

Seventh Semi-Annual
PROGRESS REPORT
to
INTERNATIONAL COOPERATION ADMINISTRATION
and
SEOUL NATIONAL UNIVERSITY OF KOREA
in behalf of
REGENTS OF THE UNIVERSITY OF MINNESOTA
covering the period
October 19, 1957 - April 19, 1958



Minneapolis 14, Minnesota
April 19, 1958

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I. OFFICE OF THE CAMPUS COORDINATOR

Technical Assistance to Korea. One of the major efforts of the United States in providing technical assistance to the Republic of Korea is being achieved through a contract between the University of Minnesota and the U. S. International Cooperation Administration designed to strengthen Seoul National University of Korea in its teaching, research, and public service activities. The original contract, signed September 28, 1954, covered a three-year period. An amendment extending the original contract an additional two years was agreed to on February 11, 1957.

The original contract specified the provision of assistance in the broad fields of Agriculture, Engineering, and Medicine (including Nursing). This was later interpreted to involve Veterinary Medicine, since at that time, at the University of Minnesota, that field was a part of the Institute of Agriculture.

The amendment agreed to on February 11, 1957 also enlarged the original contract to include the field of Public Administration, with the addition of the sum of \$525,000 to cover the operations contemplated through September 28, 1959.

The current report is the seventh in the series of semi-annual progress reports required by the original contract (Article II B). The purpose of this series is to call attention to significant developments, to outline problems which have arisen, to set forth progress being made in the achievement of the objectives of the program, and to indicate plans being made for the future.

Korean Advisory Committee. A committee appointed by the President of the University of Minnesota advises him on policy matters relating to contract operations. Members also serve as a source of advice and counsel on an

informal basis to the Campus Coordinator when perplexing operational problems arise from time to time.

Only one change in the membership of this committee has occurred since the immediately preceding report, the substitution of Dr. Howard for Dr. Diehl. The committee presently consists of Dr. Malcolm M. Willey, Vice President, Academic Administration, Chairman; Mr. William T. Middlebrook, Vice President, Business Administration; Dr. Harold Macy, Dean, Institute of Agriculture; Dr. A. F. Spilhaus, Dean, Institute of Technology; Dr. Robert B. Howard, Associate Dean, College of Medical Sciences; Mr. L. R. Lunden, Comptroller; Dr. Gaylord W. Anderson, Director, School of Public Health; Professor John C. Kidneigh, Director, School of Social Work; Dr. Lloyd M. Short, Chairman, Department of Political Science and Director, Public Administration Center; Dr. Tracy F. Tyler, Professor of Education and Campus Coordinator, Secretary.

The only meeting of the committee held during the period covered by the present report was an informal dinner meeting at the home of Vice President Willey on April 3, 1958 for the purpose of discussing with Dr. Arthur E. Naftalin the Public Administration assignment he completed recently in Viet Nam and his observations during his brief stop in Korea on his return to the United States of the Public Administration project just getting under way there.

Contract Addition in Dentistry Proposed. Under date of November 7, 1957, ICA/Washington proposed for consideration by the University of Minnesota, the addition to the present contract of a project designed to strengthen the College of Dentistry, Seoul National University.

Correspondence, set in motion immediately with the Chief Adviser in Korea, resulted in communications of December 2 and December 11, 1957, which provided

substantial background data on the situation. All of the material received was turned over to Dean William H. Crawford and Associate Dean Marion W. McCrea of the School of Dentistry, University of Minnesota, for study, comments and recommendations. At the same time, members of the Korean Advisory Committee were informed of the proposal through a copy of the November 7, 1957 communication from ICA/Washington.

Considerable time elapsed before an official answer could be forwarded to ICA/Washington. This was due to the serious illness of Dean Crawford at the time the original proposal was received. And it was felt that no commitments could be made on a project of this magnitude until the proposal could be discussed with the Dean.

Finally, in a communication dated February 10, 1958, ICA/Washington was informed that the University of Minnesota was convinced that assistance was needed by the College of Dentistry, Seoul National University, and that the University of Minnesota would like to provide that assistance. It was pointed out, however, that it was the view of the University of Minnesota that the original proposal does not call for the type of assistance actually needed now in Korea. Certain suggested changes in the details of the proposal were noted. The communication concluded with the recommendation that ICA/Washington provide the funds for sending to Korea a representative of the School of Dentistry, University of Minnesota, to evaluate present conditions and plan an assistance project which would best meet the needs of the Republic of Korea.

As the present report is being prepared, ICA/Washington has provided the sum of \$3,000 to cover the salary and expenses of the Minnesota representative. Processing has been completed on Dr. Marion W. McCrea, Associate Dean, School of Dentistry, and he plans to leave for Korea approximately

May 1, 1958 to investigate the situation there for a period of two or three weeks and make firm proposals relative to the dental needs at Seoul National University.

Agriculture Advisers. Roy O. Bridgford, associate professor emeritus of Agronomy continues his service in Korea as adviser in Agriculture. He completed a year's service in Korea on March 18, 1958 and it is planned that his service continue until approximately November 1, 1958.

Professor Bridgford's service as an agronomist has been useful in a variety of ways. For example, he has set in motion the machinery for providing several departments at Suwon with planting material of several species and varieties. Several staff members of the Minnesota Agricultural Experiment Station have collaborated in securing such seed of varieties that might be adapted to Korean conditions. Also, special equipment designed for corn breeding practices has been secured and forwarded to Professor Bridgford for use in Suwon.

Service in forestry has also been available from the Chief Adviser, a professional forester, who, in addition to his multiplicity of duties, has been available for consultation in his field of specialization. His long experience in Korea renders him singularly competent in evolving programs suited to the current needs, and to the future of agricultural education, and thus of food production in that country.

Service in Korea of eleven agricultural advisers now totals 96 man months or exactly 8 man years. Included in the eleven are Dr. Harold Macy, Dean, Institute of Agriculture (services not charged to the contract) and Dr. Arthur E. Schneider, who has served as Chief Adviser in Korea since October 19, 1954. In computing the total service of faculty members from the Institute of Agriculture, the period of service of Dean Macy was not counted, since his service was on another mission for ICA.

Engineering Advisers. Professor Clarence E. Lund began a second period of service in Korea just before the end of the period covered by the present report. He left Minneapolis on April 1, 1958, reaching Korea on April 4. He will serve as general adviser in engineering and as special adviser in his field of mechanical engineering. He will also continue his service in screening and preparation of specifications for procurement of equipment and supplies for the College of Engineering, Seoul National University.

Professor Lund was one of a group of three engineering advisers who served in Korea for approximately three months in the fall of 1955. More recently, he has served on a half-time basis on the Minneapolis campus as the college-level adviser in engineering. He has also had the responsibility for coordinating the procurement operation in engineering for the Korean institution.

The service in Korea of the 8 engineering advisers who have thus far served in Korea (4 from the University of Minnesota and 4 from other institutions) totals $53\frac{1}{2}$ man months or approximately $4\frac{1}{2}$ man years.

Medical Advisers. Three members of the faculty of the College of Medical Sciences of the University of Minnesota were serving in Korea as this report is being written. Dr. Edmund B. Flink who began his service in Korea on August 9, 1957, completed his service and left Korea on January 31, 1958.

Dr. James H. Matthews continued to serve as general adviser in medicine during this period.

Miss Margery S. Low, adviser in nursing, completed a year of service under the contract on December 31, 1957. At the request of the officials of Seoul National University and agreed to by the University of Minnesota and ICA/Washington, Miss Low began, on January 1, 1958, a second year of service.

Mr. Glenn R. Mitchell, adviser in hospital administration, will have completed a year of service under the contract on May 2, 1958. At the request

of the officials of Seoul National University and agreed to by the University of Minnesota and ICA/Washington, Mr. Mitchell will begin, on May 3, 1958, an additional period of service of six months.

Processing is going forward aimed at sending Dr. George Schimert to Korea to begin a year's service about July 1, 1958 as overall adviser in medicine and in the field of his specialty, surgery. Dr. Schimert plans to take his wife and two small children with him. Somewhat later, approximately August 1, 1958, it is planned to send Dr. Ernest B. Brown, Jr. to Korea for a period of approximately six months to serve in the field of physiology.

The service in Korea of the five individuals who have served thus far in medicine totals $47\frac{1}{2}$ man months or almost 4 man years.

Veterinary Medical Adviser. Dr. Willard L. Boyd who began service in Korea on September 9, 1957, completed his assignment and left Korea on December 9, 1957. His total service was $3\frac{1}{2}$ man months.

Dr. Boyd's report, dated December 1, 1957, sets forth the results of his careful studies of the College of Veterinary Medicine, Seoul National University, as well as recommendations for its future development that doubtless will have early significance in planning. That College is entering a major period of modification and evolution, since it may seek a new location, with consequent effects upon physical plant, equipment, and relations with other units and interests of Seoul National University, notably agriculture which it serves indirectly.

Public Administration Advisers. The first two Public Administration advisers began service in Korea during the period covered by the present report. Each received orientation both in Washington, D. C. and Minneapolis prior to his departure.

Dr. Erwin R. Draheim, a personnel officer with the U. S. Department of Agriculture, reached Korea on January 3, 1958 to serve as adviser on in-service training to the National Officials Training Institute. Dr. Draheim was accompanied to Korea by Mrs. Draheim and their two daughters, ages 7 and 14. He is scheduled to serve for a period of from one year to eighteen months.

Dr. Stuart A. MacCorkle, Director, Institute of Public Affairs, University of Texas, reached Korea on March 28, 1958. He is responsible for directing the planning for and the establishment of a new School of Public Administration in the College of Law, Seoul National University. Dr. MacCorkle was accompanied to Korea by Mrs. MacCorkle. He plans to serve for a period of one year.

The service to date of these two individuals totals 5 man months.

It is planned to send two American staff members to Korea by August 1, 1958--one to concentrate on the development of a research program at the School of Public Administration and perhaps participate in the in-service training program in the National Officials Training Institute; the other to supervise the development of the special library in public administration and assist our adviser in Public Administration at Seoul National University. In January 1959, it is planned to send a public administration professor to advise in the field of organization and management. By the early summer of 1959, two public administration professors will be sent to advise in the fields of public personnel administration and public financial administration. It is anticipated that all of the Americans sent to Korea will remain there for at least one year. It is also anticipated that, by the summer of 1959, seven American staff members will be in Korea on the public administration phase of the contract.

Korean Faculty Participants. The accompanying table reveals that of the 59 Korean faculty members studying in the United States at the time of the previous report, 7 have completed their studies and returned to Korea. Six of these were from Agriculture and 1 from Medicine. The total number of participants remains at 135, with 83 having completed their studies and returned to Korea and 52 continuing their studies in the United States. Of this latter total, 48 are studying at the University of Minnesota and 4 at other institutions. Of these 4, 2 are at Massachusetts Institute of Technology, 1 is at Lowell Technological Institute, and 1 is at the University of California, Davis. The 52 presently studying in the United States are divided as follows: Agriculture (including Veterinary Medicine) 13; Engineering, 17; Medicine, 9; Public Administration, 13.

TABULATION OF KOREAN FACULTY MEMBERS STUDYING
IN THE U. S. UNDER THE ICA CONTRACT

	Total No. of Particip.					Still Participating					
	Arrivals	Ag.	Eng.	Med.	Pub.Ad.	Departures	Ag.	Eng.	Med.	Pub.Ad.	Total
1st Report	7	2	4	1	0	0	2	4	1	0	7
2nd Report	44	11	19	21	0	3	9	19	20	0	48
3rd Report	7	16	20	22	0	5	13	17	20	0	50
4th Report	44	25	46	31	0	26	16	31	21	0	68
5th Report	1	25	47	31	0	6	15	29	19	0	63
6th Report	32	32	54	36	13	36	19	17	10	13	59
7th Report	0	32	54	36	13	7	13	17	9	13	52
TOTALS	135	32	54	36	13	83	13	17	9	13	52

A second table shows arrivals, departures, current participants, cumulative man months and man years by calendar quarters beginning with January 1, 1955 - the first quarter during which there were Korean faculty participants under our

ICA contract. The last two columns show the cumulative man-months and man-years and enable the reader to estimate the magnitude of the educational program which has been provided for the Korean faculty members. Specifically, the tabulation reveals that a total of 154.5 man years of graduate study had been provided under the ICA contract for the 135 Korean faculty members who had been supported through March 31, 1958.

	Arrivals	Departures	Participating	Cumulative Man Months	Man Years
1-1-55					
to	1	0	1	1	.1
3-31-55					
4-1-55					
to	21	1	21	38½	3.5
6-30-55					
7-1-55					
to	29	2	48	117	9.8
9-30-55					
10-1-55					
to	3	3	48	260	21.7
12-31-55					
1-1-56					
to	0	2	46	400½	33.4
3-31-56					
4-1-56					
to	13	2	57	568½	47.4
6-30-56					
7-1-56					
to	35	19	73	767	63.9
9-30-56					
10-1-56					
to	0	6	67	970	80.8
12-31-56					
1-1-57					
to	1	5	63	1,163½	97.0
3-31-57					
4-1-57					
to	0	7	56	1,352	112.7
6-30-57					
7-1-57					
to	32	28	60	1,509½	125.8
9-30-57					
10-1-57					
to	0	4	56	1,686	140.5
12-31-57					
1-1-58					
to	0	3	53	1,853½	154.5
3-31-58					

Agricultural Programs. Fifteen of the 17 Korean faculty members in agriculture studying in the U. S. during the period covered by this report studied at the University of Minnesota. One was assigned to the University of California (Davis) so that he could engage in studies and research in food technology, while another was sent to the Oak Ridge Laboratories in Tennessee to study the use of radio-active isotopes in physiological research.

Five completed their assignments during the period and returned to their teaching posts in Korea. At the close of the present reporting period, 11 remain at the University of Minnesota and 1 at the University of California.

In general, the principal subject matter specializations in the broad area of agricultural instruction have been covered adequately in the educational programs of these men; thus, both fundamental sciences and applied fields have been included. In the latter subdivisions, soils, applied biology in both plant and animal specializations, engineering and agricultural economics have been included. Two foresters from Suwon have been in Minnesota during the period covered by this report, one of whom returned recently to Korea.

Agricultural Equipment. Amendment No. 11, signed October 31, 1957, provided additional funds for procurement, of which \$50,000 was allocated to Agriculture. This sum was further divided so that \$9,709 was obligated for transportation and the services of the forwarding agent, \$1,452 for procurement expense, and \$38,839 for equipment and supplies.

Late in March, 1958 an extensive list of equipment desired by eight agricultural departments came to the University of Minnesota for screening. These items are being studied and analyzed by appropriate members of the Minnesota agricultural faculty who are specialists in the fields involved. Upon completion of the screening process, orders will be placed for the equipment deemed

appropriate, taking into consideration the needs at Suwon and the money allocated for this purpose.

Veterinary Medical Program. Two veterinarians, specializing in microbiology and anatomy, respectively, have been engaged in advanced study on the St. Paul Campus during the period. Several additional members of the Korean College of Veterinary Medicine faculty are expected to be sent to Minnesota before termination of the ICA contract.

Public Administration Programs. Each of the thirteen Korean participants in Public Administration, in addition to carrying a full program of studies planned to lead to a Master's degree, is being provided with the benefit of visits to various governmental and business establishments so as to make his academic studies more meaningful.

Between the fall and winter quarters they visited the Minnesota State Capitol, the Village of Edina, the St. Paul-Ramsey County Courthouse, the Ramsey County Civil Service Commission, the St. Paul Police Department, the Glen Lake Tuberculosis Sanitarium, the Ford Assembly Plant, and Investors Diversified Services.

Between the winter and spring quarters, they attended the National Conference of the American Society for Public Administration in New York City. At each of the panels and clinics at the Conference, one Korean participant assumed the responsibility for preparing a written report on the proceedings. The participants then visited Washington, D. C., where Dr. S. McKee Rosen and Mr. MacDonald Salter of ICA discussed the broad aims and framework of ICA and Messrs. Stover and Henshin of the Treasury Department spoke on general management improvement and the techniques of management analysis. The participants also visited the National Capitol, attended a session of the United States Senate, and observed a Congressional committee hearing. Also they had the opportunity to exchange views and information with ICA participants from Italy and Viet-Nam.

Each participant is being prepared for a specialty in the new School of Public Administration. The course programs have been arranged with this in view. All have taken a special core seminar in public administration. This has been supplemented by courses in their field of specialization. During the spring quarter, the participants are carrying out the following special projects:

Planning for the establishment of a special public administration library is Ahn, Hae Kyun;

Planning in-service training courses are Liu, Yung Sang (filing systems) and Moon, Ki Youl (position classification);

Planning courses for the new School of Public Administration are Bark, Dong Suh (public personnel administration); Kim, Hae Dong (research methods); Kim, Tae Choon (statistics in public administration); Kim, Woon Tai (organization and the dynamics of management); Lee, Joung Sik (public relations); Lee, Sang Jyo (comparative public administration); Lee, Woong Keun (governmental accounting); Rho, Yung Hee (comparative local government); Suh, Won Woo (administrative responsibility); and Yu, Hoon (public personnel administration).

During the summer months following the close of the academic year the participants will be assigned to internships. Arrangements for these internships are presently being completed.

The Master's thesis required of each Korean before he receives the Master of Arts Degree in Public Administration will be prepared immediately following his return to Korea. Background material for this purpose will be obtained before his departure from the United States. The theses will constitute part of a comprehensive research plan on public administration in Korea.

Present plans provide for bringing fourteen new public administration participants to the University of Minnesota August 1, 1958. Eight will be

sent by Seoul National University and six by the Office of General Affairs. Each will spend a one-year period in graduate study.

Lee, Sang Jyo was elected to the vice presidency of the University of Minnesota Chapter of the American Society for Public Administration. Several of the other public administration participants have served on standing committees of this organization.

Academic Achievement of the Koreans. In the immediately preceding report, a new method of presenting academic achievement was initiated. The Korean faculty members brought to the United States for study were divided into two large groups: those who audited courses (or took almost none for credit) and those who enrolled for credit and received marks in courses totalling 9 or more credits. There was no attempt to prepare separate distributions for the various fields involved.

There has now been a total of 135 Korean faculty members who have been supported under the ICA program. They might be accounted for as follows:

Deans of Agriculture and Medicine who came only for observation and consultation		2
Faculty members who either audited all courses or who registered for less than 9 credits		41
Faculty member who earned Doctor's degree solely through research at Pasteur Institute in Paris		1
Faculty members who registered for 9 or more credits		
Completed studies and returned to Korea	39	
Still studying in the U. S.	50	
Still here but credits not yet available	<u>2</u>	<u>91</u>
Total Korean faculty members supported		135

Again, as in the previous report, the marks earned by the 89 members of the group who had registered for 9 or more credits and for whom transcripts were available were secured. This resulted in the accompanying tabulation:

MARKS MADE BY 89 KOREAN FACULTY MEMBERS REGISTERED FOR 9 OR MORE CREDITS

Grade	All 89 Koreans	39 Koreans Completing Studies	50 Koreans Still Studying in U. S.	23 Koreans Who Earned Master's Degrees
	No. of Qtr. Credit Hours	No. of Qtr. Credit Hours	No. of Qtr. Credit Hours	No. of Qtr. Credit Hours
A	1,212	539½	672½	722½
B	1,353¼	603¼	750	569½
S	636½	365	271½	203
C	<u>415</u>	<u>158</u>	<u>257</u>	<u>145</u>
TOTAL OF ABOVE	3,616¾	1,665¾	1,951	1,640
Audit	1,235	822	413	409½
Fail	5	4	1	0
Other (D, Incom- plete, dropped, etc.)	<u>519½</u>	<u>179½</u>	<u>340</u>	<u>123½</u>
SUB-TOTAL	1,759½	1,005½	754	533
GRAND TOTAL	5,376¼	2,671¼	2,705	2,173
No. of individuals	89	39	50	23
No. of Quarters of individual regis- tration	436	209½	226½	186½
Average No. of quarters per individual	4.90	5.37	4.53	8.11

The following significant conclusions may be drawn from the preceding table:

1. The average number of graduate credits earned per quarter:
 - a. All 89 Koreans 8.27
 - b. 39 Koreans completing studies 7.95
 - c. 50 Koreans still studying 8.61
 - d. 23 Koreans who earned Master's degrees 8.79

2. The average number of credits taken on an audit basis per quarter:
 - a. All 89 Koreans 2.83
 - b. 39 Koreans completing studies 3.92
 - c. 50 Koreans still studying 1.82
 - d. 23 Koreans who earned Master's degrees 2.20

3. The average number of credits per quarter resulting in failure:
 - a. All 89 Koreans 0.011
 - b. 39 Koreans completing studies 0.019
 - c. 50 Koreans still studying 0.004
 - d. 23 Koreans who earned Master's degrees none

4. The average number of credits per quarter resulting in grades of D, Incomplete, dropped, etc.:
 - a. All 89 Koreans 1.19
 - b. 39 Koreans completing studies 0.86
 - c. 50 Koreans still studying 1.50
 - d. 23 Koreans who earned Master's degrees 0.66

A further table provides comparisons on a percentage basis between the four categories of grades acceptable for credit in the Graduate School.

GRADE DISTRIBUTION PERCENTAGES

Grade	All 89 Koreans	30 Koreans Completing Studies	50 Koreans Still Studying	23 Koreans Who Earned Master's Degrees
A	33.5	32.4	34.5	44.1
B	37.4	36.2	38.4	34.7
S	17.6	21.9	13.9	12.4
C	<u>11.5</u>	<u>9.5</u>	<u>13.2</u>	<u>8.8</u>
TOTALS	100.0	100.0	100.0	100.0

Attention needs again to be drawn to the high level of achievement indicated by the preceding data. It is indeed commendable when it is remembered that the Koreans continue to maintain this meritorious record in a new and unfamiliar environment and are forced to receive instruction in a different language from that to which they are accustomed.

Degrees Earned. Previous reports have given the names of 18 Korean faculty members who had earned advanced degrees through studies carried on under our ICA contract. Seventeen were Master's degrees and one, a Doctorat de l'Universite de Paris. In addition, a medical faculty member passed the examination of the American Board in Diagnostic Roentgenology.

Six additional Korean faculty members earned graduate degrees during the period covered by the present report. The following individuals received degrees at the end of the fall quarter, 1957: Chung, Hoo Sup, teaching assistant, M. S. (plant pathology); Lee, Ho Wang, teaching assistant, M. S. (bacteriology); Ohh, Bong Kug, teaching assistant, M. S. (poultry husbandry); Rhee, Sang Don, teaching assistant, M. S. (physiology); and Sim, Bo Sung, instructor, M. S. (neurosurgery). Receiving a degree at the close of the winter quarter, 1958 was Lim, Jung Kyoo, teaching assistant, M. S. (pharmacology).

This brings to 24 the number of Korean faculty members who, through graduate study under the ICA contract, have earned advanced degrees. To these should be added the one member of the medical faculty who exhibited high achievement when he passed the American Board in his specialty, diagnostic roentgenology.

Extensions. The 32 faculty members from Seoul National University who came to the U. S. for study in August, 1957, were sent for a period of one year each. The officials of Seoul National University have decided not to extend beyond a single year the periods of study of any of the 6 from the College of Agriculture.

A one-year extension has been recommended for Jeon, Yun Seong, instructor in veterinary medicine, and there is reason to believe that this recommendation will be agreed to.

Recommendations for one-year extensions have been made in the cases of 6 of the 7 faculty members in engineering who arrived in August, 1957, in the following order of priority: John, Yong Won; Kim, Yeun Shik; Min, Kwang Shik; Choi, Keh Kun; Rhee, Jin Woo; and Shin, Hyun Chun. Assistant professor Chung, In Choon prefers to return to his post in Korea following his initial year of study in the U. S.

No recommendations for extensions have been made as yet for the 5 faculty members in medicine who arrived in August, 1957.

It has been recommended that four of the 13 participants in Public Administration brought to the University of Minnesota for study in August, 1957 be given one-year extensions for further graduate study. They are: Suh, Won Woo; Yu, Hoon; Bark, Dong Suh; and Kim, Tae Choon.

Equipment Procurement. The problems involved in procuring equipment for Seoul National University through funds provided by the U. S. Government have continued during the period covered by the present report.

A new problem arose with respect to the procurement of books and periodical subscriptions. Conferences were held with executives of the American News Company which it had hoped would resolve some of the problems which had arisen. Unfortunately, as a result of these conferences, it was decided to discontinue the use of the above named concern and establish new procedures for book and periodical procurement.

The program in Public Administration involves the provision of \$50,000 for the establishment of libraries in that field in the College of Law, Seoul National University where the new School of Public Administration is to be

established and in the Office of General Affairs for the National Officials Training Institute to which assistance is being given in the in-service training of government officials. Procurement is already underway for these libraries.

Actual expenditures through March 31, 1958 in the original contract areas of Agriculture, Engineering, and Medicine totalled \$1,138,376.77. In addition, outstanding obligations covering orders placed but not yet delivered to the forwarding agents totalled \$377,699.24. Thus equipment and supplies valued at \$1,516,076.01, including transportation and export packing, had been ordered and were either on their way or actually had arrived at their destination.

Reports from the Chief Adviser in Korea indicated that the unadjusted invoice value of equipment and supplies received in Korea through March 31, 1958, totalled \$897,381.23. These totals, it must be kept in mind, do not include the cost of such items as transportation, insurance, the preparation of required documents, or other services provided by the forwarding agents. These additional items add an estimated 25 per cent to the actual costs of the equipment and supplies.

Actual expenditures through March 31, 1958 for the procurement of books and periodicals for Public Administration totalled \$1,542.04. In addition, outstanding obligations covering orders placed but not yet delivered to the forwarding agents totalled \$6,898.45. Thus books and periodicals valued at \$8,440.49, including transportation and export packing, had been ordered and were either on their way or actually had arrived at their destination.

With the addition of the sum of \$620,000 for procurement through Amendment No. 11, dated October 31, 1957, the total sum available for procurement for Agriculture, Engineering and Medicine is \$2,195,000. Sums available in Public Administration total \$55,500. Of this latter total \$50,000 involves library costs and \$5,500 covers the cost of an automobile and other equipment for use in Korea.

College Level Advisers. Dr. Clyde H. Bailey, Dean and Professor Emeritus, Institute of Agriculture, continued his service as college level adviser in Agriculture during the period covered by the present report. Professor Clarence E. Lund served in the same capacity in Engineering through March 31, 1958. He left for service in Korea on April 1, 1958 and his post as college level adviser will remain unfilled until his return from Korea in December, 1958.

Ship Model Towing Tank Subcontract Signed. Negotiations, initiated by Professor William R. Weems in a letter dated November 28, 1955, finally resulted in the signing of a subcontract between the Regents of the University of Minnesota and Professor Martin A. Abkowitz of the Massachusetts Institute of Technology on February 10, 1958.

The subcontract covers the preparation of detailed working plans and specifications for a Ship Model Towing Tank (108 feet long, 10 feet wide, and 5 feet deep), together with the necessary instrumentation, to be constructed in Korea for the Department of Naval Architecture, College of Engineering, Seoul National University.

The decision to make possible the construction of this apparatus was based upon the fact that a ship model towing tank is the most important single experimental tool of the naval architect and it is unique to him. It makes possible refined estimates of propulsive power requirements. With the addition of a wave making device, the above-water characteristics of a hull form may be evaluated qualitatively for seaworthiness. New techniques are presently being developed so as to make quantitative analysis possible with minor additional instrumentation. Every recognized school of naval architecture has such a facility and no important ship's hull form is finally fixed without its use.

Dr. Naftalin Visits Korean Project. Dr. Arthur E. Naftalin, associate professor of political science at the University of Minnesota, who has been on leave from the University since December, 1954 so as to serve as Commissioner of Administration, State of Minnesota, spent January 30 to February 1, 1958 visiting our project in Public Administration in Seoul, Korea. The visit was arranged at the suggestion of Professor George A. Warp who heads the Public Administration portion of our ICA contract.

Dr. Naftalin, together with Mrs. Naftalin, were enroute home from Viet Nam where he had served as a consultant in Public Administration on the staff of the Michigan State University ICA project.

While in Korea, Dr. Naftalin had opportunity under the guidance of Dr. Draheim to meet and discuss public administration matters with Republic of Korea Government, Seoul National University and OEC officials. He and Mrs. Naftalin were also dinner guests of the Korean Association for Public Administration and luncheon guests of the University of Minnesota group in Korea.

Ambassador Yang Delivers Commencement Address. Almost a year ago President J. L. Morrill invited Dr. Yang, You Chan, the Ambassador of the Republic of Korea to the United States, to deliver the address at the fall quarter commencement exercises on December 19, 1957. Dr. Yang accepted the invitation and spent an extra day in Minneapolis so that he could attend other affairs arranged in his honor.

Upon his arrival at noon on December 19, a news conference, including radio and television representatives, was held at the Airport. Later that afternoon he was honor guest at a tea in the University Gallery at which time the showing began of a collection of faculty and student art work to be sent for exhibition to Seoul National University. President and Mrs. Morrill entertained him, together with Governor and Mrs. Freeman, the two vice presidents

and the coordinator and their wives, at dinner in their home preceding the exercises. His address, that evening, was most impressive and was given a tremendous ovation by the students. A unique feature of the exercises came when Ambassador Yang was asked to present one of the Korean faculty members, Dr. Lee, Ho Wang, to have his M. S. degree in bacteriology conferred on him by President Morrill. Following the ceremonies he joined the relatives and friends of the graduates at the reception given by President and Mrs. Morrill.

Friday noon he was guest of the editorial staff of the Minneapolis Star and Tribune at a luncheon. In the afternoon the Coordinator accompanied him on a sightseeing tour of the Twin Cities. That evening he was honor guest at a party given by Korean students, faculty and others resident in the Twin Cities. He left Minneapolis Saturday morning, having made an excellent impression and having drawn much favorable attention on the campus and in the public press, on radio and TV, to the work the University of Minnesota is carrying on to strengthen Seoul National University of Korea.

Graduate Dean Visits Minnesota. Dr. Yi, Pyeng Do, Dean, Graduate School, Seoul National University, visited the University of Minnesota March 16-19, 1958. Dean Yi was in the United States for study, observation and investigation in his field of history under a foundation grant.

Although his visit was short, it was possible for him to confer with President J. L. Morrill, Vice President Malcolm M. Willey, Governor Orville Freeman, Dean of the Graduate School, Dr. Theodore C. Elegen, and others at the University of Minnesota. He was guest at a small luncheon on March 18, following a visit to the University Library. He also enjoyed a brief tour of the Minneapolis and St. Paul campuses. Koreans studying at the University of Minnesota were of considerable assistance to him by serving as his interpreters during his visit.

Sociology Professor Visits. Dr. Lee, Sang Baik, Professor and Chairman, Department of Sociology, Seoul National University, spent two days in mid-March at the University of Minnesota consulting with Professor John C. Kidneigh, Director, School of Social Work and with other University and community officials. He was guest at an informal luncheon given by Professor Kidneigh in the Campus Club on March 19, 1958. Dr. Lee was in the United States for observation and consultation under a grant from the U. S. Department of State. His conferences in the Twin Cities were in connection with the beginning of a program of social work education at Seoul National University. Under a Unitarian Service Committee and American-Korean Foundation project Professor Kidneigh had visited Korea in 1954. Under the same project three Koreans were sent for graduate study in social work to the University of Minnesota. They secured graduate degrees in 1957 and have now returned to the faculty of Seoul National University.

Minnesota Art Exhibit Reaches Korea. The exhibit of University of Minnesota student and faculty art work, which was on view earlier in the University of Minnesota Art Gallery, reached Korea on March 17, 1958. Shipped in four large packing cases, Dean Chang, Pal pronounced it in good condition following its long journey by rail and ship.

The Minnesota exhibit was prepared in exchange for the similar exhibit prepared by students and faculty of Seoul National University and shown at the University of Minnesota in January, 1957. The Korean exhibit then was scheduled for showing over a period of approximately one year in galleries in various parts of the United States.

The Minnesota exhibit will be shown at Seoul National University from May 21 to June 10, 1958. As presently planned, it will then be exhibited at

the U. S. Information Service facilities in Taegu, Kyungsang-Pukto (July 1-10); Pusan, Kyungsang-Namdo (September 1-10); Chunju, Cholla-Pukto (October 1-10); and Kwangju, Cholla-Namdo (November 1-10).

Dean Chang is now preparing a catalog for publication covering the Minnesota exhibit so as to make it more meaningful to Koreans who attend the exhibitions.

Governor Freeman Visits Korea. President Morrill, when he learned early last fall that Governor Orville Freeman was planning a trip to the Orient in the interests of promoting increased trade with that part of the world, suggested that Korea should be included in the itinerary so that the Governor might see at first hand the operations being carried on there by the University of Minnesota and, at the same time, by his very presence, symbolize the significance of our cooperative project. This resulted in arranging a visit to Korea covering the period, November 8-10, 1957.

The Coordinator, in advance of the Governor's departure, provided him with a brief summary of operations under the sister relationship between the two universities and with thumbnail sketches of the various individuals he would be meeting in Korea.

The day of the Governor's departure for the Orient (November 2, 1957) the University of Minnesota gave a small luncheon in the Campus Club for Governor and Mrs. Freeman and their two children so that additional informal briefing could be given and an opportunity could be provided for questions the Freemans might have about Korea and the Korean project.

During the Governor's very crowded business schedule in Korea he took time to visit Seoul National University and to talk with both Seoul National University and University of Minnesota people directly concerned with the Cooperative Project. At the UNC Economic Coordinator's dinner honoring Governor

and Mrs. Freeman further opportunity was provided representatives of both universities to present Cooperative Project objectives, progress, and future plans. Economic Coordinator Warne also discussed the project from the point of view of its importance within the total International Cooperation Administration program in Korea.

On Governor Freeman's last day in Korea, the honorary degree of Legum Doctor was conferred on him by President Yun, Il Sun of Seoul National University. The ceremony was attended by U. S. Ambassador and Mrs. Walter C. Dowling, Economic Coordinator and Mrs. William E. Warne, Republic of Korea Minister of Education Choi, Kyu Nam, Republic of Korea Minister of Reconstruction Sang, Song Il, Seoul National University Deans and other officials, many other dignitaries and guests and representatives of the University of Minnesota.

Dean Park Dies. Dr. Park, Myung Jin, Dean, College of Dentistry, Seoul National University, passed away in Seoul, Korea on December 27, 1957. Dr. Park spent three weeks in observations and consultations at the University of Minnesota, April 18 to May 8, 1955. His visit to the United States was financed by the American-Korean Foundation.

While at the University of Minnesota as guest of Dr. William H. Crawford, Dean, School of Dentistry, a number of affairs were given in his honor. One was a luncheon given by President J. L. Morrill on May 5, 1955, honoring him and two other Korean deans on campus at that time, Dr. Lee, Chae Koo, Dean of the College of Medicine, and Cho, Baik Hyun, Dean of the College of Agriculture.

At the time of his death, negotiations were under way looking toward an addition to our ICA contract involving the College of Dentistry of Seoul National University.

Contract Now Includes Home Leave and Educational Allowance. The previous report indicated the expectation that the long-sought provision for "Home

Leave," and the more-recently needed "Educational Allowance," would be added to the ICA contract. Amendment No. 11, agreed to on October 31, 1957, contained the following statement:

"Contractor's personnel who have served two years under this contract and have not taken more than 30 days leave (vacation, sick, or leave without pay in the United States) shall be allowed home leave of up to thirty calendar days in the United States, provided that such personnel agree to return overseas under an additional two year appointment, or for such shorter appointment as ICA/W may approve in advance, under the contract upon completion of home leave."

This same amendment changed reimbursable items specified in Exhibit III-A-6 line 1, to read:

"Quarters and cost-of-living (post and educational allowances only) to staff members and consultants serving overseas under the contract."

Through the above two changes in the wording of the contract, both "Home Leave" and "Educational Allowances" are made available to all who serve in Korea under the contract and meet the specified requirements.

Hospital and Medical Costs Fully Covered. Each staff member sent to Korea to serve under the ICA contract is covered by a \$25,000 health and accident policy. The first claim to be filed under this policy covered hospitalization from September 17 to 28, 1956 for our Chief Adviser in Korea.

A period of nine months elapsed during which an effort was made to find out how the bill for this hospitalization (\$211.75) was to be settled, since Exhibit II-1 of our ICA contract states that "necessary hospital and medical services for personnel and dependents" will be provided in Korea. UNC/OEC finally decided (June 24, 1957) that the bill should be presented to the insurance company for payment. This was done and the Chief Adviser was reimbursed in the amount of \$186.75 - the policy providing for a deductible sum of \$25 from each claim.

It was clear from the contract that staff members serving in Korea were not required to pay any costs of this nature. Therefore, ICA/Washington was provided with the facts in the case and asked to approve the payment from contract funds of the \$25 not paid by the insurance company. Approval of this amount as a reimbursable expense under the contract was given in a letter dated January 24, 1958.

Further correspondence with ICA/Washington led to approval, in a letter dated February 6, 1958, of "similar future charges" as "reimbursable under Exhibit III-A-9 of the contract."

Koreans Visit Public Administration Center. During recent months, four public officials from Korea visited the University of Minnesota and observed the Korean Program in Public Administration. Two of these were local government officials who were on campus September 4, 1957. They were Mr. Kim, Han Bok, Mayor of Suwon City and Mr. Kim, Young Ok, member of Chung-Nam Provincial Assembly; director of Kongju Cultural Center and chairman of the Union of Cultural Centers.

Two national government officials spent two weeks in December, 1957 in the Twin Cities on a program arranged by the Public Administration Center. They were Kim, Dong Eun, administrator, International Education Section, Ministry of Education, and Yoo, Sang-Kun, chief, Materials Division, Bureau of Public Works, Ministry of Home Affairs.

Changes in Ministry of Education. The Korean Republic of November 29, 1957 announced the appointment of Dr. Choi, Jai Yoo as Minister of Education, replacing Dr. Choi, Kyu Nam who had resigned the post after serving a twenty-month tenure of office.

A few days later it was announced that Professor Kim, Sung Ki, College of Liberal Arts, Seoul National University, had been appointed Vice Minister

of Education, replacing Kauh, Kwang Man who had tendered his resignation following that of Dr. Choi, Kyu Nam.

Dr. Choi, Kyu Nam was President of Seoul National University at the time our FOA contract was signed on September 28, 1954. It was from that post that Dr. Choi accepted appointment as Minister of Education.

Mr. Kauh, Kwang Man was a former professor of education and Dean, College of Education, Seoul National University. He had served as Vice Minister for eighteen months.

University Theatre Group Visits Seoul National University. When it was learned that the University of Minnesota Theatre Group, together with their Director, Dr. Frank Whiting was scheduled for a tour of the Far East, arrangements were made for them to visit Seoul National University and they agreed, that on their day off, if it appeared desirable, they would be willing to present a performance of their play, "I Remember Mama," at the University.

The troupe left Minneapolis on January 29, 1958 and, after brief stops enroute, reached Korea on February 3 for a period of approximately one month of presentations before U. S. Armed Forces audiences. It was the first unit to go abroad under a new program set up jointly between the USO, the American Educational Theater Association, and the Department of Defense. The Far East tour was the second overseas tour for the Minnesota players.

Later developments indicated to Dr. Whiting that the nature of the play made it inadvisable for presentation to an all-Korean audience. Instead seats were made available to President Yun and his colleagues at the February 26 performance.

The Minnesota contingent in Korea entertained Dr. Whiting and his players at a luncheon on February 13. On February 27, the day before their departure from Korea, they toured Seoul National University and were entertained as guests of President Yun and his colleagues.

Gifts. The following gifts have been made to Seoul National University, on behalf of the University of Minnesota, during the period covered by the present report:

Dr. Sidney C. Larson, associate professor of electrical engineering, presented a complete file (January, 1946 through December, 1956) of Electrical Engineering to the College of Engineering. They were shipped to Korea on November 20, 1957.

Miss Dorothy Simmons, state leader, Home Economics Extension, Institute of Agriculture, contributed to the Department of Home Economics, College of Education, on behalf of a member of the Department of Home Economics, a file of the publication, Journal of Home Economics. They were shipped to Korea on November 6, 1957.

Mrs. F. W. Street contributed four packages of medical books which had belonged to her late son, a physician, to the College of Medicine. These were shipped on July 23, 1957, but it was not until November 12, 1957 that the receipt of these books was verified.

Professor Clyde Cairy of Michigan State University contributed to the College of Veterinary Medicine back files of the North American Veterinarian, Volumes 17-36. These were shipped from East Lansing, Michigan to Minneapolis, repacked and reshipped to Korea on December 4, 1957.

The Council on Economic and Cultural Affairs, Inc., contributed through the University of Minnesota a Monroe calculating machine, Model LA 7-200, to the Department of Agricultural Economics, College of Agriculture. This machine was shipped to Korea on March 21, 1958.

II. OFFICE OF THE CHIEF ADVISER IN KOREA

April 19, 1958 marks the end of 3½ years of operations in Korea under the ICA/Minnesota technical assistance contract involving Seoul National University. Significant changes have occurred at Seoul National University during this period. Most important are considered to be changes in the knowledge level, skills, outlook and attitude of staff members who have had study opportunities abroad under the program. Of corollary importance are considered to be the specialized area analyses, improvement recommendations, and other forms of assistance provided by Minnesota staff members serving in Korea. Together these two facets of activity under the Cooperative Project have had substantial influence on Seoul National University's effecting the improvements in teaching and research that are the central objective of the ICA/Minnesota Contract. The provision of material things, such as assistance in rehabilitating and improving the University's physical plant and in providing equipment for teaching and research has, in addition, had an increasing effect on the ability of staff members to use to best advantage their knowledge and skills in instruction and research.

At this stage of the Cooperative Project it appears that the improvement in depth objective of those formulating, funding and administering the undertaking is in a fair way toward being achieved in the original contract fields of agriculture, engineering and medicine, and that a substantial start in this direction has been made in the last-added contract field, public administration. In this regard, analysis of the latest figures available indicates that, of the 122 Seoul National University staff members from agriculture, engineering and medicine who have studied abroad under the project thus far, 83 (68%) have completed this aspect of their advanced training and are back in teaching and research at Seoul National University.

The periods of observation and study abroad vary in length from approximately 6 months for deans, department heads and other senior personnel to planned graduate programs of up to four years in length for younger staff members. For participant programs already in effect actual and planned periods of stay abroad summarize as follows for all contract areas: Personnel abroad for approximately 6 months -- 15%; for approximately 1 year -- 46%; for approximately 2 years -- 28%; for approximately 3 years -- 4%; and for approximately 4 years -- 7%.

This six-month period saw Minnesota staff members present in Korea and working with their Korean colleagues in the areas of agriculture (with major emphasis on the field of agronomy), veterinary medicine (major purpose an analysis of the present situation and future needs), medicine (with continued emphasis on overall college-hospital administration, and in the fields of nursing, anesthesiology and internal medicine), public administration (where work got under way at both the National Officials Training Institute and Seoul National University), and engineering (in which field another overall adviser arrived for duty toward the end of the report period).

More Minnesota-procured equipment arrived during the period for each of the original contract areas, procurement of library materials for public administration was initiated by Minnesota, and physical plant rehabilitation and improvement continued with ICA-funded materials at the Colleges of Agriculture, Engineering and Medicine. Planning for further physical plant improvements, including some for the National Officials Training Institute, continued during the period. Further work was also done on determining additional laboratory, classroom, and physical plant equipment needs.

The close cooperative relationships previously enjoyed with Seoul National University, the Ministry of Education and OEC continued during this period.

As of the end of this report period plans had again been worked out with the cooperation of OEC's Training Division and the Foreign Language Institute of Korea for this year's Cooperative Project participants to attend the Foreign Language Institute for needed additional instruction in the English language.

Staff Exchange. The latest significant data on this most important aspect of the Seoul National University Cooperative Project appear on pages 4 to 7 of this report.

Korean Program Participants. As of the end of this report period plans were well under way for the use of remaining Korean staff exchange man-years. This, as usual, involves both extensions of graduate study periods of participants now abroad, and the selection of additional staff members and prospective staff members (the latter primarily for assignments in public administration at both Seoul National University and the National Officials Training Institute). If plans are carried out in their present form (and changes are expected to be minor) the remaining Korean man-years will be used as follows:

<u>Area</u>	<u>Number of Present Participants to be Given Extensions</u>	<u>Number of New Participants, FY 1959</u>
Agriculture		
College of Agriculture	0	2
College of Veterinary Medicine	1	3
Engineering	9	1
Medicine	1	4
Public Administration		
Seoul National University	4	8
National Officials Training Institute	<u>0</u>	<u>6</u>
	15	24

Minnesota Staff in Korea. A total of 27 Minnesota staff members, exclusive of the Chief Adviser and Administrative Secretary, have now served or are

serving in Korea. Of this total 9 saw service during this report period -- 2 in agriculture (including 1 in veterinary medicine), 1 in engineering, 4 in medicine and 2 in public administration. Of the 9 who were in Korea during the past 6 months 2 completed their periods of service and 7 are on continuing assignments.

During this report period the general plan of action for University of Minnesota staff members serving on the cooperative project in Korea continued to be to learn the fundamentals of organization and administration of Seoul National University and/or the National Officials Training Institute, with particular reference to the component with which they are concerned and its relationship to the whole; to become personally acquainted with their Korean colleagues and leaders in the technical area or areas concerned; to establish appropriate liaison with technical societies or agencies in their fields; to avail themselves of every opportunity to gain first-hand knowledge of the country, its people and their aspirations, potentialities and limitations, and Korea's need in their areas of specialization; to familiarize themselves with the details of curricula, courses, teaching methods and procedures currently in effect and of major problems affecting teaching in their areas; to note and appraise differences in curricula, course content, and teaching methods and procedures in their fields at Seoul National University as compared to those of western institutions, to bring significant differences to the attention of their Korean colleagues, to make to the latter specific recommendations for change and, where there is a desire on the part of Korean colleagues to effect suggested changes, to render all possible assistance relative thereto; to become acquainted with the kind, amount and quality of research being undertaken, to learn of the major problems affecting research in their areas, to review research needs, programs and specific projects in their fields of competence

and to assist in every way possible to improve all aspects of endeavor in this vital area; to work with their Korean colleagues in determining sound needs for the physical things (buildings, facilities, equipment) needed in teaching and research and, when provided, to assist in all ways possible to place them in effective use; and, through all of the foregoing to carry out to the best of their ability the contract objective of assisting to improve teaching and research in the fields of their responsibility.

In addition, all of Minnesota's experience in organization, administration, teaching, research and service is available to Seoul National University's President and administration upon request. Minnesota, through both its staff in Korea and in the United States, stands ready at all times to be of service to Seoul National University concerning all of these matters.

During this period overall responsibility for direction of Minnesota's advisory work in medicine continued under Dr. James H. Matthews, whose guidance, counsel and views are reflected in the comments and recommendations set forth below for the specific areas of internal medicine, nursing and hospital administration.

The following two staff members completed their Cooperative Project assignments in Korea during this report period and, before departing, prepared and discussed with their Korean and American colleagues reports including major observations and recommendations pertinent to assisting to improve teaching and research in their respective fields.

Willard L. Boyd, D.V.M., Emeritus Professor and Director, School of Veterinary Medicine, University of Minnesota. Dr. Boyd, an educator of more than 45 years' experience in the fields of agriculture and veterinary medicine, states in the preface to his report, "...The purpose of my mission was to inquire into the veterinary medical education needs of Korea and how they

are being met, to assist in determining the role which the College of Veterinary Medicine of Seoul National University should fill in this entire effort, and to consider what developments - academic and physical, including College location - should be recommended as essential for the Seoul National University veterinary medicine program envisaged...."

Dr. Boyd's report is organized under the following major subject headings:

"Historical Summary of Veterinary Medicine Education; Korea's Livestock Industry; Korea's Veterinary Medical Profession; Livestock Diseases and Methods of Control in Korea; Veterinary Medical Education in Korea; The Veterinary College of Seoul National University; and Conclusions and Recommendations". Under the latter the following major recommendations are set forth:

- "1. Move College to a more advantageous location.
- "2. Locate College preferably in a livestock producing area.
- "3. Provide a hospital that will make possible the teaching of all phases of clinical medicine. Select a plan of building which will allow for the addition of extra space as it may be needed. Room should be provided for both large and small animals and poultry.
- "4. Determine all building needs after deciding on the problem of location and after a decision has been made on the number of students to be trained.
- "5. Give careful consideration to opportunities offered on the agricultural college campus at Suwon. Appoint a committee to study building space at Suwon.
- "6. Strengthen the affiliation naturally existing between agriculture and veterinary medicine in order that a strong educational center may be developed.
- "7. Reduce present student enrollment and lengthen the period of training by requiring one year of college preprofessional training.
- "8. Accelerate the staff exchange program with emphasis on the values gained by sending more staff members to Minnesota.
- "9. Above all maintain the College under its present status, enlarge the faculty, and reduce student enrollment. If this were done, the ratio of professors and students would improve and the entire program would be more successful.

- "10. Advance the heads of departments to the rank of professor and provide them with the opportunity to do graduate training.
- "11. Maintain a curriculum that will continue to emphasize the importance of preventive medicine because the nature of the livestock industry in Korea lends itself to this form of medicine.
- "12. Give thorough consideration to the Regional Program of Education, having always in mind that veterinary medical education is very expensive.
- "13. Assure that the College faculty is given full consideration for their accomplishments and all possible encouragement needed to overcome difficulties that lie ahead."

Edmund B. Flink, M.D., Ph.D., Professor of Medicine, University of Minnesota, and Chief of the Medical Service, Veterans Administration Hospital, Minneapolis. Dr. Flink's report material is presented under the headings Didactic and Clinical Duties, The Organization and Function of the Medical Service, Clinical Experience of the Students, and Recommendations. In the report's appendix is material designated as Graduate School Courses in Internal Medicine, and Thesis Subjects of M.S. Degree Candidates of Department of Medicine, 1947-1957.

The major elements of Dr. Flink's recommendations are quoted as follows:

"A. Organization of the medical service.

- "1. The chief of the medical service must continue to be responsible for teaching assignments, coordinating appointment of assistants, keeping records of their work, arrangement of student schedules and organization of clinical training in addition to other administrative and clinical duties, of course.
- "2. The geographical segregation of tuberculosis patients is necessary for protection of hospital personnel and other patients. Likewise segregation of acute contagious diseases is also desirable at present. This does not involve segregation in a separate building. The separation of these two groups of patients from general medicine is necessary and should be continued. This does not mean that these patients cannot be a part of a general service as will be explained in paragraph 4 of this section.
- "3. The present divisions of the medical service should be disbanded.

- "4. Create a general medical service and divide into two sections. (Alternative ways of accomplishing this are given.)

This plan has several obvious advantages, but the most important are that each professor would have equal responsibilities and privileges and that the assignment of patients to students would be easier to arrange.

- "5. When 'on service' the professor should make rounds more often than at present or at least twice a week. At all times the professors would have responsibilities in his sub-specialty.
- "6. Plans should also be made for associate and assistant professors to make rounds regularly for teaching and clinical purposes.
- "7. Plans should be made to incorporate contagious disease patients into the main hospital wards as soon as adequate screening and sanitary facilities are available for their adequate isolation.
- "8. Sub-specialties should be encouraged and developed by means of special rounds and conferences. All the patients on the medical service (and on pediatrics, and other services also) with a given disease should be seen by the group interested in that sub-specialty including the professor and other staff members. An experienced assistant should be asked to arrange these special rounds each week or twice a week and keep record of proceedings. The findings and decisions should be recorded in the patient's chart in the form of a consultation. The individual groups will form natural focal points for seminars, special conferences, etc., in the sub-specialty. Furthermore, these sub-specialties can be strengthened by having regular out-patient clinic for referral of patients from general medical clinic and for follow-up of patients after discharge from hospital. (See out-patient clinic.)
- "9. The sub-specialties should be designated: hematology, cardiology, pulmonary diseases, gastro-enterology, metabolism and endocrinology, and infectious diseases.
- The senior staff member of the group most interested in the sub-specialty should be designated as chief of the sub-specialty.
- "10. Some of the members of each sub-specialty group should be advisers to the central clinical laboratory in the particular area of interest and develop close cooperation with the laboratory staff. Cooperation on both sides will be mutually beneficial.
- "11. Assignments of assistants could be arranged as follows: All would have clinic duty one or two mornings a week.

1st year - 3 month rotation periods (with one 3 month period on each of the tuberculosis and infectious diseases services).

2nd year - Choose one professor for a year (or half a year) in one of the sub-specialties of medicine as well as continuing interest in general internal medicine.

3rd and

4th years- Experimental medicine (associated with a basic discipline for this work). Clinical duties should include out-patient clinic and helping as tutor of medical students.

5th year - Senior assistants. Supervise clinic activities, ground work for consultations and conferences. Work on research project.

The teaching of graduate school courses should be fitted in with the sub-specialty rounds, conferences, and clinics, and most lectures should be eliminated. (See below also under internship and graduate training program.)

"12. Interns and graduates from other medical schools should be accepted for hospital training on an exchange basis. Exchange of ideas with other schools of medicine is vital, and this is one of the best ways.

"B. Organization of the out-patient clinic.

"All patients who come to the clinic for the first time or return to the clinic after a lapse of six months or more should have a thorough general clinical examination (complete history and physical examination and some routine laboratory and x-ray work) before going to any of the other specialty clinics (this includes all clinics outside internal medicine). Many examples of diseases could be cited to indicate the wisdom of this. Furthermore, the patient himself cannot be expected to know what division of medicine he should seek. If all specialty clinics (outside of internal medicine) would carry out a thorough clinical examination on all new patients, this would solve the problem, but as a matter of fact, this is not commonly done.

"Therefore, it is felt that the following general principle be established that all new patients have a thorough clinical examination in the internal medicine clinic by students assigned to the department of medicine and checked by medical assistants or staff members. The patients are then referred to the special clinic which is appropriate or followed in the medical clinic if the problem is internal medicine.

"The Pediatrics Department should do the same kind of examination for all children who come to the clinic regardless of the diagnosis and then refer the child if indicated to a special clinic just as is done for adult medical clinic.

"This general plan will systematize care, permit detection of diseases such as parasitic diseases and tuberculosis in the clinic population. Thus one can detect unsuspected but important diseases and help protect personnel and other patients from tuberculosis.

"The adoption of a unit record for care of all patients is imperative also in order for this plan to work effectively.

"It will be necessary probably to have more medical students assigned to the medical clinic depending on the 'new patient' load.

"Patients should be classed as 'new' when they have not been in clinic recently. An old patient can be referred back to the 'New Patient Medical Clinic' for examination when new symptoms appear or another thorough work-up is indicated. This cannot be defined any more completely now but has to be worked out by the staff.

"C. Student clinical experience.

"1. Scheduling of hospital clerkship.

A minor rearrangement of the school calendar and grouping of students will make it possible to improve the students' experience considerably. Divide each class into 4 sections, A, B, C, and D. Each group would spend 4 weeks on each of the following services or group of services:

1. Medical service.
2. Surgical service.
3. Pediatrics, dermatology, psychiatry, affiliated hospital services (one week each).
4. Urology, ophthalmology, ENT, obstetrics and gynecology services (one week each).

The schedule would be as follows:

Group	Weeks*			
	0-4	5-8	9-12	12-16
A	1	2	3	4
B	2	3	4	1
C	3	4	1	2
D	4	1	2	3

*Double time if rearrangement of schedule suggested below is adopted.

"If the in-patient or hospital clerkship were held in the second semester of the third year and the first semester of the fourth year, a number of advantages would result. There wouldn't be any waste of clinical opportunities by excusing the seniors from the fourth quarter classroom work. (This practice of excusing the seniors should be stopped anyway.) It would be possible to double the length of continuous time for each department's clerkship and, therefore, give more concentrated and continuous training than is permitted when the clerkship is divided into two periods and is separated by two semesters of out-patient clinic work as it is now. In other words, a junior student would start his in-patient work in his second semester. Then he would continue on the in-patient service during the first semester of his senior year and he would have one year of continuous in-patient clerkship. The same scheme would work out well in the clinic also.

"The school calendar needs to be changed slightly. The second quarter should be extended to the end of July.

"2. Student's clinical experience

"Out-patient clinic. The students should examine all new patients who come to the clinic. The entire history and physical examination written by the student should be incorporated into the chart. The consultant can more easily add to or correct any differences he finds than write a new account. Each patient should have a single hospital and clinical record. The students should be encouraged to do a more thorough examination and this should be possible with an increase in time of the clinic.

"If the change in rotation is adopted, the juniors then will start in the clinic. Intensive training in history and physical examination should be given at this time by all members of the staff. During the second semester of the senior year the student's clinic work will afford an opportunity in examining a relatively large number of patients again to round out his clinical experience.

"Clerkship. The entire group of assistants on the medical service (and other services for their programs) should be utilized as teaching assistants. If this is done, two students could be assigned to one assistant as their actual tutor. The assistant should be responsible for assignment of patients, correcting clinical records, making rounds, and checking and helping with laboratory work. The emphasis should be on the student doing things for himself with teaching directed at the individual clinical problem. The records should be very detailed, graphs and charts be made for appropriate cases, and the entire student record be incorporated as part of the patient's record. Better laboratory facilities should be provided for the students than are available to them now.

"The student should not know before his work-up anything about the staff's opinion as to diagnosis. The student needs to learn from first-hand experience that diseases are not automatically labelled, and he should not start an examination already prejudiced about the diagnosis.

"A general medical service rather than a highly divided service is highly desirable for proper functioning of a clerkship program.

"In order to avoid the relative waste of already short supply of clinical material some students could be encouraged to take an elective course combining clinic and ward work during part of the vacation periods.

"The experience of the affiliated hospitals should be patterned after the above clerkship. At some time in the future it may be possible to assign one half or a smaller fraction of the class to the affiliated hospital for the entire clerkship in medicine. This can be done only if that staff is of the same caliber as this staff. This would help greatly in reducing the number of students assigned to service at one time and make the whole teaching program more effective.

"The physical diagnosis course, which is the introduction to clinical medicine, is now taught entirely by lecture. Supervised sessions of examination of their fellow students for normal physical findings should replace the lectures on normal findings. When clinical material increases, the practical experience during the second year should extend to specific physical signs. At the present time the out-patient clinic examinations in the third year will of necessity complete the initial phase in the practical experience in physical diagnosis. Of course, additional experience will be gained during the remainder of training.

"D. Internship and graduate school training.

"1. Internship. An internship is desirable to complete the clinical training of the medical students. It is the firm recommendation of the entire group of medical advisers that this hospital establish an internship which can be a model for other hospitals in Korea. The internship should be open to graduates of other Korean Medical schools and a competitive system should be used to select candidates on the basis of ability regardless of school of origin. Since clinical experience is limited for students as yet, it is desirable to establish a rotating internship.

"A suggested assignment of interns has been made as follows with a total of 17 interns: Medicine 5, Emergency room and Dermatology 1, Psychiatry 1, Pediatrics 1, General surgery 2, Chest surgery 1, Neurosurgery 1, Orthopedics 1, Urology 1, Obstetrics and Gynecology 2, ENT and Eye 1.

"This will mean that each intern will miss some of the smaller services which will have one intern at a time. This could be done by having the intern select a rotation with surgical emphasis of eight months on surgical services and four months on medical services, and the others who intend to go into one of the non-surgical specialties to take a rotation with medical emphasis of eight months on medical (i.e. non-surgical) services and four months on surgical services (preferably general surgery and obstetrics and gynecology).

"On the advice of Dr. James Matthews anesthesiology is not included in the rotation. The interns on surgery rotations should be encouraged to pay particular attention to immediate pre and post-operative care and to help the anesthesiologists in caring for their own patients.

"In order that every intern get at least one month on each service, it is necessary to set up an alternate program with exactly twelve interns or integral multiples thereof. Thus a number of 24 would be more in line with what Dr. Rha felt was necessary from the standpoint of meeting eventual graduate school needs. Twelve interns are probably too few to cover the needs particularly of the surgical service which has many divisions.

"Distribution of interns could be as follows:

	12 interns	24 interns
Surgery	5	10
Medicine	4	8
Psychiatry	1	2
Pediatrics	1	2
Obstetrics and Gynecology	1	2

"The graduates who have spent at least a year in an army hospital, in another approved hospital as an intern or in a research laboratory could register directly as an assistant. This would also increase the number of graduate students in medicine without enlarging the internship inordinately.

"The following specific recommendations are concurred in by the committee:

- "1. That an internship be established and that a rotating program with 17 interns be started.
- "2. An internship committee becomes an established committee to help advise the superintendent about policies pertaining to interns, their duties, responsibilities, privileges, etc. The committee will act also to help select interns.

- "3. Graduates who have had an approved 1 year internship can begin as first year assistants (or residents).
 - "4. Interns should be registered in the graduate school and receive credits as a minor course. (There doesn't appear to be any reason why credits in their major course couldn't be accumulated when serving on that service.)
 - "5. Only students who pass Graduate School examination be accepted.
 - "6. Proper publicity in Korean medical journals for the internship should be arranged when plan has been accepted.
- "2. Graduate school training.

"In order to strengthen the graduate program in internal medicine and in all clinical divisions of the medical school, it is advisable to require a 'minor' course of study in one of the basic medical sciences (Biochemistry, Physiology, Anatomy, Pathology, Microbiology, Pharmacology, and Parasitology). The best way to accomplish this would be for the individual graduate student to spend six months or even a year in the basic science department. Such basic science training should come before the student starts his research project so that he can apply techniques in his future research work.

"The basic science departments could each set up courses of electives for the 'minor' requirement with seminars, conferences, laboratory work, and lectures for the graduate students in clinical sciences. Since the number of students would be small, plans should be made so that a sequence of courses would be arranged in a department. The formal course training is not as satisfactory and definitely less apt to lead to use of a new technique in clinical studies than informal, full-time duty in the basic science laboratory of the student's choosing.

"E. Miscellaneous recommendations.

- "1. The centralization of library books and periodicals, and the reorganization of the periodicals particularly is pleasing. The students should continue to have access to current periodicals.
- "2. For purposes of radiologic safety, economy, and efficiency an isotope committee to supervise the function of a single central isotope laboratory has been established. This pattern of a cooperative project in isotope studies should be continued indefinitely, because of the unique nature of the problems involved.

- "3. A medical records system should be established and a single chart for each patient be established to record both clinic and hospital visits. The number of the chart should be used for x-ray and laboratory procedures. A detailed plan for this is being submitted by a subcommittee of the operating committee appointed to study this problem.
- "4. The functioning of the operating committee of the hospital has been impressive to watch and to participate in. The assignment of tasks to committees for solving special problems has been generally effective, and the progress made in solution of many problems has been substantial. One disappointing fact is that in spite of firm decisions to limit visiting hours for all but the critically ill patients and to insist on patients taking only hospital food, neither regulation is enforced. In order to function as a good hospital, it is the writer's opinion that both regulations must be followed, and other decisions of this important committee adhered to.
- "5. The dietary department needs to be strengthened, and the services of a dietician and eventually of a staff of dietitians are urgently needed. The need for dieticians is particularly important for development of a metabolism and endocrinology section. A committee to study and recommend change in the whole dietary service has just been formed. It is urgent that this committee meet regularly and develop plans for better food services and for helping a trained dietitian establish a dietetics service.
- "6. There is need for rehabilitation and physical therapy. Trained personnel from the National Rehabilitation Center at Tongnae could be obtained and plans be made for development of this type of service. A committee is actively studying this problem. Establishment of this type of service is anticipated in the near future.
- "7. Other foreign advisers in medicine (and other technical fields too) should devote most of their attention to clinical or laboratory teaching and help establish and apply new techniques. Lectures should be interpreted in Korean in order that more persons can understand the material presented completely.

"Lectures and conferences where the adviser is the main contributor should definitely constitute a small fraction of the adviser's duties. When lectures are given, furthermore, they should be confined to or emphasize recent developments with a specific reference to current literature. Where there are adequate printed materials in a given course, there is little to be gained by repeating the material in lectures. This material should be studied at home, and the classroom time spent in discussing its application to clinical or basic problems."

In addition to end-of-assignment in Korea reports of the nature above summarized, two of Minnesota's present staff members have now been in Korea

a full year. For the information and guidance of all concerned these staff members have prepared reports of their activities, observations, and recommendations thus far. Excerpts from these reports follow.

Margery Low, R.N., M.A., Adviser in Nursing. The "Summary of Major Recommendations" portion of Professor Low's interim report is quoted as follows:

"TEACHING METHODS AND TEACHER PREPARATION: Much has been accomplished in furthering the plans for the up-grading of the basic nursing program. Preparation of the faculty is going forward. Teaching methods have been and are being scrutinized and revised. The faculty seem tireless in their efforts for improvement.

"Recommendations:

- "1. Discussion methods in teaching should be used more frequently and by all of the faculty.
- "2. Laboratory practice in nursing arts should be followed within approximately a week by supervised practice in the hospital.
- "3. Discussion type patient-centered ward classes should be held on each station at least once a week.
- "4. Faculty members should be required to take a college or university course, with emphasis on education, each semester until requirements for at least a bachelor's degree have been reached.
- "5. A number of years, sufficient to permit the earning of a bachelor's degree, should be stipulated, after which time the minimum of a bachelor's degree should be required as one qualification for membership of the faculty.
- "6. Seoul National University should make it possible, administratively, for faculty members who have been admitted through the regular channels to take one or two classes each semester for credit, and should allow sufficient time in which to complete a given program (preferably in education). This is necessary in order that the faculty may be adequately prepared without loss to the School of Nursing during the time of preparation.
- "7. Consideration should be given now to ways and means for further education of the faculty in the future on the master's level.

"NURSING SERVICE ADMINISTRATION: Since it is seldom possible to teach a student to give a higher quality of nursing care than that she experiences in the teaching hospital, it is imperative that the quality and quantity of nursing care be improved. To accomplish this, lines of authority must be clarified and responsibilities clearly defined.

"Recommendations:

- "1. Complete responsibility for the hiring of nurses should be delegated in as far as possible to the Director of Nursing Service.
- "2. Such responsibility for discipline of nurses as is possible under the law should be delegated to the Director of Nursing Service. Other discipline, up to and including discharge, should be dealt with immediately by the proper authorities upon the recommendation of the Director of Nursing Service.
- "3. Nursing service must have the backing of administration in the carrying out of official hospital policies.
- "4. Written nursing policy books should be kept on each station and the nurses held responsible for the carrying out of these policies.
- "5. The responsibilities and limitations of nursing service should be clearly delineated in written form.
- "6. Functions and responsibilities of doctors and nurses should be in written form to eliminate the present dual authority.
- "7. The medical staff should not have to carry the responsibility for station administration. This responsibility should be placed upon the head nurses.
- "8. Supervisory and head nurse duties should be in written form.
- "9. Supervisors should have an office in the area of their responsibility.
- "10. The majority of the supervisor's time should be spent on the stations under their supervision.
- "11. The responsibility of the hospital and the responsibility of the School of Nursing for student nurses during the clinical learning experience should be mutually decided upon and put in writing.

"WARD ADMINISTRATION: The head nurse is one of the most important people in the hospital because of her close relationship with patients, relatives, and doctors. Her attitudes, knowledge, and efficiency determine the nursing care of the patients on her station. It is possible to greatly improve the quality and quantity of nursing care under the existing conditions.

"Recommendations:

- "1. Kind, skillful, and continuous nursing care must be given to the patients by the nurses.
- "2. Equipment and supplies for nursing care to provide comfort and cleanliness for the patient should be secured as rapidly as possible.

- "3. Head nurses must accept and meet their responsibilities to the patients and to the hospital. Included are the head nurse's responsibility to:
- a. Treat patients and relatives with kindness and consideration.
 - b. See that so-called 'menial' duties, such as giving and removing bed-pans are performed by nurses.
 - c. Use available equipment to the utmost.
 - d. Keep the station clean and neat by example and by teaching the personnel.
 - e. Make efficient use of personnel.
 - f. Keep equipment clean and in good repair.
 - g. Conserve expendable supplies.
 - h. Assign student nurses in terms of student's need for learning.
 - i. Supervise and help students in terms of clinical experience as a learning situation.
 - j. Enforce hospital policies.

"SUPERVISION: Supervision of student nurse clinical experience has made great strides. Faculty members are assuming this responsibility as often as time permits. The nursing service personnel is cooperating with them and taking over the supervision when the faculty cannot be on the stations.

"Recommendations:

- "1. There should be continued expansion of and emphasis on supervision as 'the encouragement of professional and personal growth of those supervised'.
- "2. As budget permits, teaching supervisors should be attached to the School of Nursing.
- "3. Closer and more constant supervision should be provided for both graduate and student nurses as rapidly as possible.

"CURRICULUM CHANGE: The collegiate curriculum is being built on a solid base of student and nursing needs in Korea. The cooperation and advice of other colleges within the University and of individual faculty members have been sought and secured. The curriculum has taken definite form although much work remains to be done on it.

"Recommendations:

- "1. The curriculum must be continually evaluated, based on the nursing needs of a changing society. Revisions of the curriculum should then be made to meet these new needs and to eliminate those parts of the curriculum which no longer meet present needs.
- "2. Courses should be contemporaneous with clinical experience in that area. As an example, medical courses should be taught while the student is having medical nursing experience.
- "3. A study should be made of the midwifery course as to the need for such a course, needs of the student in learning midwifery, and possible ways of meeting these needs. The present course is incompatible with sound education.

"EQUIPMENT: Teaching equipment is now arriving. The FY 1957 request completed the School of Nursing's needs, with the exception of books. The request for these has been deferred to FY 1959 since the proposed collegiate program will affect the choice of books.

"Recommendations:

- "1. Ways and means should be sought to increase the kinds and quality of text-books in the Korean language.
- "2. Students should be taught proper care and cleaning of equipment, particularly new kinds and those of new materials.
- "3. An inventory should be kept of equipment and the inventory checked at regular intervals.

"BUILDINGS: The class-room building is under construction and its completion is expected this summer (1958). Attempts are being made to procure counterpart funds for that part of the furniture not ordered from the United States. The building should provide adequate facilities for the School of Nursing for many years.

"A much-needed new dormitory, to house both graduate and student nurses, has been planned. Attempts are now being made to finance it.

"Recommendations:

- "1. The completion of the class-room building should be effected as rapidly as possible.
- "2. Efforts should be made to procure counterpart funds for the School of Nursing out of the FY 1957 budget.
- "3. Efforts to finance the new dormitory should be pushed so that construction can be started this fall (1958)."

Professor Roy O. Bridgford, Adviser in Agriculture. (Area of specialization agronomy). As a result of Professor Bridgford's wide travel and discussions with agriculturists engaged in a broad cross-section of endeavor in this area in South Korea, plus his more concentrated observations at and in the vicinity of the College of Agriculture at Suwon, he has concluded that the introduction of more practical laboratory work and research, the latter at both student and staff levels, would prove an enlivening and productive change in the handling of many of the subjects which make up the generally satisfactory - from the point of view of required and elective courses - present curriculum for agronomy students. With the concurrence of the College of Agriculture dean and staff members concerned, during the 1957 field season action was initiated along this line by Professor Bridgford and more is planned for the field season of 1958. Through this addition to teaching methods and procedures at both the senior and graduate student levels it is to be expected that the College will not only be graduating better educated, more capable men, but will be assisting to a greater and greater degree in the solution of some of Korea's myriad food and fiber problems.

To basic knowledge which students will gain concerning sound research methods and procedures, including the scientific observation, measurement and analysis of results, will in some cases come the satisfaction of making significant contributions to knowledge. Professor Bridgford has been spending much time and effort in assisting his Korean colleagues to effect this basic change to the greatest extent feasible. In conjunction with this endeavor Project Establishment and Project Progress Report forms have been devised and suggested for both student and staff use.

Professor Bridgford's observation has been that there is a very great need for more textbooks and reference materials written in the Korean language,

and that the College should bend every effort to develop more such materials on a continuing basis. Likewise in his opinion more visual aids would add materially to the effectiveness of the teaching process. To his view the essentials for many such aids are currently available in Korea.

Glenn R. Mitchell, Adviser in Hospital Administration. Mr. Mitchell's interim report discusses each of the major areas of concern to hospital administrators - the physical plant and its rehabilitation, maintenance, improvement, and efficient use; safety precautions; housekeeping; the management of patients, their nurses and doctors; admissions procedures and the preparation, use and filing of medical records; the special problems of service facilities such as kitchen, laundry, x-ray, pharmacy, laboratory, and bookkeeping; the great and troublesome problem of financing the hospital; operation of the out-patient clinic; and miscellaneous matters such as autopsies, public relations, and possible advantages of forming a Korean Hospital Association. The close working relationship of the entire Minnesota medical team is evident in the treatment of each subject.

The overall objective evident in the report is to be instrumental, along with colleagues, in assisting to improve Seoul National University's hospital, its services and administration, at the fastest pace feasible to attain an operational level consonant with educational needs and leadership responsibilities.

Some substantial accomplishments have already resulted at the Seoul National University hospital in the form of rehabilitation, improved maintenance and housekeeping, and the establishment of a central supply room, emergency room service, and central admissions and record procedures. A great deal of work has been done on plans for further improvement of the physical plant, including obtaining kitchen, ward and laboratory equipment which will aid materially in improving sanitation, maintenance, housekeeping, and patient care in general.

The greatest single problem facing the Seoul National University hospital at this time is financing. A way must be found, and soon, to alleviate the very serious financial situation which now faces the hospital. Currently both Koreans and Americans concerned are working on this problem.

Public Administration. Work in Korea in the latest contract area, public administration, got under way with the arrival of inservice training specialist Dr. E. R. Draheim in January of 1958 for an assignment with the National Officials Training Institute of the Republic of Korea's Office of General Affairs. This facet of the project in public administration appears to be off to a good start.

A more recent arrival for work in this field was Dr. Stuart A. MacCorkle whose major responsibility will be to assist in establishing and developing a graduate level School of Public Administration at Seoul National University's College of Law.

Both Dr. Draheim and Dr. MacCorkle are proceeding under the broad plan entitled "Korean Public Administration Program - Report" which was summarized in the Cooperative Project report for the period April 19 - October 19, 1957.

Engineering. Professor C. E. Lund, Minnesota's most recently arrived staff member, will serve as general engineering adviser and will give to Seoul National University's College of Engineering more specific assistance in the field of his specialization, mechanical engineering.

Final Reports. The content of reports prepared by Minnesota advisers are always the subject of much discussion with Korean colleagues during the course of their development. Reports are invariably discussed in detail with Seoul National University personnel concerned prior to the departure of the staff members preparing them. The reports are always thoroughly discussed with the Dean of the College involved, with concerned members of his staff, and with the President of the University, who usually requests the Academic Dean to participate.

Copies of the reports, in appropriate number, are placed in the hands of Seoul National University's President, the Dean of the College concerned (including copies for his staff), OEC and the University of Minnesota.

Relative to the foregoing recommendations and those submitted by other staff members in preceding report periods the following comments continue to be applicable and significant:

1. By and large suggestions for change as a basis for improving instruction and research in all areas are developed through close working relationships effected between Korean and American staff members concerned. Thus the written report in most cases simply makes a matter of record conclusions and courses of action already subjects of much discussion and close agreement.
2. Seoul National University's President and Deans concerned indicate great interest in changes proposed and, in the main, have given the impression of accepting them as desirable guides for action in the fields concerned.
3. Minnesota staff members respect the competence of their Korean colleagues. Both Korean and American staff members recognize that the advanced study programs of Seoul National University members now participating in the cooperative project will further advance the level of faculty competence in specific technical areas concerned.
4. The physical things (structures, facilities, equipment) needed for carrying out certain recommendations are in the process of being supplied through the operational facilities portion of the Cooperative Project and in some areas are already exerting a beneficial effect on teaching and research.
5. The basic elements which make possible the effecting of instructional and research changes agreed upon as desirable are either present now in some degree or will be supplied, according to present plans, before the end of the contract period is reached.
6. Many of the changes desired by both Koreans and their American colleagues will come about only through the dedicated efforts of Seoul National University officials and faculty members over a long period of time. Some of the foregoing recommendations have already been placed in effect; some may be carried out at an early date with staff and facilities now available; others will require more time.

Additional Minnesota Staff. Expected near future arrivals of additional Minnesota staff members for Cooperative Project service in Korea are commented upon in Part I of this report.

Equipment and Supply Dollar Funds, Seoul National University Cooperative

Project.

	<u>FY 1956</u>	<u>FY 1957</u>	<u>FY 1958*</u>	<u>Total</u>
Agriculture	\$ 260,000	\$ 50,000	\$ 20,000	\$ 330,000
Engineering	730,000	500,000	134,000	1,364,000
Medicine	450,000	70,000	171,000	691,000
Veterinary Medicine	50,000		27,000	77,000
Liberal Arts and Sciences (For premedical courses)	50,000		40,000	90,000
Seoul National University General (For printing facility)	<u>35,000</u>	<u> </u>	<u> </u>	<u>35,000</u>
Total	\$1,575,000	\$620,000	\$392,000	\$2,587,000

*These amounts requested but not as yet allocated.

As of March 31, 1958 the invoice value of laboratory and classroom equipment and supplies purchased by Minnesota for Seoul National University and received in Korea totalled \$897,381.23. This amount is made up of the following sub-totals by Colleges:

Agriculture	\$171,550.62
Engineering	\$444,230.80
Medicine	\$220,463.14
Veterinary Medicine	\$ 30,143.94
Liberal Arts and Sciences	\$ 30,992.73

Much of this equipment is already in use; the use of some items must await provision of additional laboratory space and facilities for installation. These needs are receiving attention. (For information on the use of Cooperative Project equipment received see following reports of Deans of Seoul National University Colleges concerned.)

Further work on classroom and laboratory equipment and supply needs for each of the contract areas was accomplished by Minnesota staff members and their Korean colleagues during this 6-month period.

Physical Plant Rehabilitation and Improvement. Funds requested for physical plant rehabilitation and improvement for agriculture, engineering and medicine have been allocated as follows:

Rehabilitation and Improvement Dollar Funds
Seoul National University of Korea Cooperative Project

	<u>FY 1955</u>	<u>FY 1956</u>	<u>FY 1957*</u>	<u>FY 1958**</u>	<u>Total</u>
Agriculture	\$422,300	\$ 650,000	\$ 159,000	\$ 5,000	\$1,236,300
Engineering	65,200	100,000	676,000	---	841,200
Medicine	<u>63,500</u>	<u>275,000</u>	<u>345,000</u>	<u>103,000</u>	<u>786,500</u>
Total	\$551,000	\$1,025,000	\$1,180,000	\$108,000	\$2,864,000

*As of the end of this report period copies of the PIO/C's for the engineering and medicine projects concerned had not been received from OEC.

**These amounts requested but not as yet allocated.

As of the end of this report period all except a few items of the construction materials and supplies procured by the Republic of Korea Office of Supply with FY 1955 funds had arrived in Korea, had been delivered by that agency to the colleges for which intended and had been used for the purposes for which procured. Additional materials procured with FY 1956 funds also arrived during the period. Much of these materials have already been used for the purposes intended, more will be used in construction during the current field season.

(See following reports of Deans, Seoul National University Colleges concerned, for information on status of physical plant rehabilitation and improvements.)

Changes Which Have Occurred at Seoul National University as a Result of the Cooperative Project. Part I of this report presents data on the staff exchange aspect of the Cooperative Project; Part II comments further on the same subject and includes information on equipment procurement and on physical plant rehabilitation and improvement. Regarding both of these major aspects of the Cooperative Project a continuing question is the nature and extent of changes which have occurred at Seoul National University in the contract fields concerned as a result of this technical assistance program. To obtain current information regarding this question the President of Seoul National University was again asked to provide the University's views on the matter. It was suggested that material be provided for each college concerned under the following categories:

- "1. The nature and extent (as specifically as possible) of additional changes in teaching and research that have come about wholly or partially as a result of the Cooperative Project.
- "2. The nature and extent of changes in teaching and research which will be placed in effect during the next school year as a result of the Cooperative Project. Of particular interest here will be added and improved laboratory offerings.
- "3. Physical improvements (building repair and improvement, and new construction) which have been completed since the beginning of the Cooperative Project. A brief description of each will suffice.
- "4. The nature of building repair and improvement, and new construction which will be continued or started during the next six-month period, and planned completion dates for each project.
- "5. Major obstacles which continue to prevent the introduction of desired changes in teaching and research. Please specify the changes concerned and why it has not been possible to make them.
- "6. The extent to which new library materials are in use."

These reports speak for themselves. They are considered to have significant value for all concerned in judging the Seoul National University Cooperative Project as it has progressed to date.

College of Agriculture. (Dean: Cho, Baik Hyun).

- "1. The nature and extent of additional changes in teaching and research that have come about wholly or partially as a result of the cooperative project.

A. Department of Agriculture:

- (a) Professor Roy O. Bridgford, cooperating with Professor Chi, Young Lin has been carrying on some tests as a joint project.

Since barley and wheat in this country are quite important crops that are next to rice, Professor Bridgford brought 384 varieties of wheat and 585 varieties of barley to this country to be tested whether any of them will be able to fit more to plant in rice paddies after rice harvesting. Professor Bridgford also brought 10 varieties of soy-beans from the University of Minnesota for the same purpose.

- (b) Professor Chi has also made a plan to introduce new varieties of corn and potatoes under the direction of Professor Bridgford, to be examined these characters in this country.
- (c) Under cooperation with Professor Bridgford, Professor Chi introduced many new methods of field tests for various crops to graduate students studying at the Department.
- (d) Professor Kim, In Kwon

Professor Kim has been teaching plant breeding, plant genetics and crop production, also conducting laboratory works in new methods and ideas brought from Minnesota. Professor Kim has been trying to find out a new variety of rice which has a strong resistance to the blast disease (*Piricularia oryzae*) in his research work. For the student laboratory work, he is chiefly conducting micro-technique, pollen analysis and examining the crop characteristics using the apparatuses and chemicals provided under the Cooperative Project.

- (e) Professor Yu, Tal Young

Professor Yu specialized in floriculture and olericulture. He has been teaching advanced floriculture and olericulture, also these laboratory works with newly trained methods and ideas. His research work, since he returned from Minnesota, has been very slow but steady. He is trying to find out a method in germination of orchid seed and promoting the root inducing with growth regulator. For the student laboratory work the propagational method of rose, the method of cabbage storage and flowers' tubes storage, etc., have been effectively conducted since he has gotten the necessary chemicals and apparatuses under the Cooperative Project.

(f) Professor Lee, Tai Hyun

Professor Lee has been teaching modern pomology, growing principles of crops and modern biometrics. His research is chiefly related to urea foliar application of various kinds of deciduous fruit, and to delaying the dormant season of peaches with the aims to protect them from frost killing of flowers. With the aid of the Cooperative Project, Professor Lee has been getting many new varieties of fruit trees from different countries. He will also be able to bring 88 varieties of Vitis Vinifera grape from the University of California with the same aid.

(g) Professor Lee, Eun Woong

It was not possible to carry out any crop production laboratory work before the various testing apparatuses under the Cooperative Project had arrived at the Department of Agriculture. Professor Lee has, however, been conducting his laboratory work with these testing apparatuses, eliminating former difficulties encountered. His research work has been chiefly related to the seed examination of the various crops with different methods.

B. Department of Forestry:

- (a) More than 400 plant labels for living specimens in our arboretum which were destroyed during the war have been perfectly restored by the use of the "Embossing Press" and "Aluminum Tapes" which were procured under the Cooperative Project.
- (b) Microscopic laboratory works in Dendrology and Wood Technology which we had not been able to offer as regular courses due to lack of microscopes were made possible to be conducted by the use of microscopes which were provided under the Cooperative Project.
- (c) More than 600 permanent microscopic slides, representing crops and radial and tangential sections of Korean wood have already been made and additional slides are being made by the use of "Sliding Microtome" which was equipped under the Cooperative Project, thus providing the forestry students with profound materials in their laboratory works in wood technology.

C. Department of Livestock:

- (a) The imported inbred White Leghorn, White Rock and New Hampshire from the St. Paul Campus produce around 70% of eggs each day at the present time. 1,000 eggs were incubated on March 2, 1958, and 500 more eggs were added to it on March 10, 1958. We planned to raise 100 laying hens for each of the above breeds. The following performance test will be carried on during the new school year:

1. Production test using the trap next will be made in order to determine the individual producing ability.
2. The weight of the individual bird will be checked in a week interval in order to determine the growth rate.
3. Hatchability.

D. Department of Agricultural Engineering:

- (a) For physical laboratory work, equipment received at this department has been wholly utilized. Except for physical laboratory work things are slow, but steady to carry out full time work, since the space for laboratory is still lacking.
- (b) Little change in teaching staff was made during the last semester. Professor Park, Sung Woo has been studying at Minnesota and Ko, Chae Koon will come back to his post next semester.

E. Department of Agricultural Chemistry:

- (a) Electrical facilities, the lack of which had been a major difficulty in laboratory, teaching and research, have been so much improved that the future work will be promising.
- (b) Regarding additional changes made at this department as a result of the Cooperative Project, staff change and some improvement in the student laboratory work may be pointed out. Mr. Lee, Sung Hwan has been studying at the University of Minnesota and Mr. Cho, Duck Hiyon at the University of California under the exchange program.

Up to now the shortage of teaching staff has been an obstacle for lectures and due to absence of five members who are now in the United States, many lectures were made by lecturers from outside. However, most of these members are expected to return back to duty in this year and lectures at our department will be much fortified along with changes in curriculum according to the new selected semester system.

- (c) At the laboratory work students are using additional instruments such as autoclave, hydrometer, pH meter, rotary pump, water bath, etc. The quantitative analysis, soil and fertilizer analysis, fermentation laboratory work and organic synthesis are much enriched for training students.

In the coming semester a new course of biochemical laboratory work will be started in which manipulation of various new instruments such as Beckman pH meter, Beckman spectrophotometer, Coleman photocolormeter, potentiometer, nephelometer, flame photometer, etc. will be demonstrated for senior students.

- (d) A research on sugar beet has been well in progress and a good result was already obtained last year. The extension of the project is planned for this year.

F. Department of Agricultural Economics:

- (a) Two of the department staff were sent to the University of Minnesota under the Project and the one of them returned after finishing his graduate work in the field of Farm Management and Agricultural prices. The other man is still studying there in the field of Statistics. Farm Management, Agricultural prices and statistics are supposed to be the major portion of Agricultural Economics. These two staff who were trained in the University of Minnesota will contribute the most for the development of Agricultural Economics in accordance with new ideas and techniques that are rapidly developing in this field.
- (b) The course schedule of the Department was reorganized in imitation of Department of Agricultural Economics in American Colleges emphasizing on practices and basic understanding of students. As an example, more time of the students will be spent in Farm Management and survey study of farm operation rather than in theoretical discussion.
- (c) Effective use of calculating machines have eliminated use of the older abacuses in the survey studies. The typewriter and the other equipments have given good chances for practicing of the students and also offered better efficiencies of the Department administration.
- (d) The building construction has benefitted for the Department to use four rooms instead of one room before the Project started.

G. Department of Agricultural Biology:

- (a) Since members of exchange staff were returned to the Department the following changes were carried out.

Increasing courses

Aphidology	by Woon Hah Paik
Biological Control	by Woon Hah Paik
Diseases of Field Crops	by Hoo Sup Chung

- (b) After the arrival of equipments and chemicals students' laboratory work and staff's researches were improved remarkably. The equipments which are now used for laboratory works and researches are given in the following table.

<u>Name of equipment</u>	<u>Usage</u>
Refrigerator	Storing insect viruses, cultures of phytopathogene, gypsy moth eggs, and cabbage worm pupae. Storing typical chemicals such as Colchicine, Auxin, etc.
Incubator	Rearing of rice weevil; culturing of pathogenic fungi of insects; culturing of bacteria and fungi either phytopathogens or saprophytes; drying of the mounting medium of microscopic slides.
Oven	Not only for drying and backing of materials but also sterilization of plates, glassware, and instruments.
Germinator	Useful in teaching students the methods of seed testing as well as showing the different types of seed germination.
Arnold's sterilizer	Sterilization of various culture media.
Microscope	Laboratory works and researches.
Binocular dissecting microscope	Very convenient and excellent for examination of opaque subjects and transparent subjects.
Micrometer	Accurate measuring of microscopic structures.
Microtome	For rapid and accurate sectioning of tissues.
Slide warmer	Used to keep slides at a constant temperature, in order to provide flattening without damage to the sections.
Projector	Projecting various teaching materials.
Analytical balance	Very accurate and suitable for use in weighing stains, chemicals, etc.
Beckman's pH meter	More accurate determine of pH value than by any other instrument.
Colony counter	Counting number of bacteria colonies on the media.
Waring blender	Preparation of inoculum of phytopathogenic fungi.

(c) The following staff's researches were accomplished by ICA technical aid partially.

"Studies on the quick testing method of cold resistance and the factors affected to cold resistance of wheat and barley"

by Professor Ahn, Chai Joon

"Longevity of aphid (Macrosiphum pisi) on different nutrient solution"

by Professor Paik, Woon Hah

"2. The nature and extent of changes in teaching and research which will be placed in effect during the next school year as result of the Cooperative Project. Of particular interest here will be added and improved laboratory offerings.

A. Department of Agriculture:

- (a) Professor Chi and Professor Bridgford will continue their tests and will bring the varieties of corn and potatoes in next school year.
- (b) They are also planning to provide full time laboratory works for crops, pomology, and crop breeding in next school year.

B. Department of Forestry:

- (a) Expecting that Mr. Kim, Kap Duk, one of the trainee in Minnesota under Cooperative Project will join our faculty from coming spring semester, "Aerial Photogrammetry" was added as a new course required for senior forestry students and a minimum equipments which would be necessary for instructional work in the course were proposed to be procured additionally under Cooperative Project.
- (b) The instruction on Aerial Photogrammetry at the Forestry Department with no doubt will meet the great need for the technique of this new field as the Ministry of Agriculture is engaging in the work of aerial photography as a newly adopted project for forest inventory work of South Korea.

C. Department of Livestock:

- (a) The curriculum of Animal Husbandry has been changed on the basis of the semester system for benefit of the students, and this new system would be used from the new school year. Furthermore several courses such as poultry breeding and poultry products will be opened for the students during the new school year.
- (b) Mr. Ohh, Bong Kug returned on December 23, 1957 from St. Paul Campus after completion of his graduate works on poultry breeding. He will give lecture on poultry breeding and poultry products. Also he will take care of the experimental chickens which were sent by the Poultry Husbandry Department, Institute of Agriculture, University of Minnesota. Mr. Lee, Young Sang, who is studying on Animal Nutrition at St. Paul Campus will be back by April 1, 1958.

D. Department of Agricultural Engineering:

- (a) Up to now the shortage of staff has been an obstacle for lectures and to absence of four members who are in United States. Many lectures were made by lectures from outside. However, two of them

are expected to return home of their duty in this year and lectures at our department will be much fortified along with changes in curriculum according to the new selected semester system.

E. Department of Chemistry:

- (a) As mentioned before at first question, many difficulties encountered at last school year will be eliminated.

F. Department of Agricultural Economics:

- (a) Text books or references which were sent from the Cooperative Project will more effectively be used in teaching and research from the coming school year.
- (b) During the summer and winter vacations the farm earning survey study will be proceeded using the ideas and techniques that were learned at Minnesota and other collage.
- (c) Considering the present state of Department of Agricultural Economics, more persons would have been trained to have a better cooperation among the staff members for the desired changes. As it is, however, we who were trained under the Cooperative Project wish to do our best in the maximum utilization of new ideas and techniques for the developments of Agricultural Economics.

"3. Physical improvements which have been completed since the beginning of the Cooperative Project and the nature of building repair and improvement, and new construction which will be continued or started during the next six-month period, and planned completion dates for each project.

A. Buildings which have been completed or being constructed are as follows:

<u>Name of Building</u>	<u>Number</u>	<u>Size</u>	<u>Area</u>	<u>Remark</u>
1. Quonset	3	40' x 100'	333.3 (Pyong)	Completed
2. Dormitory (3 storied)	3	44' x 126'	1,502.4	" "
3. Mess hall (single storied)	1	140' x 147'	740.3	" "
4. Silo	1	15' in.dia. x 32' height	6.0	" "
5. Livestock shed	1	40' x 100'	111.1	" "
6. Green house	2	26' x 60'	73.6	" Being constructed
7. Farm implement and workshop	2	40' x 60'	133.2	" "
8. Main building extension	1	33' x 268'	255.7	" Completed

<u>Name of Building</u>	<u>Number</u>	<u>Size</u>	<u>Area</u>	<u>Remark</u>
9. Library extension	1	45' x 45'	64.0 (Pyong)	Completed
10. Faculty residence moved recently	10	-	130.0	" "
11. New main building	1	-	2,200.0	" Being constructed
12. Auditorium	1	-	500.0	" "
13. Power House	1	-	100.0	" Will be started soon

(a) Department of Agriculture have got a new warehouse which is made of zinc plate and it will be used very effectively as a warehouse and, even though it is not completed, we have one green house which will be used for crop breeding and floriculture.

(b) At the Department of Livestock a silo, 270 ton capacity, has been completed since last fall at the College Livestock Farm. This silo will be filled as soon as the crops are available.

The construction of cattle barn has been made partially. We expect that this barn will be completed in a very short time if the materials are available.

The construction of warehouse, has been completed, and hope to use it at the earliest possible time.

"4. Major obstacles which continue to prevent the introduction of desired changes in teaching and research.

(a) In view point of the college administration, it will first be financial problem. Since national budget of Republic of Korea government is limited in amount, consequently the budget for the administration of this college is very short. Under this circumstance, without any special consideration and measurement would be made by Republic of Korea government, the college will meet a great difficulty in administration and to bring up the desired changes in teaching and research in near future.

"5. The extent to which new library materials are in use.

(a) The Library at the College of Agriculture has receiving more than 1,000 books and 94 different kinds of periodicals which are needed for the preparation of the lecture of staff members and the student use.

(b) Under the guidance of Mr. Ostvold, chief of the library of the Institute of Agriculture, University of Minnesota, our library changed the classification and cataloging systems into the new Congress Library System. This new system has brought a great help to accomplish the effective works at the library for both user and worker.

- (c) The books, periodicals and other publications arrived at library have been using almost 100%.
- (d) Staff members and students have familiarized with reading the foreign current new books and periodicals.
- (e) 64 pyongs of annex has been added to the old library building. It will be used very effectively as a reading room for the students and book storage.

College of Engineering. (Dean: Hwang, Yung Mo).

General: As described on previous report, with FY 1956's building materials all doors of Building No. 1, 2 and 4 were newly fixed, making the buildings look like brand new ones.

With the electric wires, switches and transformers supplied by ICA, total electric wirings inside and outside of the buildings including Building No. 5 were replaced and are being transformed so that the secondary voltage of the single phase would be maintained from 110 to 125 volts regardless the fluctuation of the primary voltage. This transformation also facilitates to connect the stand-by generators to main power supply line of our college. These re-wirings and transformations of the power lines of our campus cost around 35.7 million hwan of counterpart funds.

Plumbing and heating installations of the building No. 5 have been completed with the materials supplied by ICA costing around 37.2 million hwan of the counterpart funds, except boiler installation. To save the heating fuel during the winter time, from November, 1957, radiators in corridors and rooms, which are not frequently used in winter, of Building No. 1 and 2 were cut off. On the same reason some of the rooms of the Building No. 5 were not equipped with the radiators but in the near future, when the need arises, the radiators will be installed in the needed rooms gradually.

The steel grates in the windows of the Building No. 5 are being installed for security. Due to the delay of the funds released the Department of Mining Engineering will be able to move partly in the Building No. 5 from next semester, however, the Physics and Chemistry laboratory works will be carried out at the newly equipped rooms in Building No. 5 from the next semester.

Towing tank body and its building are under works costing around 16 million hwan of counterpart funds and they will be finished within next 50 days. The instrumentation of the towing tank is expected to be delivered by end of this year.

Various antennae, which will be used for the laboratory tests in the Department of Electronics, were installed on the roof of the Building No. 1 costing around 1.3 million hwan.

After the installations of the laboratory equipment, around 11.6 million hwan were spent to equip laboratory tables for each department.

Future Plan within Next Six-Month: Security fence of the campus will be started from the rear side of the Building No. 4 stretching to the rear hill of the Building No. 2. With the PTA funds the corridors of the Building No. 5 will be renovated and the trees will be planted on the terraced area.

Levelling of the ground for the scheduled dormitory site and quonsets will be built which will be used as the warehouses for the building materials of the dormitory which are expected to be poured in around August this year.

Department of Architecture: Lecturer Yoon, Chung Sup, after coming back from the University of Minnesota in August last year, unfortunately, was unable to have lecture in this Department. From the next semester he will have his lecture. With the cooperation of Assistant Professor Kim, Hi Choon, Kim, Jong Soo and other his colleagues, we expect much improvement of teaching method in this department from the next semester putting more emphasis on the architectural design works.

Department of Chemistry: No specific improvements have been made since last six-month report submitted. After moving in the Building No. 5 all of the equipment received under this project will be used effectively. Annexed to each laboratory room in the Building No. 5 there is a preparatory room, which will be used also as a stock room, to provide "check-in and out" of the equipment in each laboratory work. The following laboratory rooms are provided in Chemistry:

1. Qualitative Analysis Room: Six laboratory desks, eight students on each desk totalling 48 students, are installed. This room will be occupied 8 times a week - 3 hours each - by the Freshmen.

2. Gravity Analysis Room: Ten laboratory desks, four students on each desk totalling 40 students, are installed. This room will be occupied 4 times a week - 3 hours each - by the Sophomore students.

3. Volumetric Analysis Room: Same as above.

4. Balance Room: Concrete balance platform is constructed which is able to bear 20 sets of balance. One balance will be used at the maximum by four students at the same time.

Department of Chemical Engineering:

1. Improvement in Teaching Method: Since there has been no staff returned from Minnesota in the Department of Chemical Engineering, no new teaching method has been introduced by our staffs during this period as a result of the personnel training program of the ICA project.

2. Installation of Equipment: As the department has so far received only small apparatus and instruments, no installation work has yet been attempted by the Department of Chemical Engineering although the buildings and the power- and water-line construction designed with the expected Unit Operations Equipment and other big experimental facilities in mind have been almost accomplished. In fact, the installation program is under complete stalemate because of the delay in purchasing those big equipment at the University of Minnesota.

3. Student Laboratory Hours: New aid apparatus and instruments are being constantly used as explained in the previous report except the period during the coldest weeks of a year.

4. Staff Research: Associate Professor Lee, Chai-Sung and his assistant Mr. Lee, Young Joo (graduate student) have recently succeeded in synthesizing the first little sample of liquid hydrocarbon from the gas which they generated from Korean anthracite. (Refer to the previous report).

A vacuum pump, gas analyzer, wet test meter, constant temperature water circulator, balances, pressure gages, pressure regulators, glass wares and other tools received under ICA aid project have been effectively utilized during the research works.

Department of Civil Engineering:

1. Since this department was trying to follow as much as possible the recommendations made by Dr. Andersen from the University of Minnesota last year to improve the teaching method as described on the previous report, no specific change has been made during this period. As assistant Chung, Myung Sik is scheduled to come back in August this year after studying sanitary engineering in the United States for two years, he will be in charge of the said lecture and laboratory which will be equipped with the funds of FY 1958.

Assistant Professor Chung, In Choon is also scheduled to return in August from the States after one year training in soil mechanics. At the moment soil test laboratory is not quite active.

2. The equipment of the hydraulic test laboratory to be used by both this department and mechanical engineering are requested under FY 1958. With the concrete tester arrived recently, from next semester the students will be able to have any kind of laboratory works on concrete testing, including pre-stressed concrete works.

Department of Electrical Engineering:

1. With the four faculty members' return - Professor Chung, Sung Kae, Yang, Heung Suk, Chee, Chol Kon, Cho, Kun Chan, and Bark, Min Ho - in this department, the improvement in teaching attributable to them are as follows:

- a. New subjects brought by them to teach are - automatic control, metadyne, semi-conductor, high tension engineering and illuminating engineering.
- b. In teaching to let the students familiarize in the fields of application, calculations on each subject are much more emphasized than theories with heavy load of home work assignment and frequent quiz.
- c. Each lecture is followed by subsequent demonstrations and laboratory works to make the students thorough understanding, except the following subjects which will be done after the equipment available requested under FY 1958: Power transmission, illumination, automatic control, transient phenomenon and high tension engineering.

2. Tables and electric wirings in the laboratory rooms of the Building No. 4 are fully equipped during the period. Old motor-generators driven by means of belts and pullys have been direct-coupled.

Since last report, D.C. ammeter and voltmeter, vacuum pump and grease, vacuum gage, and light filter were delivered under the cooperative project. With these equipment installed, the laboratory rooms for the electric machineries and the basic electric laboratory are completely equipped.

With the equipment received since last report, the following laboratory works are newly added for the students: Measurements of various resistances, magnetic flux, phase sequence, and rotating magnetic field; Use of wattmeter, ammeter and voltmeter, potentiometer, and oscillograph; Characteristics of induction motor, synchronous generator and motor; Use of variable inductor and resistor.

Department of Electronics:

1. In order to foster the student's abilities of understanding on their subjects considerable home works and assignment are given. This department attempted to make a time schedule on each lecture and laboratory work beforehand in the second Semester, 1957, and checked carefully afterward. They found that all of the lectures and laboratory works in the department were closely followed according to the schedule.

Just for a reference, this department, trying to get public informations among the students, distributed to the students a certain form to be filled concerning the contents of lecture, teaching method, attitude of the lecturer, laboratory works and the department administrations. Since this was the first attempt, they could not collect all of the informations but at least they could see the frank and honest opinions and desires of the students concerned. By analysing these informations obtained repeatedly, they like to consider these materials as an important factor to improve the teaching method and administration.

2. Antenna for the amateur radio station, short-wave three-frequency bands, and ultra-short wave of rotary beam antenna type have been installed at the end of last year. They will be used effectively on antenna tests and transmitter and receiver tests, especially, tests and researches on --

- a. Quantitative relation between wave radiation and field intensity,
- b. Directivity of antenna,
- c. Propagation characteristics of electrowaves,
- d. Scattering phenomena of electrowaves and utilization of scattering waves to ultra-short wave communication,

are feasible with the antenna.

The completion of electric wirings inside of the laboratory rooms will remove the inconvenience for the students in obtaining electric sources during tests from next semester.

3. Future Planning:

- a. More emphasis will be put on schedule to be followed both on lectures and laboratory works, that is, the staff should report to the department head in the middle and at the end of the Semester concerning their progress to make sure their works.
- b. In order to improve the contents of the lectures text books will be used; accordingly, reprinting of the text books will be supported positively by the department.
- c. Subjects, which were taught for a year up to now, will be taught for a semester increasing the hours a week.
- d. Lectures and laboratory works on transistor and servomechanism will be newly added. In the Senior class, seminar will be established to introduce new articles from the recently published books and periodicals by the students themselves so that it might stimulate the ambitions of the students to study and discuss the subjects.
- e. Observation equipment for the artificial satellite will enable the college to participate in IGY activities. Research room for the measurement of ionosphere will be established to help the graduate students' laboratory works.

Department of Mechanical Engineering: Professor Lee, Ryang has been appointed as the head of this department since the second semester, 1957. Before the Korean War he was the head of the department, volunteered to the ROK Air Force as soon as the War broke out, and became the academic dean of the In Ha Institute of Technology after three years service. With his return faculty members of the department are much more cooperative.

1. To train the students in the fields of application rather than theory, practical engineering calculations are being practiced including the laboratory works, home works and frequent tests after three faculty members - Professor Kim, Hi Chul, Lee, Taik Sik and Suh, Chai Chin - returned.

2. Laboratory Equipment:

- a. Stress Analysis Laboratory: This laboratory will be in use from the next semester since it is completely equipped with the following instruments: Temperature calibration test unit, cantilever apparatus - both for static stress and combined stress, thermal stress apparatus, bending test unit, stress coating, torque measuring unit and vibration test unit.
- b. Air Conditioning Laboratory: Under the supervision of Professor Kim, Hyo Kyung, the constant temperature room is under construction. The inside dimensions of the room are 10' x 10' x 8' and all the materials for the room are locally made. The instruments are already on hand under the FY 1956 funds.
- c. Material Testing Laboratory: In addition to the original Japanese made testing machines, hydraulic universal tester, impact tester,

and hardness tester are newly arrived. This laboratory will benefit the students of the departments of the mechanical, naval architecture and aeronautical, civil and electrical engineering.

- d. Internal Combustion Engine Laboratory: This laboratory will be installed with gasoline and diesel engines and dynamometers in the Building No. 3 within next 50 days.

Department of Metallurgy:

1. Smelting furnace is built by Professor Park, Pyung Choo in this department to make the test of slag formation during the smelting of non-metallic materials. Instructor Hahn, Bong Hee is making good demonstration to the students concerning the structure of metals with the standard specimen of various metals and alloys.

In the physical metallurgy laboratory, with the high frequency heater and grinder the case hardening experiment became feasible. In the iron metallurgy laboratory, sulfur analyzer of a metal is built locally and in use.

Due to the delay of delivery of acetylene gas generator requested the welding laboratory room has not been completed.

2. Regarding the lecture of welding the film "Inside of Welding" is very helpful for the students to understand what is happening actually during the welding process.

3. Ore dressing equipment will be installed during the next semester in Building No. 5 which will be used both by this department and mining engineering.

Department of Mining Engineering:

1. The contents of the lectures are constantly being improved so as to teach the actual engineering problems arising in many mines in Korea, such as, advanced physical prospecting, coal mine engineering and calculation method on diamond drilling for exploration. Frequent tests and regular assignment to the students will help them understand their lectures thoroughly.

2. Due to the delay of the rehabilitation works of the Building No. 5 this department is not able to move into the Building No. 5 wholly but partially from next semester. Light equipment and mineral samples will be transferred to the building as soon as possible and entire department will be settled in the Building No. 5 during the next semester. Since last report the following major instruments are delivered and in use.

- a. Scintillator - Students took the instruments to investigate the coal mines at Hambaik last winter and it was proved as one of the most effective practice for them.
- b. Diamond drilling machine - Boring practice is available for the students.
- c. Coal preparation and coal analysis laboratory - Furnace, grinding machine, polishing machine and mount press are equipped.

Department of Naval Architecture and Aeronautics:

1. The improvements in lectures attributable to the staff members returned - Professor Kim, Cheung Hun, Hahn, Mansop and Hwang, Jong Heul - are as follows:

- a. Applications of theory and practical subjects are taken up more than theory itself.
- b. Emphasis on home works.
- c. During one semester 2 or 3 quizzes and final examination.
- d. Reduction of the number of subjects to be taken by the students during a semester.
- e. Aerodynamics of compressible fluid, aerodynamics of viscous fluid and aircraft structure in the aeronautics are newly added.

2. Using 3 sets of mechanical integrators received, the students are saving lots of time in calculations of hull form design, ship design and so forth.

With the wood shop machineries, the students are practicing to make propellers and ship models. From the next semester ship models to be used both for teaching and research purposes will be made for the future use in the towing tank.

3. Towing tank body of reinforced concrete and its building are completed about 90 per cent, and the building for the various aeronautical engineering laboratories has been renovated.

4. Future Planning: Marine hardwares requested under FY 1956 will be used in design drawings of supermore ship class. Wind tunnel will be equipped under FY 1958 funds.

Department of Physics: No specific improvement has been made since previous report in teaching and laboratory works. Two hours of lecture (physics) a week are considered not enough to teach the whole area of the physics including modern physics in Sophomore. From the next semester this department likes to try to teach electro-magnetism and optics in Freshman course and modern physics only in Sophomore course to spare more hours to modern physics.

After moving in the Building No. 5 each lecture will be followed by the sequent laboratory works of the same subject to make the students thorough understanding.

Since the equipment requested under FY 1957 is not delivered yet, the following experimental subjects have been carried out temporarily during this semester. Five students worked together in each set.

- a. Determination of "g" by Kater's reversible pendulum.
- b. Measurement of Young's modulus in elongation.

- c. Measurement of Lissajous figure by sand pendulum.
- d. Measurement of specific heat of a liquid by cooling.
- e. Resonance of a gas column.
- f. Copper volta meter.
- g. Measurement of cane sugar concentration by saccarimeter.
- h. Measurement of equi-potential line.
- i. Measurement of impedance.
- j. Characteristics of triode vacuum tube.
- k. Measurement of sensibility of a galvanometer.
- l. Measurement of humidity by hair apparatus.

Department of Textile Engineering:

1. The improvements in teaching method are mostly the same as other department emphasizing much more on practical subjects than theories and reducing the number of subjects to be taught in a week. Teaching schedule was made at the beginning of the semester and reviewed afterward, the result was satisfactory.

2. Laboratory rooms already equipped with tables and machineries received are as follows:

- a. Dyeing laboratory.
- b. Textile analysis laboratory.
- c. Testing laboratory - equipped with testing machines and fadeometer which can test fibers, yarns, fabrics and dye stuffs.
- d. According to Dr. Chapin A. Harris' recommendation, the lot of machineries will be procured under FY 1956. With these machineries this department will be the first best equipped textile engineering in Korea.

Library: Books requested under FY 1956 have arrived recently, however, the books requested under FY 1955 have never been delivered yet. Recently arrived books will be a great help both for the faculty and students beginning from the next semester.

Summary: Although unavoidable delays have affected the implementation of the Cooperative Project as scheduled, the Project is progressing. There is no doubt in the near future this college will be equipped fully with all of the equipment received under this Cooperative Project. By that time this college should provide enough funds and personnel to utilize the equipment effectively and maintain them constantly in good operational conditions. These personnel

must be trained very specifically to operate and maintain their equipment. To do so it will need considerable amount of funds with adequate organization and administration. After the installations in order to keep good maintenance this is going to be the top most importance to be dealt with by the administration of Seoul National University as well as the College of Engineering.

College of Medicine. (Dean: Myung, Choo Wan).

I. The nature and extent of additional changes in teaching and research that have come about wholly or partially as a result of the Cooperative Project.

As a result of the Cooperative Project, great changes and improvements have been made in teaching, research and medical care at each department of this college. They are described as follows:

Department of Physiology:

- 1) Use of Beckman Model B Spectrophotometer enabled the staff of the department to widen their choice of wave length in photometry.
 - a. Antipyrine, creatinine, inulin, etc. related to the dilution technique in body fluid physiology.
 - b. The same above is demonstrated for the students.
- 2) Warburg apparatus enabled Dr. Rhee, Sang Don, who returned from Minnesota with knowledge and techniques acquired under the guidance of Dr. H. Mead Cavert, to continue his research on the carbohydrate metabolism.

The use of the instrument is wide open for the medical school faculty. Dr. Hahn, Shim Suk, exchange member in Internal Medicine under Dr. Cecil J. Watson, is using the instrument for his research of porphyrin.

- 3) Flame-photometer. Dr. Park, Chae Il of this department is working on Na-excretion under various nervous reflexes. This instrument aroused big interest in the field of body fluid physiology particularly with ease of the measuring procedure.

Clinical routine specimens are also treated in this department.

- 4) Sanborn's Two-Channel ECG. This is used for the auxillary in the dye dilution experiments.
- 5) Pressure transducer facilitates the continuous recording of physiological pressure changes in combination with the use of Two-Channel ECG.
- 6) Horsely-Clark and Suction apparatus is under use by Dr. Kim, Chul in the investigation of the limbic system of which research technique was acquired under the guidance of Dr. McLean at the department of physiology, Yale School of Medicine.
- 7) Van-Slyke and scholander gas apparatus will be kept unused until the arrival of Dr. Ernest B. Brown, Jr. from Minnesota.

- 8) Superscaler, Scintillation detector and other accessories arrived partly damaged during transportation. However, when they are fixed for satisfactory utilization, they will serve for the ^{14}C -labeled glucose metabolism by Dr. Rhee, Sang Don of this department. The chief use will be for the Radio-isotope Tracer Course of Post-graduate Training of the medical school.

The use of the chief instruments of this department is mostly by the post-graduate level and not by the undergraduate students. For the undergraduate students the practical demonstration by the department staff is performed for suitable occasion alongside with the lecture and laboratory course.

Department of Biochemistry:

- 1) Since the teaching staff returned from abroad, U.S.A. and France, after they had shared much in various field of research works, they introduced many of the up-to-date and advanced ways of teaching which they themselves had practically learned and exercised what and how to carry out. These movements have proved quite helpful in regard to education of the students. To name one of such an improvement made by them: they cut out some respectable time arranged for lecture so far, and assigned this time for experimental work to the extent that they may safely carry out practical education by means of a new program of teaching which is of utmost necessity and importance in Korea.
- 2) Newly arrived books, monographs and journals were of tremendous help for both education and research works.
- 3) The arrival of new equipments and reagents have facilitated the laboratory works and have made a great epoch in this department in relation to research works now under way. For example, though the visual colorimeter has long been used for the purpose of students' laboratory work, electro-photometer has recently introduced for this purpose and this replaced much of the difficulties confronted so far with correct and advanced availability. This led the students to the level of reasonable extent in regard to their laboratory instrumentation.

Department of Pharmacology:

- 1) Staff exchange; 2 staff underwent the staff exchange program and 1 is on the course. This is of great help in introducing new methods and techniques for teaching.
- 2) Equipment; Distilling apparatus makes it convenient to prepare test solutions for student lab. works and research purposes.
- 3) Building; Water supply benefits the research works.

Department of Pathology: Equipments and other teaching materials allocated to the Department of Pathology have been received, listed and reported to Dean. All these equipments help departmental staff to perform teaching and research satisfactorily. Particularly photographic and projecting equipments are in excellent condition and in full use for audiovisual education of undergraduate and postgraduate students.

Autopsy tables have been fixed in proper position in dissecting rooms. A refrigerator is working for preservation of fresh autopsy materials for students and staff. However still complaints are focussed on too short supply of expendable materials, e.g. various stains for histological use and related materials, museum of pathological specimens is still in paper plans because of shortage of containers and preservatives.

Department of Microbiology: The equipments and glass-wares provided for the students laboratory works made desirable changes in teaching, although they are still to be added considerably.

Department of Preventive Medicine: According to the specific character of this Department, particular attention has been paid to the activity and some changes have been made in teaching and research owing to the instruments and modern knowledge about preventive medicine.

- 1) Hygrometer, slide rule, anemometer, barometer, burret holder, pipette, thermometer, air pump, cooker canner, manometer, etc. have improved the students' laboratory works to great extent.
- 2) Such instruments as galvanometer, milliammeter, temperature control unit, resistance box, voltmeter, etc. are in full use for research works.
- 3) For both teaching and research, specific gravity apparatus, gas analyzer, glass cutter, calculator balance analytical, centrifuge, incubator, refrigerator, etc. are highly appreciated. And these instruments have greatly developed the results of teaching and research.
- 4) Many instruments have contributed to mass survey.

For instances, dynamometer, measure tape, vitae capacity apparatus, anthropometer, etc. are well used for anthropometry, and reagent for hematologic examination, melanzur, hemoglobin pipette are for blood survey and stool parasite.

Department of Parasitology:

- 1) Aquaria, refrigerator and some other equipments made partially possible not only the research in the study of Trematode life cycle, but also the laboratory works of students for demonstrating the living specimens of larval worms.
- 2) Certain kinds of equipments provided through this project were greatly helpful for production of permanent slide specimens of helminths which are necessary for the student lab. work.

Department of Internal Medicine:

Staff Exchange:

- 1) Dr. E. B. Flink from Minnesota has contributed very much to the improvement of teaching in clinical medicine.

He has raised by his guidance the efficiency of the various teaching programs such as Grand Round, C.P.C. and seminars, introduced by the Korean staff who had been in Minnesota.

He also has demonstrated the importance and technique of bed-side teaching. By his teaching rounds, students have acquired more reasonable way of approaching to the patients. In addition to his wide-ranged academic assistance in general medicine, he has introduced some essentially new fields for medicine such as endocrinology, metabolic disease, and electrolyte and acid-base balance.

- 2) The Korean staff who had been in Minnesota proved to have better ability in teaching, by their increased academic levels and improved teaching methods.

Equipments: By the equipments we have received under the Cooperative Project, the following major change in teaching and research has come about.

- 1) Basal metabolator, electrocardiogram and gastroscope have made more detailed teaching possible in the fields of endocrinology, cardiology and gastroenterology respectively.
- 2) Other lab. equipments have markedly increased the lab. facilities for clinical and research purposes.

Department of Surgery:

Staff Exchange:

- 1) Since Professor Chin returned from University of Minnesota and his inspection tour through Europe, several of noteworthy changes in organization and training program of surgeons have been realized; weekly clinical conference, pathological-surgical conference, surgical-X-ray conference, review of surgical literatures, physiological conference, seminar, and tumor clinic (discussion on tumor patients) are being conducted with immeasurable merits both to staff and doctors.
- 2) Establishment of division of Anesthesiology with Dr. Rhee, Dong Shik's return from University of Minnesota, wholly different aspects in surgery in our hospital have been brought into light; surgeons are now able to do many intricate operations with more confidence and better understanding of patients as a whole being thanks to meritorious cooperation of anesthesiologist. Furthermore, sacrifices of patients previously attributed to lack of knowledge and failure of anesthesia have greatly been reduced. It goes without saying that Dr. Matthews acted as a key-man in making all this possible.
- 3) Dr. Sim, Bo Sung, trained as neuro-surgeon is regarded as doing very fine works as pioneer. The out-patient number of neuro-surgical cases is steadily increasing, the average number of in-patients being 8-10.
- 4) Though there has been no visitors from Minnesota, we have come to realize that first-hand guidance and advice are best possible method bringing changes and inspiring new atmosphere, as evidenced by Dr. E. B. Flink.

It is fully recognized that he left behind great contributions for Department of Internal Medicine and also for Department of Surgery. He gave weekly lectures on fluid and electrolyte balances and endocrinology pertaining surgery, arousing great interest on the part of surgeons.

- 5) If we reinforce our surgical staff with the return of Dr. Kim, Ja Hoon and Dr. Lee, Yung Kyoon, who are presently studying plastic surgery and cardiovascular surgery respectively in University of Minnesota, our hospital is expected to have best surgical staff in Korea.

Equipment: Among the instruments, centrifuge, constant temperature tank, gastroscope and splint for fracture are in full use for patient care and research.

Department of Pediatrics:

Staff Exchange:

- 1) Dr. Hong studied at the Department of Pediatrics, University of Minnesota for two years by the I.C.A. Project and came back in September 1957. Since his return, there have been much improvement, particularly in teaching students, interns and residents. He introduced many new methods and ideas in treating patients, and laboratory procedures. He set up many inter-department conference to get more organic and broad knowledge in pediatrics and making realize how much cooperation among departments is necessary to take care of a patient as a whole. He studied especially on pediatric cardiology including cardiac catheterization and hematology in U.S. and is contributing very much in this fields not only for Department of Pediatrics but also for all University Hospitals. Dr. Flink stayed in our hospital for 6 months and we learned much new knowledge on endocrinology and electrolyte and fluid balance through him.
- 2) Dr. George Schimert, Department of Surgery, University of Minnesota, is to come to our hospital as an exchange staff. His visit will give us additional improvement in the surgery of congenital heart disease. We are preparing a cardiac catheterization laboratory for the diagnosis of congenital heart disease.
- 3) We would like to have some staff, specialized in metabolism and immunology, during the next year, from the Department of Pediatrics, University of Minnesota, as an Exchange Staff, so that we may be able to learn from him in our situation. He will give a great help in teaching students, interns, and residents and also in research.

Equipment: During the Korean War, we lost all the equipments for treatment and research. We received basic instruments and equipments such as microscopes, oxygen tents, baby incubator, etc. which make us possible to carry out basic treatment and diagnosis. And also, we are receiving many medical journals through the I.C.A. projects, which make us get new knowledge in medicine and we have now very fine central medical library.

Building: We do not have centralized system yet, that is the children who come to the hospital for operation are being hospitalized in the Department of Surgery, instead of children's ward, and the cooperation between the department is poor. Mr. Mitchell is giving us a big help in setting up a centralized system, including wards and medical recording. We hope that this centralization will be completed at latest during the next three months.

Department of Obstetrics and Gynecology: Since I.C.A. project started and after Professor Kim returned from University of Minnesota, there are many changes in the teaching and training programs in this Department.

- 1) Pathology has become a major subject for the training of undergraduates and postgraduate students. Biopsy and histological examinations of all the surgical specimens are now our routine procedure and we are making slides at our own small laboratory. Slide reading is held every other day and a pathological conference is held once week regularly. Each resident is required to have at least twelve-months' experience in pathological service. For the undergraduates one afternoon is assigned for pathological demonstrations.
- 2) A morning lecture hour is set for the undergraduates in which one of the staff or residents gives a lecture on demonstration which is not given during the formal lecture hours. This is held at the out-patient department, before the students see the patients, usually from 9 to 10 a.m., on Saturday morning students are requested to present and discuss any subject they are interested in during the week.
- 3) In the afternoon, special schedules are followed for another group of students which is assigned to ward service. We give lectures, demonstrations and make rounds with them. At the end of week, each student is requested to present a case report.
- 4) A new Blood Bank has been established in the hospital in which Professor Kim is the Director, and one of our residents is in charge of the practical work. The Blood Bank is functioning well serving patients in and out of the hospital. This Department is one of the most busy department requiring blood transfusions and the maternal and postoperative mortality has been definitely lowered by the blood bank service. Professor Kim is also interested in blood work and at present several research works are under way using this blood bank.
- 5) A new incubator for the newborn and premature baby is now available and is a great help for the treatment of neonatal asphyxia and premature cases which are so often encountered.
- 6) A section of the hospital, which had been planned for this department even before the Liberation, and grand work had been done, is now completed giving another 12 beds for our service.
- 7) Other old section of the hospital for this department is repaired.

Department of Urology:

- 1) Dr. Choo, Kun Weon who has returned from University of Minnesota after the completion of Urological training under the project of I.C.A. has devoted his time for the improvement of Urological lectures for junior and senior classes.

In spite of the difficulties of various physical conditions the research works in Urology has begun since his arrival.

- 2) The instruments we received since last fall are Urological examination table and Urological X-ray table without operator and tube are great benefit for the teaching and patient care.

Department of Dermatology:

- 1) We are studying mycology for the purposes of diagnosis and research works and setting strains, though our facilities are insufficient, providing it for teaching materials.
- 2) Not only the collections of color-slides and other teaching materials for visual dermatological educations, but also the establishment of conference-room attached by color-slides projector, become well as a result of the Cooperative Project.
- 3) Biopsy cases are steadily increasing since the beginning of the Cooperative Project.

Department of E.N.T.: Thanks to trained staff and import of instruments, such operations as endaural approach to middle ear and laryngectomy have greatly been improved. The use of projector has brought about progress and efficiency both in teaching and clinical works.

Department of Ophthalmology: Many surgical instruments, have been received, main items are the instruments of diagnosis, such as Perimeter, Ophthalmoscope, Lancaster's Red-Green Test, and Gonioscopes.

- 1) The Surgical Instruments: These instruments are for cataract operation and they are designed very well, so that we can operate more accurately by intracapsular methods.
- 2) Perimeter: This instrument is the best one and automatically operable, so that we can check the visual field more quickly and more correctly. This is very much helpful for the diagnosis of neurological, neurosurgical and chorioretinal diseases.
- 3) Gonioscope Prism Set: This instrument is the first one for investigating the anterior chamber state in glaucoma patients.
- 4) Lancaster Red-Green Test: This instrument is very useful in the diagnosis of muscular imbalances. Now we can check the nature and characters of muscular imbalances more quickly and more accurately.
- 5) Ophthalmoscopes (Pantoscope): We are using these instruments for training of students in ophthalmoscopy. It is very good one and we can see the ocular fundus more clearly. They are very helpful in diagnosis of intra-ocular cases. These have contributed very much to both teaching and patient care.

Department of Radiology: After Dr. Kim's return from Minnesota, the centralization of the X-ray working and Conferences have been displaying activity, and the new aspect in Neuro-radiology, Cardiology and Bone have been particularly improved.

Central Laboratory: Refrigerators, paraffin ovens, autoclave, microscopes, colorimeters, centrifuges and other equipments for laboratory works have been received. All these equipments made a great development on students' laboratory studies and patients examinations to great extent.

School of Nursing:

- 1) Mrs. Lee, Kwi Hyang, Principal of Nursing School, and Miss Lee, Song Hi who studied in Minnesota University have contributed very much to improve the standard of nursing education. Also Miss Margery Low having being devoting herself to change in teaching method and administration.
- 2) Following instruments have been received and these are in full use in nursing education and training.

Article	Rec.
Double ring basin stand and basins	3
Irrigation stand	2
Basin stand single ring	1
Bassinette stand with bassinet	1
Mattress for above	1
Adult bedpans	5
Infant bedpans	1
Safety razors	4
Razor blades	300
Safety pins size 2	10 boxes
Nursery bottle brushes	5
Bedpan brushes	5
Hand brush	100
Irrigators (volbrath)	2
Pus basins	5
Wash basins	10
Sponge bowls	10
Solution bowls	10
Tonsillectomy ice bag	2
Throat bag	2
Ice cap	2
Ice bag	2
Breast pump	2
Molded rubber rings	2
Wheel chair	1
Graduated measure	5
Health-O-Meter Scales	1
Refrigerator	1
Scissors, Bandage 4½" chrome	15 ea
Forceps, Dressing 5" lg ss# 160-05	3 "
" " 10" lg ss# 160-05	2 "
Perenssion hammars #115-05	1 "
Blood pressure instrument calibration	2 "
Syringes, asepto bulb 102	6 "
" " " 403	6 "

<u>Article</u>	<u>Rec.</u>
Thermometers	1 ea
Typewriters 44 keys A 3550	1 "
Microslide for 100 slide	1 "
Tube stomach 5' long	9 "
Tube nasal feeding 30" long	3 "
Tape measure all steel	2 "
Thermometer, fevers, oral	50 "
" " rectal	12 "
Bed, hospital	5 "
Dies, height 1/8" 9#	4 "
Dies, length of 1/8" 33/4"	4 "
Anti-Colic brand nipples #151Xsanitals	40 "
Medicine droppers straight style	1 gro
Infant feeders #6680	6 ea
Spatula, martin pelvimeter ss#410-150	2 "
Chase hospital doll, adult female	1 "
Chase hospital doll, 4 year child	1 "
Glove-surgeon's #7 fisher #140-091	20
Grinder and chopper fisher #8-490	2
Clamp, tubing mohr's pinchcick	4
Layette-aluminum sterilizer	2

- 3) On March 8, 1958 the Minister of Education gave official permission for a collegiate program in nursing at S.N.U. beginning with the academic year, 1959. The curriculum for this program is being constructed on the nursing needs of the people of Korea.

Only high school graduates are being accepted this year (1958).

"II. The nature and extent of changes in teaching and research which will be placed in effect during the next school year as a result of the Cooperative Project. Of particular interest here will be added and improved laboratory offerings.

As a result of the Cooperative Project great many changes will be made in teaching, research and patient care during the next school year. They are as follows:

Department of Physiology:

Teaching:

- 1) Demonstrations by means of those instruments.
- 2) Determination of Rh factor of blood group using anti-Rh serum.
- 3) Simultaneous and direct recording of ECG, PCG or ECG and arterial pressure in man and animal using Twin-Visa cardiograph.
- 4) Measurement of cardiac output in animal by use of Fick principle. Concentration of injected dye measured by photometry.

- 5) Blood gas measurement by use of VanSlyke volumetric apparatus operated by students.
- 6) Measurement of the composition of alveolar air by means of Scholander apparatus.
- 7) Measurement of antipyrine space and thiocyanate space, analysis being done by photometry using Beckman Spectrophotometer by the instructor.
- 8) Measurement of the electric constants of human skin. Instruments being audio-frequency oscillator, resistance box, impedance circuit and variable air condenser and other accessories.

Research: General outlook is understood by the content of the previous section. Some difficulties are that the chemicals are hard to get, delay of arrival of instruments previously requested and authorized, extreme shortage of running expense by the Korean side, some shortage of instruments which cannot be afforded due to the limitation of ICA fund, etc.

Department of Biochemistry:

- 1) Quantity of equipments is running short very much as for the 120 students' laboratory utilization. Supplement in place of lack is of utmost necessity. A single set of electrophotometer, to name first, could not meet the need of the whole students. And we cannot run a single specimen even for demonstration as we have not yet facilitated with pH-meter. Apart from the pH-meter, we expect numerous others to arrive soon.
- 2) Books, monographs, and journals are expected to come as has been done. However, varieties of them are largely wanted hereafter.
- 3) Various equipments and apparatus, which are not yet facilitated, are also expected to be supplemented for complete and perfect research works.
- 4) Equipments and all others needed to perform experiment utilizing isotope are expected in urgent need.

Department of Pharmacology:

- 1) Staff exchange: 1 staff will return and engage in teaching and research.
- 2) Equipment: 10 kymographions which will be introduced during this term will help the student lab. works.

Department of Pathology: Practice of gross post-mortem pathology is expected to be improved quantitatively and also qualitatively, for better understanding of disease processes by students and staff members, and also for improvement of hospital and patient-hospital relationship.

Department of Microbiology: It is expected that the laboratory facilities both for the teaching and the research may come into effect during the coming academic year.

Department of Preventive Medicine: The combined work with the Seoul National University Health Center for University students' physical examination will be carried out more effectively than before.

Many changes will be made in students laboratory works according to the modern concept of preventive medicine.

Department of Parasitology:

- 1) The cultivation of protozoa will make progress during the next school year as a result of the supply of sterilization apparatus.
- 2) The laboratory offering of living specimen of human parasitic protozoa will be helpful for visual education in the student lab-work.

Department of Neuro-psychiatry: Mental and personality tests on Korean primary and high school and college students will be carried out.

Department of Dermatology:

- 1) We are intending to prepare color-slides for the teaching materials of the visual dermatological education.
- 2) We are trying to promote the histopathological and mycological knowledges of the skin.

Department of Radiology: With the coming machines of Skull Unit and new model diagnostic unit, the uncultivated field such as neuro-X-ray training will be developed favorably.

Central Laboratory: Teaching and laboratory practice of clinical pathology, chemistry, bacteriology and parasitology are expected to be improved for the coming school year.

School of Nursing: Pre-Nursing courses will be taught by the College of Liberal Arts and by the Medical School. It is hoped that in anatomy, physiology, physiological chemistry, and microbiology, the laboratories of the Medical School will be utilized.

"III. Physical improvements which have been completed since the beginning of the Cooperative Project.

I. Basic Science

<u>FY</u>	<u>Designation</u>	<u>Project</u>	<u>Dollars</u>	<u>Hwan</u>
'55		Painting of Anatomy Dept.		510,000
'55		Repair of windows of Biochem. Dept.		720,000
'55		Painting of Biochem. Dept.		655,000

<u>FY</u> <u>Designation</u>	<u>Project</u>	<u>Dollars</u>	<u>Hwan</u>
'55	Waterproof works of the basic science roof		8,700,000
'55	Waterproof works of the animal room at the basic science roof		6,560,000
'55	Repair of floor of Anatomy Dept.		538,000
'55	Repair of experiment stands and water supply of Biochem. Dept.		1,180,000
'55	Repair of electric system of Biochem. Dept.		399,000
'55	Electricity of basic science		985,000
'56	Installation of water tank		8,573,000
'56	Repair of heating system		26,290,000
'56	Construction of lead sinks		4,420,000
'56	Installation of sanitary facilities of basic science		3,600,000

The total amounts in dollars for above project in FY '55 are \$10,560.83 and in FY '56 are \$75,000.00.

II. University Hospital

'55	Rehabilitation of ophthal. & ob-gyn stations - plastering painting, & making windows	17,148.70	11,200,000
'55	Rehabilitation of kitchen - painting, doors installed, screened, new concrete floor put in, & roof repaired	4,703.10	3,100,000
'55	Rehabilitation of interior of psychiatric building - painting, windows installed, security bars installed	2,500.05	3,300,000
'55	Installation of plumbing, sewerage, heating & toilet facilities in the hospital kitchen	1,289.08	368,000
'55	Installation of toilet, plumbing & heating facilities required for psychiatric building	1,682.32	2,070,000

<u>FY</u> <u>Designation</u>	<u>Project</u>	<u>Dollars</u>	<u>Hwan</u>
'55	Electric work for psychiatric building - 81 places	1,799.80	768,000
'55	Electric work for ob-gyn - light 15, outlet, 15, & rewiring	2,510.00	1,190,000
'55	Electric work for kitchen - light, 69, outlet 10, & rewiring	1,382.00	485,000
'56	Making bricks for boiler room	3,040.80	976,000
'56	Rehabilitation of toilet & plumbing for main building	4,290.96	4,830,000
'56	Repair of boilers	583.20	3,936,000
'56	Installation of plumbing toilet & heating facilities for ob-gyn and ophthalmology	3,949.00	2,900,000
'56	Rehabilitation of toilet in No. 1 ward	663.80	380,000

"IV. The nature of building repair and improvement, and new construction which will be continued or started during the next six-month period, and planned completion dates for each project.

I. Basic Science

<u>FY</u> <u>Designation</u>	<u>Project</u>	<u>Dollars</u>	<u>Hwan</u>	<u>Expected date of completion</u>
'56 additional	Repair of the boiler rooms and installation of boilers	24,000.00	12,285,000	unknown
'56 additional	Repair of water supply system	none	24,074,000	"
'56 additional	Installation of hot water pipes and pump	3,750.00	3,745,000	"
'57	Repair of the animal rooms	618.00	6,600,000	"
'57	Repair of the library reading room facilities	7,812.00	8,145,000	"
'57	Repair of the windows of the roof building	none	10,705,000	"
'57	Repair of the light of laboratories	814.00	6,950,000	"

<u>FY</u>	<u>Designation</u>	<u>Project</u>	<u>Dollars</u>	<u>Hwan</u>	<u>Expected date of completion</u>
'55 additional		Concrete floor for wooden floor of main building OPD & psychiatric ward	23,760.00	16,230,000	Sept. 30

(The above amounts only suffice for the construction of concrete floor for main building. The construction of other places, therefore, has to be delayed.)

'55 additional		Construction of inter-ward corridor - inter-ward corridor in the upstairs connecting 1-5 wards	13,244.00	8,000,000	July 30
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'56		Installation of water Tank	10,783.40	8,650,000	April 30
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'56 additional		Rehabilitation of heating facilities - installing boilers, radiators, pipe-returns, fans, high pressure steam pipes & wrapping steam pipes	55,733.84	44,746,000	Oct. 30
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'56 additional		Rehabilitation of sanitary facilities - installing hot water tank, plumbing for entire building, new water pump & toilet traps; and repair of all toilets	28,000.00	8,000,000	Oct. 30
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(The above two projects may be completed before October 30, provided that all the materials needed and counterpart fund are obtained. Release of the counterpart fund is expected during the second quarter of the fiscal year of the government.)

III. School of Nursing

Construction of the class-room building was started September 27, 1957, and should be completed during the summer of 1958.

"V. Major obstacles which continue to prevent the introduction of desired changes in teaching and research.

Some departments are confronting obstacles in changing teaching and research. Some of them need building repair and soon.

Department of Biochemistry:

- 1) The following items are in urgent need and expected to be solved in the field of education.
 - a) To increase T/O of department members. Present members cannot stand against 120 students. Therefore, more of the teaching staff and assistants should be increased.
 - b) Laboratory fee of a student now amounts Hw 2,500. With only this, it is almost impossible to let a student work in laboratory under such a poor financial conditions given to us. Therefore, more aid of fund, preferably several times of the present status, from Government, if possible, is helpful.
 - c) Because of a few teaching staff and assistants, it is a desperate fact that one man of the department should instruct almost 40 students. Under the readjustment of whole T/O of this college, to increase the members would be almost imperative.
- 2) The following items are what is in urgent need and expected to be solved in the field of research works.
 - a) It would not need to comment again to ask for more members. Present members could not meet even the demand of the students. The increase T/O together with technicians is again expected.
 - b) No financial aid for research work has been paid to this department up to the present, to have nothing particular to make public.
 - c) Without any financial aid, we could not make the best of the equipments we have received through the aid of ICA.
 - d) Few rooms are still left for further repair and equipments.
 - e) As FLIK is still using some parts of this department, various difficulties and inefficiencies are confronted. We hope FLIK should try to find their class-room elsewhere.
- 3) Laboratories left for further repair are expected to resume their original state.
- 4) Air-gas apparatus is expected because of inefficient electricity supply.
- 5) Further repair of students' laboratory tables is expected. Tables repaired so far could not meet the demand of whole students. Under the present situation only 80 students can utilize them at the most, so those for 40 other students are in absolute need in the future.
- 6) Isotope laboratory is expected to be established.

Department of Pharmacology:

- 1) Unfair distribution of equipments, for instance, the centrifuge is of no use without centrifuge heads and accessories were requested, and none was available.
- 2) Shortage of proper equipments and chemicals makes it impossible for the staff to apply their new knowledge and procedures in teaching and research.
- 3) Water supply repairing.
- 4) Lead plate covering the lab. tables.

Department of Microbiology:

- 1) Shortage of running budget.
- 2) Lack of gas.
- 3) Difficulty to get chemicals, dyes and media enough in quantity and kinds.
- 4) Shortage of the incubator space and refrigerator space. A plan to construct a walk-in incubator and walk-in refrigerator in this department was submitted to the Minnesota Office at Seoul University.

Department of Preventive Medicine: In order to get the effective changes in teaching and research following are needed,

- 1) Construction of constant temperature room.
- 2) Balance weight.
- 3) Wire for glass cutter.

Department of Obstetrics and Gynecology:

- 1) Irradiation equipments: Radium

As all of us know this hospital has been the only one well equipped hospital for the treatment of malignant diseases. It has been more true for the uterine cancer because of the lack of personnel and equipment in other hospital and medical schools. This Department has been the main place which was able to handle uterine cancer with surgery and irradiation. Therefore uterine cancer patients are more concentrated in this department than in any other hospitals in the country. We now know that irradiation treatment gives same or better results than surgical treatment but since we do not have irradiation equipment, we had to depends in other lates cases, and only on surgery, even that is for early cases in other lates case, and after the surgery, we had to send the patient to other place which is poorly, but equipped X-ray and radium. We understand that a new X-ray apparatus is on the way, but in certain cases raidum is absolutely necessary for the most of uterine cancer. We had 150 mg of radium before the war and have experience of radium treatment.

2) Delivery Room and Nursery and their equipment:

This department has been practically so far mainly for Gynecological Services. The obstetrical services are very much handicapped by various reasons. This resulted poor training for the students and graduates. Since last year we have trying to extend the obstetrical services and fortunately the obstetrical cases are gradually increasing in number. At present we have a small room as a delivery room which is not suitable for asepsis and demonstrations. The delivery table is also improvised one and very inconvenient for handling the mother and baby. Furthermore we need anesthesia apparatus, oxygen, and resucitator for the baby. The nursery is also a simple empty room with no temperature or moisture regulators, no equipment for nursing. As a modern equipment we have only one incubator which we received last year. We need at least one spacious delivery room with same condition as an operating room and a nursery completely isolated and well equipped for the nursing.

3) Research Laboratory:

As a teaching hospital and a part of medical school, and as a National Institute we have the duty not only treat patient well but also to follow and contribute to the world medical science. Therefore we in the clinical department, are also obliged to many investigative and research works, and have to encourage the students in this line, too. This kind of work was enforced under even the Japanese and each department had their own research laboratories. Medical schools in the United States also maintains departmental research laboratories beside central laboratory which is serving the patients for the treatment purpose of treatment. Each department has non-graduate students from the graduate school and they are required some scientific work for their credit and degree. At present our department has 11 graduate students and 22 residents. We now have a small laboratory which is maintained by voluntary contributions from the staff. This laboratory receives no help either from the hospital or medical school or graduate school for the maintenance. We believe the conditions are same in other clinical departments. This condition, we hope should be corrected in the near future and a system should be established for its maintenance. We believe that research laboratories in the clinical departments should be maintained by the medical school same as in the department of basic sciences, and helped by the hospital.

Department of Neuro-psychiatry: Several equipments and building repair are desirable in order to achieve the complete activities of this department.

- 1) Special bed is needed for severe existing case and the case of suicidal tendency.
- 2) Harder window-glass and elastic wall.

Department of Urology:

- 1) Since the cystoscopic room we are using now is still inadequate, it should be set up as soon as possible for the betterment of teaching and patient care.

- 2) Special set-up for urological operation in central operating room is practically nil at the present time.

Department of Dermatology: Reagents and consumer goods for diagnosis and research are lacking due to insufficient budget and we hope presently to get them to make our teaching and research programs possible.

Department of E.N.T.:

- 1) We are confronted with considerable difficulties because opinions and request from our department do not seem well reflected upon determination of central policy.
- 2) It is urgently required that teaching staff be allowed to treat private patients.

Department of Ophthalmology: Following items are needed to achieve the activity of this department completely.

- 1) Opton Zeiss Slit Lamp
- 2) Giant magnet
- 3) Tangent screen for detecting the central scotoma
- 4) More surgical instruments

Department of Radiology: The coming therapy unit will be installed for the patients, but it seems to be beyond control both increasingly many cancer patients and teaching program with the only therapy unit. Therefore, we have to need one more therapy unit to make favorable progress. We emphasize that Radium and Isotope equipment should be centralized at the Department of Radiology to use these equipment to the best advantage.

"VI. The extent to which new library materials are in use.

Since the beginning of Cooperative Project, much attentions have been paid to the library and specific plan has been established for its enlargement. On the other hand, library committee was born a few months ago, and this committee has contributed very much to the library operation. This centralization system is well understood by the faculty and rule is under strict practice.

New medical librarian has being working since three months ago, who studied at the United States and only one medical librarian in Korea.

Under the Cooperative Project, 157 kinds of journals have been in receipt and these journals are provided on newly made book-stands. These book-stands are arranged in new reading room. The average number of visitors to this journal reading room is 90 daily.

466 of monograms were received through the Cooperative Project. Among these 287 are arranged on open shelves for medical students. About 100 of medical students utilize the library daily.

At present time, some difficulties are confronted in operation of library. These difficulties are from mainly budget and building. However, when the rehabilitation program of library will be completed, present two separated reading rooms will be combined into enlarged one, and the difficulties which are from building will be disappeared.

Owing to the shortage of national budget for library, it is almost impossible to purchase more books although much more books are needed for both faculty and medical students.

Additional Report on the Cooperative Project (College of Medicine):

- 1) In compliance with the recommendation of Dr. Edmund B. Flink, who served as adviser in medicine for six months and returned home last January, some new systems in administration have been discussed. The main items are (a) New Patient Clinic and (b) Medical Record System.
 - (a) New Patient Clinic: This clinic is thoroughly new one in our field although this has been practiced in some countries.
 - (b) Medical Record System: The conception of this system is well understood by faculty at present time. Department of Radiology has started one kind of this system, but this system must be applied to entire hospital.

Above two systems are quite necessary and important to improve our effectiveness. However, some preparations are needed before these system will be practiced. It is well known fact that these systems will contribute to the centralization policy. On the other hand, Mr. Mitchell gives various advices on these systems.

- 2) As an activity of interdepartmental coordination, maternal and child health program has been planned. Departments of Preventive Medicine, Pediatrics and Obstetrics are participated. Actually this program is from the idea of Manila Meeting on Socia-preventive Medicine where Dean Myung, Choo Wan and Dr. Shim, Sang Whang, Professor of Preventive Medicine, attended as the representatives of Korea, and Dr. James H. Matthews participated as observer in September 1957. Since this program could be carried out well only under the cooperation between Ministry of Health and Social Affairs, and medical school, several meetings negotiations were held between them. As of now, none of the practical activity is gained except for the educational course for house-wives which was held in last January for eight days. However, it is quite sure that this plan will be successful in near future.
- 3) For three weeks, before and after the New Year, Dean Myung, Dr. Flink, Dr. Matthews and Mr. Mitchell discussed and studied the FY 1958 plan, particularly of instruments. They checked the lists of instruments which had been submitted by each department, with the representative of each department. They wanted to use the limited fund effectively, therefore they had to check item by item and avoid duplicates. Item card for each instrument had been made to achieve their purpose. This fact means the necessity of centralized inventory control. During this business, each representative of department learned lots of new knowledges; consequently some of them learned what they had to do.

- 4) Document of establishment of School of Public Health was submitted to the President of University. After the approval of the President, this will be forwarded to Minister of Education. Although we recognized the importance and necessity of this school, we couldn't get exact reply yet.

On the other hand, Dean Myung is attempting to establish medical technology school. It is the first step in establishment for Dean Myung to collect the literatures on technology school.

- 5) Mr. Glenn R. Mitchell, adviser in Hospital Administration, is attempting to have Korean Hospital Administrators' Association. This plan will involve the training of hospital administrators. Since we are confronted the lack of hospital administrator, this plan is very sound at present time.
- 6) Internship program was discussed at faculty meeting. It was decided that 18 interns will be hired from coming academic year annually. In order to carry out this program. Intern-resident Committee was born. According to the specific condition, it is somewhat difficult to start the internship system. However, Dean Myung and Dr. Kim, Superintendent of University Hospital are trying their best to achieve the original purpose of this system."

College of Veterinary Medicine. (Dean: Oh, Soon Sup).

"The staff exchange program and aid materials received under cooperative project have not been completed, and yet the improvements and progresses being made as a result of the project are remarkable and contributed enormously to the further development of College of Veterinary Medicine. During the period three professor have returned upon completion of their respective training at the University of Minnesota, one staying at the University at present, and three more staff members are expected to study at the University of Minnesota this year. Also, Dr. Willard L. Boyd, visiting scholar and adviser from the University of Minnesota, has given numerous productive contributions during his stay at this College. This, together with the laboratory equipments and instruments received under the cooperative project have been of great significance in the further development of this College by raising the general standards of veterinary medical education, and many improvements and progresses in teaching and research have actually been made during the period indicated. The advanced knowledge acquired by the staff members at the University of Minnesota and the laboratory facilities received will be utilized to the fullest possible extent for better teaching and research. The following are the description of improvements and progresses made during the period.

1. The Nature and Extent of Additional changes in teaching and research that have come about wholly or partially as a result of Cooperative Project.

\$28,000 worth laboratory equipments and instruments have been received up to the end of March, 1958. The arrival of these materials which had been lacked before have enabled the staff members of this College to give fuller instruction accompanied by the proper demonstration, and chances for students to improve their knowledges and techniques in laboratory works increased. At the same time, participation of students in laboratory works has also increased to a considerable extent. In some departments, the participation has increased from 2 to 3 times.

If a new more specific equipments are obtained, teaching in surgery would be given sufficiently with the recent additional arrival of equipments and instruments. The number of incubators and refrigerators, the utilization of which have been limited due to the shortage, has solved the problems for bacteriological laboratory works and storage of specimens and chemicals. Projectors with screen have replaced the conventional charts as an effective visual training aid, and this not only has alleviated the unnecessary efforts by the staff members in preparation for proper instruction, but also helped students understand the subjects better than ever.

Meanwhile Dr. Willard L. Boyd, visiting scholar and adviser, has been at this College for three months from September 9, 1957 to December 9, 1957, and Assistant Professor of Anatomy Dr. Yoon, Suk Bong has returned to the College upon completion of his study at the University of Minnesota for 15 months.

A. Improvements which have been made by Staff Exchange.

Dr. Willard L. Boyd, upon his arrival on September 9, 1957, as a visiting scholar and adviser, has studied numerous problems confronting this College and given productive advices and recommendations in connection with the administration and further development of this College. It is particularly his untiring efforts and contribution that this College has been granted to receive additional laboratory facilities and journals amounting to \$30,000.

Every Friday morning Dr. Boyd has also given lectures to the staff members on the latest trend of Veterinary education, veterinary curricula in the United States Colleges and historical background of Veterinary education in America and Canada. To all classes of students he gave a series of lectures reaching 32 hours on such various subjects as American Veterinary education, hormones and genital organs of dairy cattle, endocrinology and reproductive organs, Veterinary education in America and Canada, leptospirosis, bovine brucellosis, artificial insemination, and infectious diseases of domestic animals.

During his stay, he visited several educational institutions and Veterinary research institutes throughout the country and had many occasions to speak and confer with Korean officials, governmental or educational.

Dr. Yoon, Suk Bong, Assistant professor of Anatomy, has returned to this College on November 9, 1957 upon completion of his training at the University of Minnesota for 15 months. He furthered his knowledge in gross Anatomy, histology, and embryology. Neuroanatomy was the subject he studied with renewed interests, and he also learned advanced teaching methods and techniques with respect to the preparation of anatomical specimens.

B. Improvements and Progresses which have been made by the Equipments Received under Cooperative Project.

- a) Veterinary Anatomy: Bovine, equine, porcine, canine and avian skulls received recently under cooperative project are exhibited in the specimen room and open to students at all times so that the students might actually observe and study them in comparison with one another. Also, participation of students in gross anatomical laboratory works has increased from 20 to 40 students with the additional materials received.

- b) **Veterinary Histology and Embryology:** Such equipments as binocular microscope, microtome, paraffin embedding oven, oven utility, microslide staining and drying bath, projector, pH meter, microscopic illuminator, and heating mantles are the new equipments. With these equipments, microslide preparation, participation of students in laboratory works, effective teaching with projector as a visual training aid, and demonstration of minute structures have been either extended or become possible. At the same time, titration and preparation of chemical reagents, and research works have also been furthered.
- c) **Veterinary Physiology:** Haemometer, photo-electric colorimeter, spectrophotometer, blood gas apparatus, colorimeter, slide projector are the new equipments, which have enabled the department to broaden the field of laboratory works for students.
- d) **Biochemistry:** The flame test of alkali metals, measurement of weights, qualitative as well as quantitative analyses, measurement of PH of various chemical reagents, blood sugar test, food analysis, and the other research and laboratory works for students have become possible with such newly received equipments as spectroscope, blood sugar test set, hydrogen ion comparator, pH meter, ammonia apparatus, balance, CO₂ apparatus, fat extraction apparatus and the like. Formerly, the aforementioned laboratory works could not be carried out by the lack of equipments.
- e) **Veterinary Parasitology:** Incubator, paraffin embedding oven, centrifuge, and micrometers were allocated to this department.

Participation of students in the laboratory works has also considerably increased. Field laboratory works designed to give thorough practical knowledge have been given. Simultaneously, these equipments have been of great value in the research work on gastro-intestinal parasites of fowls in Korea by the instructor.

- f) **Veterinary Pathology:** Photomicrographic equipment, freezing microtome, incubator, paraffin embedding bath, tissue cubes, heater, microslide staining and drying bath, refrigerator, and binocular microscope are mostly new equipments allotted to this department. Participation of students in laboratory works has increased from 20 to 30, and research will be furthered greatly.
- g) **Veterinary Hygiene:** Hydrometer, acidometer, milk tester, and variety of thermometers, hydrogen ion comparator which have been allocated to this department are equipments primarily for milk test, and also these could be used for the examination of dairy products. The students now have free access to these laboratory equipments and are permitted to familiarize themselves for better understanding and utilization of equipments for practical sanitary works.
- h) **Veterinary Bacteriology and Epidemiology:** Air pressure vacuum unit, instruments for anaerobic culture, centrifuge of great efficiency, microscopic darkfield illuminator, balance, microprojector, hydrogen ion comparator, sterilizer shaker-line Kahn, counting apparatus are the new equipments

lacked previously. With these equipments preparation of culture media has become easier, and steam sterilizer replaced the out-moded and inefficient steam sterilizer using charcoal for the heat. Anaerobic culture test, Kahn test, darkfield demonstration of micro-organisms, and colony counting have newly been introduced into laboratory works for students. Demonstration of pictures and microslide preparation, accompanied by the lectures helped the students understand the subject matter better and thereby, the instruction has become easier as well as very progressive. Filter and air pressure vacuum unit are used in connection with the demonstration of virus filtration and are of great help in the research work on the part of instructor. With refrigerator and incubator the laboratory works for cultivation of microbes have become an easy process. Participation of students in laboratory works has been doubled from 20 to 40.

- i) **Animal Clinic:** In addition to the equipments received up to October, 1957, speculum, head light, scissors, retractors, knives, forceps and clamps were received, and general operations on small animals can be performed without any difficulties. Chances for students to participate in animal clinical practice from 15 to 25. These instruments can be used in operation on large animals with such equipments as restraining board, endoscope, and instruments necessary for bone surgery and obstetrics.
2. **The Nature and Extent of Change in teaching and research which will be placed in effect during the next school year as a result of the cooperative project.**

In view that three professors have returned from the training at the University of Minnesota and a large number of new equipments and instruments received, there will be over-all changes in teaching research works progressively. The conventional veterinary curriculum has been reorganized in an effort to reinforce and made it comparable with those of American Veterinary College, and will be put into effect from the new school year beginning from April of 1958. The advancement of Veterinary medicine in recent years required this College pre-veterinary course to ensure the successful education of qualified veterinarians. To meet this higher standard of Veterinary medical education have recommended the establishment of Pre-Veterinary course in the near future to the Government. For the time being, the revised curriculum will play an important role to fill the gap produced by the absence of pre-veterinary course. In the first year of education emphasis is placed on the general subjects along with some fundamental subjects such as Anatomy, Physiology, Histology and Embryology. Professional education in major subjects will be taught from Sophomore through Seniors, and especially clinical practice will be given the fullest emphasis for the seniors in accordance with the new curriculum.

The description of improvements and progresses to be made from the new school year as a result of the Cooperative Project for respective department are as follows:

A. **Department of Veterinary Anatomy:**

- (1) Application of embalming method in the preparation of anatomical specimens.
- (2) Anatomy of Dog will be given the primary emphasis instead of horse anatomy.

- (3) Improvement of knowledge in anatomy for Junior students by the introduction of Surgical Anatomy.
- (4) An endeavor will be made to emphasize and give lectures and laboratory works in neuroanatomy as a subject of vital importance in relation to physiology.
- (5) With the new equipments received up to date the students' laboratory works will be strengthened.

B. Department of Histology and Embryology:

- (1) Thorough utilization of projector as a visual training aid to the lectures in Histology and Embryology will be continuously placed into effect.
- (2) Chances for students to participate in preparation of histological and embryological tissue preparations will be increased.

C. Department of Physiology:

- (1) Examinations will be given every Monday to make students thoroughly familiar with the basic principles of animal activities and techniques in laboratory works. The equipments received under cooperative project will be utilized to the fullest possible extent.
- (2) Seminar will be held once a week to have students actively take part in their study of physiology.
- (3) As many chances as possible for laboratory works will be given to the students.

D. Department of Biochemistry:

- (1) Though many in kinds, the quantity of equipments and instruments are not sufficient, and accordingly certain laboratory works will be confined to demonstrations.
- (2) Laboratory works closely related to Physiology and clinic will be given the primary emphasis. Laboratory demonstrations are planned to go hand in hand with lectures.

E. Department of Parasitology:

- (1) Demonstration of preparation of Parasitic microslide
- (2) Measurements of parasitic organs by the use of micrometer
- (3) Cultivation of Amoeba, tricomonas, eimeria
- (4) Field practice of parasite examinations by the use of hand-operated centrifuges, etc. will be given along with the lectures.

F. Department of Veterinary Pathology:

- (1) Utilization of projector as a visual training aid along with the lectures.
- (2) Laboratory works in preparations of pathological tissue microslide which have been confined to mere demonstrations due to the shortage of facilities will be given to the fullest extent.

G. Department of Hygiene:

- (1) Laboratory works necessary for meat and dairy products inspection will be particularly emphasized, and it is planned to have students visit dairy farms to practice their knowledge and skills acquired.
- (2) Participation of students in laboratory works will be increased.

H. Department of Bacteriology and Epidemiology:

- (1) Preparations of various culture media.
- (2) Cultivation of variety of micro-organisms.
- (3) Virus filtration.
- (4) Serological tests and the like will be given additionally from the new school year.
- (5) Participation of students in laboratory works will be increased from 15 to 25 and the field of laboratory works will also be doubled.

C. Physical improvement (building repair and improvement and new construction) which have been completed since the beginning of the cooperative project: None.

D. The Nature of building repair and improvement, and new construction which will be continued or started during the next six-month period, and planned completion dates for each project: None.

E. Major obstacles which continue to prevent the introduction of desired changes in teaching and research

- a) Laboratory Rooms: Due to the expansion of laboratory equipments with the aid materials received under the cooperative project, the laboratory rooms have become narrower and that shortage of rooms to establish those equipments which should be used in common of prime difficulty facing staff members. Consequently, the participation of students in laboratory works has to be limited. With more spacious laboratory rooms, such equipments as microscope, projector, and balance would be used to the fullest possible extent.
- b) Electric wiring and Water Supply pipe works: Shortage of electric power and water supply are factors preventing the maximum utilization of laboratory facilities. These conditions often prevent staff members from using the equipments as scheduled. This sort of problems should be dealt with the reconstruction of the present school buildings on the one hand, and the appropriation of Government budget on the other.

- c) Lack of Chemical Reagents: The lack of chemical reagents which are not purchasable in Korea is one of major difficulties in some departments, and this should be taken into consideration by the authorities concerned and steps must be taken to procure such chemical reagents for the fullest utilization of aid materials. For instance, cyclopropane or chloroform, anesthetics used in inhalation anesthesia, chemicals used in the preparation of anatomical specimens by embalming method, and dye-stuffs used in histopathological works are not produced nor obtainable in this country.

Plans for the Next Six Months.

1. Staff exchanges - Korean and American - now in the planning stage will be carried out to the fullest extent possible.
2. Staff exchange planning for subsequent periods will be given appropriate continuing attention.
3. Requisite further attention will be given to getting the new program in Public Administration off to a sound start.
4. During this period Minnesota staff members will continue their education concerning Korea and the frame of reference pertaining to their areas of responsibility, will guide their activities as set forth under "Minnesota Staff in Korea", and will continue to strive to be of utmost assistance to Seoul National University and to the National Officials Training Institute of the Republic of Korea Office of General Affairs in helping to effect improvements in teaching, research, organization and administration.
5. Authorities concerned will continue to be assisted in working out plans and procedures concerning the receipt, installation and use of equipment procured for the project. Assistance will also continue to be given relative to determining additional well-justified needs for equipment and supplies.
6. Physical plant rehabilitation and improvement needs will continue to receive appropriate attention. Particular attention will be paid to the expeditious planned use of building materials and supplies received.
7. Close liaison will continue to be maintained with those who have participated in the cooperative project and returned to Korea. The objectives of this liaison will be:
 - a. To determine how the continuing program might be improved, and
 - b. To assist them in any way feasible, through appropriate channels, to carry out effectively their part of cooperative project objectives.
8. The bearing which assistance to Seoul National University in areas such as the teaching of English and basic sciences could have on better attaining the objectives of the ICA/Minnesota contract will continue to be explored with OEC and Embassy Education personnel.
9. Appropriate continuing attention will be given matters of contract termination or extension during the next six months.

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Eighth Semi-Annual

PROGRESS REPORT

to

INTERNATIONAL COOPERATION ADMINISTRATION

SEOUL NATIONAL UNIVERSITY OF KOREA

and

OFFICE OF GENERAL AFFAIRS, REPUBLIC OF KOREA

in behalf of

REGENTS OF THE UNIVERSITY OF MINNESOTA

covering the period

April 19, 1958 - October 19, 1958



Minneapolis 14, Minnesota
October 19, 1958

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I. OFFICE OF THE CAMPUS COORDINATOR

Technical Assistance to Korea. A major effort of the United States in providing technical assistance to the Republic of Korea involves a 1954 contract between the University of Minnesota and the U. S. International Cooperation Administration. The aim of the contract is to strengthen the largest national university in Korea, Seoul National University, in its teaching, research, and public service activities in certain specified areas.

There are a great many universities and colleges, both public and private, in Korea. Not all of them could be assisted directly by means of the limited U. S. and Korean funds available. However, it was believed that assistance to Seoul National University would result, through those who in the future earn degrees in its Graduate School, in a supply of more adequately trained individuals from which the other institutions in Korea would be able to draw to meet, at least partially, their faculty needs.

Not all the twelve colleges of Seoul National University are presently being assisted under the ICA contract. The original contract specified the provision of assistance in the broad fields of Agriculture, Engineering, and Medicine (including Nursing). This was later interpreted to involve Veterinary Medicine, a field closely related to Agriculture. Still later, through a contract amendment, assistance was provided in the field of Public Administration to the College of Law, Seoul National University, and to the Office of General Affairs, Republic of Korea Government.

The current report is the eighth in the series of semi-annual progress reports required by the original contract (Article II B). These reports call attention to significant developments, point out problems which have arisen, with an indication of attempts at their solution, set forth progress that has been made toward the achievement of the objectives of the program, and outline plans being made for the future.

Because these detailed reports do provide both interesting and significant background, the University of Minnesota has discovered that they are of interest to a much larger audience than the International Cooperation Administration, the Office of the Economic Coordinator for Korea, Seoul National University, the Office of General Affairs of the Republic of Korea Government, staff members of the University of Minnesota concerned with contract operations, and others immediately involved. As a consequence, it has been the policy to distribute copies to members of the Minnesota Congressional Delegation, to the American-Korean Foundation (both in the U. S. and Korea), the American Council on Education, and interested institutions and individuals requesting copies for study.

Korean Advisory Committee. A committee appointed by the President of the University of Minnesota advises him on policy matters relating to contract operations. Members also serve as a source of advice and counsel on an informal basis to the Campus Coordinator when perplexing operational problems arise from time to time.

The committee presently consists of Dr. Malcolm M. Willey, Vice President, Academic Administration, Chairman; Mr. William T. Middlebrook, Vice President, Business Administration; Dr. Harold Macy, Dean, Institute of Agriculture; Dr. A. F. Spilhaus, Dean, Institute of Technology; Dr. Robert B. Howard, Dean, College of Medical Sciences; Mr. L. R. Lunden; Comptroller; Dr. Gaylord W. Anderson, Director, School of Public Health; Professor John C. Kidneigh, Director, School of Social Work; Dr. Lloyd M. Short, Chairman, Department of Political Science and Director, Public Administration Center; and Dr. Tracy F. Tyler, Professor of Education and Campus Coordinator, Secretary.

One meeting of the committee was held during the period covered by the present report (September 23, 1958). The purpose of the meeting was to

discuss tentative proposals developed in Korea for a further extension of the contract, now scheduled to terminate on September 28, 1959. All committee members were present except Dr. Gaylord W. Anderson, who is on leave for the fall quarter, 1958 serving WHO in connection with a Public Health project in India; Dr. A. F. Spilhaus, who was out of the city; and Mr. William T. Middlebrook.

The committee devoted an hour and a half to a discussion in detail of the extension proposals for each of the contract fields: Agriculture, Veterinary Medicine, Engineering, Medicine (including Nursing), and Public Administration. In each case major study interests of each of the Korean faculty members proposed as participants under the extension were carefully considered and, where appropriate, alternate suggestions made. Also the man-year proposals for Minnesota staff for service in Korea were similarly evaluated.

The committee's conclusions may be summarized as follows:

1. The proposals for extension in the present fields seem reasonably satisfactory. The man-years, Korean and American, do not seem excessive.
2. Plans should contemplate the winding up of the contract in the original areas at the end of the proposed two-year extension (September 28, 1961). Public Administration, it was agreed, might require longer.
3. To provide the necessary staff for service in Korea poses a serious recruiting problem. It may be necessary to look outside the University of Minnesota to secure a portion of the requested staff.
4. If the contract is to be extended, it must be through amendment to the present contract, with which the University of Minnesota is familiar, and not by means of a new and completely different contract.

The committee concluded its meeting by discussing briefly the often-repeated suggestion that the proposed contract extension make provision for some expert in overall university administration to make a thorough inquiry into Seoul National University with a view toward identifying areas where improvements might be suggested and then assisting to effect changes agreed upon as desirable.

The committee concluded that this proposal should be agreed to only if specifically requested or at least accepted without reservation by Seoul National University and the Ministry of Education. To proceed on any other basis would be administratively unsound and could only result in a serious breach of the friendly relations which, through a period of four years, had characterized the relations between the two sister universities.

Proposed Contract Addition in Dentistry. The previous report outlined the steps which had been taken between November 7, 1957 and April 19, 1958 with respect to the proposal of ICA that the University of Minnesota add to its contract a project designed to strengthen the College of Dentistry, Seoul National University, for which \$150,000 had been allocated from FY 1957 funds.

Dr. Marion W. McCrea, Professor and Associate Dean, School of Dentistry, University of Minnesota, left Minneapolis on May 2, 1958 and reached Seoul, Korea on May 5, 1958. He spent exactly three weeks in Korea, departing on his return to Minneapolis on May 26, 1958.

During the three weeks he spent in Korea, Dr. McCrea made a thorough and comprehensive study of the College of Dentistry, together with an attempt to determine Korea's basic dental needs. The results of his investigations made it possible for him to evaluate the original proposal, made by Colonel Kothe in 1956.

Among Dr. McCrea's recommendations were that the \$60,000 originally proposed for equipping the Dental Anatomy and Techniques Laboratory be expended for the commodities listed.

He also recommended that no further effort be made to obtain the services of dental educators. This resulted in the immediate de-obligation by OEC of the \$87,000 balance remaining for this purpose.

He further recommended that a contract be negotiated with the University of Minnesota designed to provide further education for members of the dental faculty, especially in methods of teaching, of curriculum planning, of research, and of methods whereby their knowledge could be made more readily available to the students. He also pointed out that their training should involve preparation for a more extensive and effective use of audio-visual aids.

The successful implementation of these recommendations, Dr. McCrea pointed out, would necessitate a program involving at least two years of study for each Korean faculty member brought to the University of Minnesota. This, he asserted, would greatly strengthen the present dental faculty.

Before he left Korea, Dr. McCrea provided a detailed report setting forth his findings and recommendations and left copies for OEC, President Yun, the Dean of the College of Dentistry, and Dr. Schneider.

No further steps have been taken by the Korean Government or OEC to implement the training portion of Dr. McCrea's recommendations concerning dentistry. However, in a letter dated August 7, 1958, Dr. Schneider stated "that in OEC's FY 1959 plans there is no provision for expansion of the Minnesota contract to include this field." Whether plans for FY 1960 will include funds for the program recommended by Dr. McCrea remains to be seen.

It may be of some interest to note that OEC is operating a participant program in Dentistry on a small scale during 1958-59. Periods of study

are reported to be set at nine months. Four faculty members came to the United States in the fall of 1958 under this arrangement. Two were sent to the University of Minnesota, 1 to the University of Alabama, and 1 to Indiana University.

Dean McCrea's recommendations included an integration plan to absorb the present OEC operation beginning with 1959-60 and thus transfer the training aspects of the program in Dentistry from OEC to the University of Minnesota. This would involve the negotiation of a contract amendment to continue the project started by OEC, extending the period of study of each Korean faculty member in Dentistry now here for one more year, then processing new faculty members for study at the University of Minnesota for the recommended two-year period.

College-Level Advisers. Although the contract now provides for the use of college-level advisers in the three colleges involved in the original contract, the only such adviser serving with compensation from contract funds at the University of Minnesota during the period covered by the present report has been Dr. Clyde H. Bailey, Dean and Professor Emeritus, Institute of Agriculture. The post in Engineering has not been filled since the departure for Korea of Professor Clarence E. Lund.

The College of Medical Sciences has provided for the carrying on of duties of this nature during the entire period of the contract through the use, without cost to the contract, of the part-time services of Dr. Gaylord W. Anderson, Professor and Director, School of Public Health. Dr. Anderson is presently on a leave of absence from the University of Minnesota for the fall quarter, 1958 and is in India serving the World Health Organization in the Public Health field. During his absence his duties in connection with the contract are being discharged by Dr. Stewart C. Thomson, Professor and

Associate Director, School of Public Health, with assistance from Dr. Herbert M. Bosch, Professor of Public Health.

Advisers in Agriculture. Roy O. Bridgford, associate professor emeritus of Agronomy, continues his service in Korea as overall adviser in Agriculture and, in addition, as special adviser in Agronomy. His service under the contract began on February 25, 1957 and, after observations of agricultural operations in the Philippines and Japan, he reached Korea on March 19, 1957. Last spring, with the approval of the two universities concerned, Professor Bridgford indicated his willingness to serve for approximately eight additional months beyond the one-year period originally agreed upon. It was understood then that his service in Korea would probably continue until November 19, 1958. However, it is presently believed that he would be willing to continue in Korea until September 28, 1959, or for an even longer period, should the present contract be extended.

During August, 1958, Dr. Sherwood O. Berg, Professor and Head, Department of Agricultural Economics, while enroute to an international meeting in India, spent fifteen days in Korea studying the situation in Agricultural Economics at the College of Agriculture, Seoul National University, at Suwon. He returned to his post at Minnesota in late September and it is expected that he will be an important source of useful suggestions respecting assistance this University can render in the economics field. His service was most favorably received in Korea and a letter written by him from Korea includes extremely favorable comments on the effective service being rendered there by the Chief Adviser, Dr. Arthur E. Schneider.

The Chief Adviser, a professional forester, continues his availability as a consultant in his specialty in addition to the multiplicity of duties as "representative of the Contractor in Korea" and, as such, "responsible

for the supervision of the performance of all duties undertaken" by the University of Minnesota and its staff serving in Korea.

Engineering Advisers. Professor Clarence E. Lund continues his second period of service in Korea which began on April 1, 1958. He serves as general adviser in engineering, as special adviser in mechanical engineering, and renders additional service in screening and preparing specifications for equipment and supplies under procurement for the College of Engineering, Seoul National University.

Dr. Clarence E. Schwartz, assistant professor of chemical engineering, University of Virginia, left Charlottesville, Virginia on August 7, 1958 for a year's service in Korea. He was accompanied by his wife and two children, ages 11 months and 9 years. They spent one day in Minneapolis enroute to Korea so that Dr. Schwartz could confer with Dr. Neal R. Amundson, Professor and Head, Department of Chemical Engineering, and other staff members at the University of Minnesota.

Medical Advisers. Five members of the faculty of the College of Medical Sciences of the University of Minnesota were serving in Korea as this report is being written. Two new members joined Dr. James H. Matthews, Miss Margery S. Low, and Mr. Glenn R. Mitchell since the previous report. They are Dr. George Schimert, assistant professor of surgery, who began service on July 6, 1958 and Dr. E. B. Brown, Jr., professor of physiology, who began service on July 25, 1958. Dr. Schimert plans to serve in Korea for one year. He was accompanied by his wife and two sons, ages 6 months and 1½ years. Dr. Brown plans to serve for five months in Korea. He was accompanied by his wife. However, since he is not serving a full year, her expenses could not be paid from contract funds.

Public Administration Advisers. Dr. Stuart A. MacCorkle and Dr. Erwin R. Draheim continued their service in Korea which began during the period covered by the previous report.

Two additional faculty members began service during the past summer. Leigh W. Hunt, Jr., assistant professor, began his service on July 1, 1958 working at the University of Minnesota in preparing library materials with which he will work in Korea. He has had extensive training in Political Science and for several years served on the staff of the Public Administration Library at the University of Minnesota. Mr. Hunt, accompanied by his wife and three sons, ages 7, 3, and 2 years, left Minneapolis for Korea on August 2, 1958. He has the responsibility for advising in the development of the library at the new School of Public Administration, College of Law, Seoul National University, and at the National Officials Training Institute, Office of General Affairs, Republic of Korea.

Dr. William O. Farber, professor and chairman of the Department of Political Science and director, Bureau of Governmental Research, University of South Dakota, began service on the contract on July 31, 1958 spending three days in conference with staff members at the University of Minnesota and departing for Korea on August 3, 1958. Dr. Farber was instrumental in establishing the South Dakota Legislative Research Council. During 1956-57, he served as visiting professor of political science at Northwestern University. He is advising on the development of a research program at the School of Public Administration, Seoul National University, and probably will participate in the in-service training program in the National Officials Training Institute.

Agricultural Programs. Eight Korean faculty members who had been studying agricultural specialties in the United States have returned to their posts

in Korea since the previous report. One, Cho, Duck Hiyon, had been studying for a year at the University of California, Davis. The other seven, who had been studying at the University of Minnesota were: Im, Hyong Bin; Lee, Su Rae; Lee, Sung Hwan; Park, Sung Woo; Park, Hong Nai; Yim, Kyong Bin; and Yuk, Chong Yung.

Six Korean faculty members in Agriculture are studying at the University of Minnesota as this report is being prepared. Four who have been here since 1955 are: Cho, Chai Moo; Lee, Chul Choo; Pyo, Hyun Koo; and Ryu, Han Yeol. The other two who arrived in August, 1958 are Hyun, Jai Sun and Sim, Young Kun.

The fourteen faculty members mentioned above represented a wide range of subject matter interests, including food technology, botany, biochemistry (nutrition), organic chemistry, horticulture, business administration, silviculture, dairy husbandry, soils, agricultural engineering (3), entomology, and agricultural economics.

Agricultural Equipment. Screening on the lists of equipment referred to in the immediately preceding report was completed during the period covered by the present report. Procurement began some time ago through the University Purchasing Department and delivery in Suwon in due course is expected.

Another list of equipment items was received from the same source in September, 1958. FY 1958 funds in the sum of approximately \$16,000 cover equipment costs, with some \$4,000 set aside to cover shipping and other costs. These lists have now been screened by specialists in the Institute of Agriculture and, as this is being written, have been turned over to the Purchasing Department for procurement.

Veterinary Medical Programs. The College of Veterinary Medicine, University of Minnesota, continues to provide post-doctoral training and

experience for the faculty of its sister college at Seoul National University. There have now been six faculty members, including the Dean (now replaced) and the present Dean, who have been brought to the United States for study in this college. Three of them have returned to their posts in Korea and three are presently studying at the University of Minnesota.

Three of these Korean faculty members were at the University of Minnesota during all or part of the past academic year, two of whom have returned to Korea. The other one, Jeon, Yun Seong came to Minnesota in August, 1957. He is an instructor in Veterinary Microbiology.

Two new faculty members arrived in August, 1958. One, Cho, Byung Ryul is a lecturer in Veterinary Microbiology and the other, Kim, Sang Nam, an instructor in Veterinary Histology and Embryology. Another participant scheduled for arrival in August, 1958 was unable, at the last moment, to pass the required health examination.

One of the most important developments noted in connection with the last group of Korean faculty members to come to the University of Minnesota has been the marked improvement in their ability to communicate in the English language and, in turn, to benefit more by their experience here.

Considerable freedom is given each Korean faculty member in choosing his research problem, trying to relate it to the more important animal disease problems of his country. The close proximity and working relationship of the College of Veterinary Medicine with the Institute of Agriculture on the St. Paul campus affords the Korean faculty members an opportunity and a responsibility to further such a relationship in Korea.

Dr. Rhee, Young So, who spent a year at the University of Minnesota, ending August 1, 1957, auditing courses and familiarizing himself with modern procedures, is now Dean of his college in Korea.

Engineering Programs. During the past four years the Institute of Technology of the University of Minnesota has met almost completely the initial program envisioned for strengthening the College of Engineering, Seoul National University. Fifty-five Korean faculty members have been brought to the United States for study, of whom 38 have completed their studies and returned to Korea. Seventeen are presently engaged in study in the United States. Fifteen of these are at the University of Minnesota and 2 at other institutions.

It came as no surprise that many of the first Korean faculty members in engineering to come to the United States failed to meet the rigorous standards applicable to regular graduate students. However, as time has progressed the situation has steadily improved to the point that now these faculty representatives of our sister university are able to compete on an equal basis with other students enrolled in graduate courses.

Three overall advisers in Engineering have provided an adequate liaison in Korea, beginning with the arrival of Professor William R. Weems on March 1, 1955. His departure on April 16, 1956 was followed by the arrival of Professor William W. Staley on June 25, 1956. Following Professor Staley's departure on August 23, 1957, Professor Clarence E. Lund has provided this essential service from April 4, 1958 until the present. Thus during a total of $43\frac{1}{2}$ months since Professor Weems' arrival in Korea, overall engineering advisers have been in Korea to provide almost continuous consultative services for all but $9\frac{1}{2}$ months.

It is a pleasure to discover that the 9 faculty members sent to Korea for service in Engineering under the ICA contract have represented practically all of the engineering fields. And the Korean faculty members from those same fields who have come to the United States for further graduate study have been able to begin their studies as regular graduate students.

It seems logical at this point to establish two important principles to be kept in mind during the remainder of the contract:

1. Korean faculty members in Engineering brought to the United States in the future should be of such caliber as to justify their acceptance and admission as regular graduate students;
2. Admitting the desirability of staffing with University of Minnesota faculty members, further faculty members requested for service in Korea might, in some circumstances, have to be recruited from outside the University of Minnesota on the basis of their qualifications for the task to be accomplished.

Medical Programs. Members of the faculty of the College of Medical Sciences, University of Minnesota, believe that the Korean exchange program has definitely produced beneficial results and that it is likely to bear even more fruit if extended beyond its presently scheduled expiration date.

Although language barriers have created varying degrees of difficulty and some of the Korean faculty participants have not been clearly academically oriented, most Koreans have given definite evidence that their time---and ours---has been spent in a worthwhile manner. Our experience leads us to the strongly-held conclusion that participation, by each Korean faculty member, in the graduate medical program is essential.

Public Administration Programs. The program in Public Administration at the University of Minnesota is supervised by a Director (half-time), assisted by a secretary (half-time). Assisting him in the training aspects of the program is a Research Fellow (half-time). Three professors offered special instruction on a part-time basis arranged to meet the specific needs of the Korean faculty members. There are, in addition, a one-fifth time librarian and a half-time senior clerk-typist who devote their efforts to

selecting and typing requisitions for the books in Public Administration being procured for the two libraries in Public Administration being established in Korea.

The immediately preceding report outlined the major activities in which the 13 participants who came to the University during August, 1957 engaged. The paragraphs which follow supplement and bring up to date the information provided earlier.

These 13 participants received special attention in the planning of their programs for the specific roles it was expected that they would play in the new School of Public Administration at Seoul National University (11 participants) and in the National Officials Training Institute of the Government of the Republic of Korea (2 participants). Statistics reveal that the 13 participants were enrolled in 159 courses from 10 University of Minnesota departments.

All of the participants were enrolled in an orientation course in American political institutions soon after their arrival in Minneapolis, and a special seminar in Public Administration extending through the three academic quarters of the year. The seminar was taught by Professor George A. Warp during the fall quarter, Professor Raymond Uhl during the winter quarter, and Professor Lloyd M. Short during the spring quarter. A comprehensive examination covering the entire year of the seminar was taken at the close of the spring quarter.

Intensive language instruction and tutoring in individual courses were provided for those participants whose achievements indicated the need for such special assistance.

An American student counterpart was assigned to each participant. Assignments were made according to the special interests of the students.

Most of the counterpart relationships were very successful, not only from the standpoint of the Korean participants, but also from the standpoint of the American graduate students.

All of the participants did satisfactory academic work and completed the coursework requirements for the Master of Arts Degree in Public Administration (M.A.P.A.).

All of the participants took part in a non-credit seminar conducted by Dr. Arthur Naftalin, Commissioner of Administration for the State of Minnesota, on the "practice of public administration." In addition, the participants attended a series of seminars on teaching methods.

During the five-week period from June 16 to July 18, the participants served internships with government agencies as follows:

<u>Participant</u>	<u>Place</u>	<u>Agency</u>
Ahn, Hae Kyun	Ithaca, New York	Library, School of Business and Public Administration, Cornell University.
Bark, Dong Suh	Albany, New York	New York State Department of Civil Service.
Kim, Hae Dong	Knoxville, Tenn.	Tennessee Valley Authority.
Kim, Tae Choon	Washington, D. C.	National Office of Vital Statistics.
Kim, Woon Tai	Chicago, Illinois	Public Administration Service.
Lee, Joung Sik	Boston, Mass.	Massachusetts Department of Commerce.
Lee, Sang Jyo	New York, New York	United Nations Technical Assistance Program, United Nations.
Lee, Woong Keun	Madison, Wisconsin	Wisconsin Division of Budget and Accounts.
Liu, Yung Sang	Coshocton, Ohio	Soil Conservation Service Training Center.

<u>Participant</u>	<u>Place</u>	<u>Agency</u>
Moon, Ki Youl	Washington, D. C.	U. S. Civil Service Commission.
Rho, Yung Hee	Hartford, Conn.	City Hall.
Suh, Won Woo	Washington, D. C.	Federal Trade Commission.
Yu, Hoon	Albany, New York	New York Department of Taxation.

Tentative thesis topics were selected during the spring quarter. The theses will be prepared in Korea. Each thesis will be part of an overall research program in the new School of Public Administration.

Nine of the participants returned to Korea in July, 1958; four remained at the University of Minnesota for an additional year of graduate work. In August, 1958, 13 new participants arrived in Minneapolis--eight from Seoul National University and five from the Korean Government. In general, the same type of program will be arranged for the 1958-59 group as for the 1957-58 group, though the members will be trained for additional specialties.

The library project is moving along nicely. To date, orders have been placed for 1,748 books. Of these, approximately one in seven is for the library of the National Officials Training Institute; the others are intended for the special public administration library at Seoul National University. Catalogue numbers (both Library of Congress and Dewey) have been prepared for most of the books which have been ordered. Sets of catalogue cards will be obtained from the Library of Congress.

Korean Service. It might be of some interest in this report to provide a list by colleges and departments, of staff members who have served or still are serving in Korea. The accompanying table reveals that 32 staff members have served in Korea under the ICA contract. Their total service adds up to 310 man/months or 25 5/6 man/years. Of this total, 2 individuals served 90 man/months or 7½ man/years in project administration; 9 individuals served

58 $\frac{1}{2}$ man/months or 4 $\frac{7}{8}$ man/years in agriculture; 9 individuals served 62 man/months or 5 $\frac{1}{6}$ man/years in engineering; 7 individuals served 73 man/months or 6 $\frac{1}{12}$ man/years in medicine; 1 individual served 3 $\frac{1}{2}$ man/months or $\frac{7}{24}$ man/years in veterinary medicine; 4 individuals served 23 man/months or 1 $\frac{11}{12}$ man/years in public administration.

TOTAL SERVICE OF STAFF MEMBERS SENT TO KOREA
September 5, 1954 to October 19, 1958

Name	Date Service Began	Last Day Served	Man Months	Man Years	Prof. Field	Rank
<u>Project Administration</u>						
Arthur E. Schneider	9- 5-54		49½		Chief Adviser	Prof.
N. Gertrude Koll	5-31-55		40½		<u>Secretarial</u>	Adm. Secy.
TOTALS			90	7½	2 depts.	
<u>Agriculture</u>						
Clyde H. Bailey	9- 3-55	12-17-55	3½		Ag. Biochem.	Prof. & Dean Emer.
Philip W. Manson	9- 3-55	2- 2-56	5		Ag. Eng.	Prof.
Paul M. Burson	6- 1-56	12-14-56	6½		Soils	Prof.
Harald Ostvold	6- 1-56	9-18-56	3½		Library	Asst. Prof.
Andrew Hustrulid	8- 1-56	1- 5-57	5		Ag. Eng.	Prof.
Frank H. Kaufert	8-13-56	11-28-56	3½		Forestry	Prof. & Head
Roy O. Bridgford	2-25-57		20		Agronomy	Assoc. Prof.
Thomas H. King	3-29-57	9-13-57	5½		Pl. Path.	Prof.
Clarence E. Mickel	3-29-57	9-26-57	6		<u>Entomology</u>	Prof. & Head
TOTALS			58½	7 4½	8 depts.	
<u>Engineering</u>						
William R. Weems	2- 1-55	7-17-56	17½		Genl. Eng.	Prof.
Carl Graffunder	9- 9-55	12-12-55	3		Architecture	Lecturer
Sidney C. Larson	9-16-55	12-19-55	3		El. Eng.	Assoc. Prof.
Clarence E. Lund	9-26-55	12-23-55	3		Mech. Eng.	Prof.
	4- 1-58		6½			
Chapin A. Harris	6- 4-56	9- 1-56	3		Text. Eng.	Prof.
William W. Staley	6-16-56	9-27-57	15½		Mining Eng.	Prof.
Paul Andersen	7-31-56	12-22-56	4½		Civil Eng.	Prof.
J. Harvey Evans	4- 1-57	7-12-57	3½		Naval Arch.	Prof.
Clarence Schwartz	8- 7-58		2½		<u>Chem. Eng.</u>	Prof.
TOTALS			62	5 6	8 depts.	
<u>Medicine</u>						
William F. Maloney	3-24-56	7-11-56	3½		Int. Med.	Asst. Prof. & Asst. Dean
Margery S. Low	1- 1-57		21½		Nursing	Asst. Prof.
James H. Matthews	5- 2-57		17½		Anesthes.	Asst. Prof.
Glenn R. Mitchell	5- 2-57		17½		Hosp. Adm.	Asst. Dir. Univ. Hosp.
Edmund B. Flink	8- 1-57	2-18-58	6½		Int. Med.	Prof.
George Schimert	7- 6-58		3½		Surgery	Asst. Prof.
E. B. Brown, Jr.	7-25-58		3		<u>Physiology</u>	Prof.
TOTALS			73	6 12	6 depts.	
<u>Veterinary Medicine</u>						
Willard L. Boyd	9- 7-57	12-24-57	3½		<u>Genl. Vet. Med.</u>	Prof. & Dean Emer.
TOTAL			3½	7 24	1 dept.	
<u>Public Administration</u>						
E. R. Draheim	12-19-57		10		Pers. Trng.	Prof.
Stuart MacCorkle	3-16-58		7		Govt.	Prof.
Leigh W. Hunt, Jr.	7- 1-58		3½		Library	Asst. Prof.
William O. Farber	7-31-58		2½		<u>Res. in Govt.</u>	Prof.
TOTALS			23	11 12	4 depts.	
GRAND TOTALS			310	25 6	28 depts.	

Korean Faculty Participants. The accompanying table reveals that of the 52 Korean faculty members studying in the United States at the time of the previous report, 26 have completed their studies and returned to Korea. Eight of these were from Agriculture (including Veterinary Medicine), 3 from Engineering, 6 from Medicine, and 9 from Public Administration. Twenty-two new participants have arrived during the same period. Four were from Agriculture (including 2 from Veterinary Medicine), 1 from Engineering, 4 from Medicine, and 13 from Public Administration. This raises the total number of participants since the beginning of the program to 157, of whom 109 have complete their studies and returned to Korea. There are presently studying in the United States under the ICA contract a total of 48 Korean faculty members, of whom 46 are studying at the University of Minnesota and 2 at other institutions. Both of these latter are studying Textile Engineering; one at Lowell Technological Institute and the other at Massachusetts Institute of Technology. The 48 presently studying in the United States are divided as follows: Agriculture 9 (including 3 from Veterinary Medicine); Engineering 15; Medicine 7; and Public Administration 17.

TABULATION OF KOREAN FACULTY MEMBERS STUDYING
IN THE U. S. UNDER THE ICA CONTRACT

	Arrivals	Total No. of Particip.				Departures	Still Participating				
		Ag.	Eng.	Med.	Pub.Ad.		Ag.	Eng.	Med.	Pub.Ad.	Total
1st Report	7	2	4	1	0	0	2	4	1	0	7
2nd Report	44	11	19	21	0	3	9	19	20	0	48
3rd Report	7	16	20	22	0	5	13	17	20	0	50
4th Report	44	25	46	31	0	26	16	31	21	0	68
5th Report	1	25	47	31	0	6	15	29	19	0	63
6th Report	32	32	54	36	13	36	19	17	10	13	59
7th Report	0	32	54	36	13	7	13	17	9	13	52
8th Report	22	36	55	40	26	26	9	15	7	17	48
TOTALS	157	36	55	40	26	109	9	15	7	17	48

A second table provides data on arrivals, departures, number of participants during each quarter, and cumulative man-months and man-years by calendar quarters beginning January 1, 1955 - the first quarter during which there were Korean faculty participants under the ICA contract. The last two columns show the cumulative man-months and man-years for each of the 15 quarters involved and enable the reader to estimate the magnitude of the educational program which has been provided for the Korean faculty members. Specifically, the tabulation reveals that a total of 179.9 man-years of graduate study had been provided under the ICA contract for the 157 Korean faculty members who had been supported through September 30, 1958.

	Arrivals	Departures	Participating	Cumulative Man Months	Man Years
1-1-55					
to	1	0	1	1	.1
3-31-55					
4-1-55					
to	21	1	21	38½	3.5
6-30-55					
7-1-55					
to	29	2	48	117	9.8
9-30-55					
10-1-55					
to	3	3	48	260	21.7
12-31-55					
1-1-56					
to	0	2	46	400½	33.4
3-31-56					
4-1-56					
to	13	2	57	568½	47.4
6-30-56					
7-1-56					
to	35	19	73	767	63.9
9-30-56					
10-1-56					
to	0	6	67	970	80.8
12-31-56					
1-1-57					
to	1	5	63	1,163½	97.0
3-31-57					
4-1-57					
to	0	7	56	1,352	112.7
6-30-57					
7-1-57					
to	32	28	60	1,509½	125.8
9-30-57					
10-1-57					
to	0	4	56	1,686	140.5
12-31-57					
1-1-58					
to	0	3	53	1,853½	154.5
3-31-58					
4-1-58					
to	0	2	51	2,009½	167.5
6-30-58					
7-1-58					
to	22	25	48	2,159	179.9
9-30-58					

Exhibition of Korean Art Treasures. The state of Minnesota was extremely fortunate in being included in the itinerary of the priceless exhibition, "Masterpieces of Korean Art," sent by the Republic of Korea Government to this country for showing in a few selected cities as a token of the appreciation of the Korean people for the efforts the United States has put forth for their benefit. The initiative of Mr. Richard S. Davis, director of the Minneapolis Institute of Arts, was primarily responsible for the inclusion of the Twin Cities in the itinerary of the exhibit. The exhibition opened for public showing in the Minneapolis Institute of Arts on September 20, 1958 and continued through October 19. A members' preview of the exhibit was held on September 19, beginning with a reception given by the Korean Ambassador to the United States and Madame Yang from 4:30 to 6:30. This was followed by a buffet supper at 6:30 and an informal introduction to the exhibition by Dr. Kim at 8:30.

Distinguished Koreans who came to Minneapolis for the opening of the exhibition included His Excellency Dr. Yang, You Chan, Ambassador of the Republic of Korea to the United States, and Madame Yang; Dr. Kim Won Yong, Curator in charge of the Research Division of the National Museum of Korea; and Mr. Choo, Young Han, Korean Consul General in San Francisco.

Ambassador and Madame Yang, Dr. Kim, and Consul General Choo were honored on September 18 at a dinner given in their home by Mr. and Mrs. Davis.

Korean faculty members from Seoul National University, studying at the University of Minnesota, and other Koreans resident in the Twin Cities gave a party for their Twin Cities friends in Newman Hall in honor of Consul General Choo on the evening of September 18. A delightful program of Korean music presented by Twin Cities Koreans was followed by the showing of a colored film of Cheju Island, a part of the Republic of Korea lying south of the

Korean peninsula. An address by Consul General Choo to the Koreans and their guests completed the program, following which light refreshments were served.

Ambassador Yang was the guest speaker at the weekly luncheon meeting of the Minneapolis Rotary Club in Hotel Nicollet on September 19. Special guests of Mr. Davis included Dr. W. B. Bryan, who heads the School of Art at Minneapolis Institute of Arts; Mr. Harry Bullis, Board Member, American-Korean Foundation; and Dr. Tracy F. Tyler, Coordinator of the Korean ICA contract.

Academic Achievement of the Koreans. The present report continues the tabulations for presenting academic achievements which were initiated with the sixth report. The faculty members brought to the United States for study are again divided into two groups: those who audited courses (or took almost none for credit); and those who enrolled for credit and received marks in courses totalling 9 or more credits. No attempt was made to prepare separate distributions for the various fields involved as it appeared that no good purpose would be served by such comparisons.

There has now been a total of 157 Korean faculty members who have been supported under the ICA program. They might be accounted for as follows:

Deans of Agriculture and Medicine who came only for observation and consultation	2
Faculty members who either audited all courses or registered for less than 9 credits	41
Faculty member who enrolled for no course work but earned Doctor's degree solely through research at Pasteur Institute in Paris	1
Faculty members who arrived in the fall of 1958 and have just begun their studies	22
Faculty members who registered for 9 or more credits	
Completed studies and returned to Korea	65
Still studying in the U. S.	<u>26</u>
	<u>91</u>
Total number of Korean faculty members supported	157

The marks earned by the 91 members of the group who had registered for 9 or more credits were secured. This resulted in the accompanying tabulation:

MARKS MADE BY 91 KOREAN FACULTY MEMBERS REGISTERED FOR 9 OR MORE CREDITS

	All 91 Koreans	65 Koreans Completing Studies	26 Koreans Still Studying in U. S.	29 Koreans Who Earned Master's Degrees
Grade	No. of Qtr. Credit Hours	No. of Qtr. Credit Hours	No. of Qtr. Credit Hours	No. of Qtr. Credit Hours
A	1,529½	812	717½	892
B	1,645¼	1,005¼	640	728½
S*	736½	580½	156	221
C	<u>535</u>	<u>315</u>	<u>220</u>	<u>191</u>
TOTAL OF ABOVE	4,446¼	2,712¾	1,733½	2,032½
Audit	1,394	1,021	373	457½
Fail	17½	9	8½	4½
Other (D, Incom- plete, dropped, etc.)	<u>480</u>	<u>324½</u>	<u>155½</u>	<u>139</u>
SUB-TOTAL	1,891½	1,354½	537	601
GRAND TOTAL	6,337¾	4,067¼	2,270½	2,633½
No. of individuals	91	65	26	29
No. of Quarters of individual regis- tration	532½	332	200½	242½
Average No. of quarters per individual	5.85	5.11	7.71	8.36

*Used to denote grade of "B" or better.

The following significant conclusions may be drawn from the preceding table:

1. The average number of graduate credits earned per quarter:
 - a. All 91 Koreans 8.35
 - b. 65 Koreans completing studies 8.17
 - c. 26 Koreans still studying 8.65
 - d. 29 Koreans who earned Master's degrees 8.38

2. The average number of credits taken on an audit basis per quarter:
 - a. All 91 Koreans 2.62
 - b. 65 Koreans completing studies 3.08
 - c. 26 Koreans still studying 1.86
 - d. 29 Koreans who earned Master's degrees 1.89

3. The average number of credits per quarter resulting in failure:
 - a. All 91 Koreans 0.033
 - b. 65 Koreans completing studies 0.027
 - c. 26 Koreans still studying 0.042
 - d. 29 Koreans who earned Master's degrees 0.018

4. The average number of credits per quarter resulting in grades of D, Incomplete, dropped, etc.:
 - a. All 91 Koreans 0.901
 - b. 65 Koreans completing studies 0.977
 - c. 26 Koreans still studying 0.776
 - d. 29 Koreans who earned Master's degrees 0.573

A further table provides comparisons on a percentage basis between the four categories of grades acceptable for credit in the Graduate School.

GRADE DISTRIBUTION PERCENTAGES

Grade	All 91 Koreans	65 Koreans Completing Studies	26 Koreans Still Studying	29 Koreans Who Earned Master's Degrees
A	34.4	29.9	41.4	43.9
B	37.0	37.1	36.9	35.8
S	17.6	21.4	9.0	10.9
C	<u>12.0</u>	<u>11.6</u>	<u>12.7</u>	<u>9.4</u>
TOTALS	100.0	100.0	100.0	100.0

The unusual achievement indicated by the preceding data cannot be stressed too often. Although all of our studies have revealed the high level of competence of the average Korean faculty member who has been privileged to participate in the program, it still seems remarkable that, on the average, each has maintained such a high level of academic attainment in a new and unfamiliar environment and forced, as he is, to receive instruction in a completely different language from that to which he has been accustomed.

Degrees Earned. The accompanying table provides an alphabetical listing of the 23 Korean faculty members who, prior to the present report, had earned Master's degrees through ICA contract support. Also indicated are the date the degrees were awarded and the college, the academic rank, and the field of specialization of each individual. To this list should be added the name of Dr. Lee, Ki Young who, in January, 1956 received the degree, Doctorat de l'Universite de Paris. To be added also is the name of Dr. Kim, Chu Wan who, in September, 1957 passed his examination before the American Board in Diagnostic Roentgenology.

The table reveals that degrees have been received by Korean faculty members from 18 different departments. Distribution among the three colleges is as follows: Agriculture 10; Engineering 9; and Medicine 4. The breakdown by ranks is as follows: Teaching Assistant 15; Instructor 2; Assistant Professor 2; Associate Professor 3; and Lecturer 1.

During the period covered by the present report, six additional Korean faculty members completed the requirements for the Master's degree. Wie, Sang Kyoo, lecturer (aeronautical engineering) and Woo, Jae Lin, instructor (textile technology) received M. S. degrees in June, 1958. The following have completed the requirements but will be awarded their degrees when the checking of their records has been completed: Chung, Myung Sik, teaching

assistant, M. S. (civil engineering); Im, Hyong Bin, instructor, M. S. (plant pathology); Lee, Su Rae, teaching assistant, M. S. (agricultural biochemistry); and Yim, Kyong Bin, instructor, M. S. (forestry). A few others, whose records had not yet been checked when the present report was being prepared, may be added later. Their names will appear in the next report.

This brings to 30 the number of Korean faculty members who, through graduate study under the ICA contract, have earned advanced degrees. The total becomes 31 when to the previous number is added the medical faculty member who passed the American Board in his specialty.

TWENTY THREE KOREAN FACULTY MEMBERS EARNING MASTER'S DEGREES
December, 1955 through March, 1958

Name	Date Degree Awarded	College	Academic Rank	Field of Specialization
CHO, Chai Moo	6-57	Agriculture	Teach. Asst.	Soils
CHO, Kun Chan	6-57	Engineering	Lecturer	Electrical Engineering
CHOI, Jong Wan	3-57	Engineering	Teach. Asst.	Civil Engineering
CHUNG, Hoo Sup	12-57	Agriculture	Teach. Asst.	Plant Pathology
HAHN, Mansop	7-57	Engineering	Teach. Asst.	Aeronautical Engineering
HAHN, Tae Hee	6-57	Engineering	Instructor	Chemical Engineering
KANG, Woong Ki	6-57	Engineering	Teach. Asst.	Chemical Engineering
KIM, In Kwon	12-56	Agriculture	Assoc. Prof.	Agronomy and Plant Genetic
LEE, Chul Choo	6-57	Agriculture	Teach. Asst.	Agricultural Engineering
LEE, Chung Han	6-57	Engineering	Asst. Prof.	Electrical Engineering
LEE, Ho Wang	12-57	Medicine	Teach. Asst.	Bacteriology
LEE, Socker	12-56	Engineering	Teach. Asst.	Mechanical Engineering
LEE, Tai Hyun	6-56	Agriculture	Asst. Prof.	Horticulture
LEE, Yong Bin	12-55	Agriculture	Assoc. Prof.	Animal Husbandry
LIM, Jung Kyoo	3-58	Medicine	Teach. Asst.	Pharmacology
OHH, Bong Kug	12-57	Agriculture	Teach. Asst.	Poultry Husbandry
PAIK, Woon Hah	8-56	Agriculture	Assoc. Prof.	Entomology
PARK, Won Hee	8-57	Engineering	Teach. Asst.	Chemical Engineering
PARK, Zin Hwan	7-57	Agriculture	Teach. Asst.	Agricultural Economics
RHEE, Sang Don	12-57	Medicine	Teach. Asst.	Physiology
RYU, Han Yeol	3-57	Agriculture	Teach. Asst.	Agricultural Engineering
SIM, Bo Sung	12-57	Medicine	Instructor	Surgery
SUH, Chai Chin	7-57	Engineering	Teach. Asst.	Mechanical Engineering

The Problem of Extensions. Proposed extensions of the periods of study in the U. S. for Korean faculty members have become more difficult to finalize in recent months. Originally Exhibit I provided that

"Selected junior staff or faculty personnel . . . shall be brought to the University of Minnesota for such periods not in excess of three years, as may be mutually agreed upon by Contractor and the University."

It was furthermore provided that

"When the Contractor arranges a period of training in the United States in excess of one year, it shall notify ICA in writing of the reasons for the extension of the training period."

This proved to be a reasonable and satisfactory procedure. University of Minnesota, in cases which justified extensions, forwarded the recommendation of the individual adviser, concurred in by the appropriate Dean and Campus Coordinator to the Chief Adviser in Korea. The President of Seoul National University, in consultation with his colleagues, then reached his decision after consideration of the Minnesota recommendations. Upon receipt of an affirmative decision, the Coordinator then notified the Korean in writing of the decision and a copy of this letter served as the basis for securing an extension of his passport and U. S. visa. At the same time ICA/Washington was given written notification of the extension and the reasons therefore.

Amendment 10, added to the Contract on February 11, 1957, placed a restriction on periods of study in the U. S. by the use of the following language:

"Before arranging for any training period in excess of one year, Contractor shall obtain the prior written approval of ICA."

The above language requires approval rather than notification. Fortunately, it applied only, of course, to Korean faculty members who began their studies in the U. S. subsequent to the adoption of the Amendment. It only applied to earlier participants in cases where extensions were recommended carrying beyond the periods of study originally fixed.

In recent months it became apparent that some Korean faculty members, the plans for whom involved the completion of the requirements for the Ph.D. degree, would require periods of study in excess of three years, as limited by the original contract. This resulted in the approval of a new Amendment (Amendment No. 14), effective June 5, 1958, which deleted the phrase "not in excess of three years."

No difficulty has been experienced in securing ICA approval for extensions of periods of study. The problem has been the recent inability of the Korean faculty members, whose extensions had been previously approved by the appropriate officials of Seoul National University, to secure passport extensions.

Discussions in Korea with the appropriate officials of the Government of the Republic of Korea revealed that applications for passport extensions must now proceed through a series of definite steps. This procedure begins with a presentation in writing from Seoul National University requesting extensions for the specific faculty members involved, together with a statement of the basis for each individual request. This request must be addressed to the Ministry of Reconstruction for action and, if approved, to the Ministry of Foreign Affairs for granting the requested extension of the passport.

Now that the cause of the difficulty has been identified and the proper procedural steps determined, it appears that the problem is being resolved satisfactorily.

Another difficulty faced recently involved securing approval for three Korean faculty members to enter Canada for approved field trips. Trips of this nature were made possible through Amendment No. 14 which added to Exhibit I, General Plan, the following paragraph:

"When staff or faculty personnel in the respective colleges of the University are selected, in accordance with the General Plan under Exhibit I, for training at institutions or for observational trips outside the United States, Contractor shall be reimbursed for the costs of transportation and per diem of such personnel on the same basis as provided for trainee personnel in paragraph 11 next above."

One of the Korean faculty members was to report his research before the meetings of the American Physiological Society in London, Ontario, September 1-5, 1958. Two others were to take a mining field trip which involved visiting mines and mining installations in Canada during a portion of a period of some three weeks between September 7 and 26, 1958.

This difficulty arose because University of Minnesota authorities were unaware of the fact that no Korean is permitted to enter any foreign country without securing permission from the Foreign Ministry in Seoul.

This problem, like the one concerning extensions, was finally, although belatedly, resolved and the three Koreans were able to participate in their approved field trips.

Another English Program Conducted. The twenty-two Korean faculty members who had been selected to begin their graduate studies at the University of Minnesota in the fall of 1958 were given an intensive program of English language instruction similar to the one provided in the previous two years.

Again, as before, it was hoped that the participants would reach Minneapolis by August 1 so that a month and a half of instruction could be provided. Unfortunately, the arrival of the 1957 participants had been spread over the period, August 10 to September 15. This had resulted in the loss, in all cases, of some part of the anticipated instruction. In contrast, the first 1958 contingent of three arrived July 31 and the last participant on August 23. However, thirteen had arrived on or before August 9 and eight reached Minneapolis on August 15. Thus a profitable period of study was provided this year for all participants prior to September 20 and a full week remained before the opening of classes for each of them to plan his study program with his Graduate School adviser.

The staff was headed again this year, as it had been in the previous two years, by Dr. Harold B. Allen, professor of English, and included five experienced instructors. Former instructors were: M. Millard Miller, teaching assistant, School of Social Work, instructor in English for foreigners, International Center of St. Paul, and former U. N. staff member in Korea; and Dr. Richard Narvaez, instructor in Romance Languages and former assistant professor of English as a foreign language, University of Puerto Rico and at the Navy Pier Branch, University of Illinois. New appointments were: Paul Kirchner, teaching assistant in English for foreign students; Dr. Joseph Miller, research fellow and instructor in English; and Robert O'Hara, instructor in communication. In addition, Dr. Ruth Roberts, reading and testing specialist, Office of the Dean of Students, former staff member for the 1956 and 1957 programs, directed part of the pre-testing and all of the post-testing.

Initial preparation of the group consisted of an English language and orientation program at the Foreign Language Institute in Seoul. This was followed immediately upon their arrival in Minneapolis by a somewhat similar program intended both as a review for consolidating the language gains and as a more advanced stage in their English language learning. It had the purpose also of providing some introduction to the cultural adjustment needed for their year or more in America and, particularly, in an American university.

These objectives were sought in an intensive program, five hours a day and five days a week from August 4 through September 19.

Tests were utilized for both diagnosis and evaluation. Pre-test scores formed the basis for sectioning the Koreans into three groups according to English language ability. Tests used were Gates Reading Survey for Grades 3 to 10; Prator Accent Inventory; Allen Pronunciation Test; Written Composition (35-minute impromptu theme).

The same teaching materials were used as in 1957. The instructional objective was to apply as much as possible the findings of recent research in linguistics and in the teaching of English as a second language. The general organization of the course followed in large measure that of the short course in the University of Michigan Language Institute.

With the exception of a ten-day period when special lectures were given by a professor of political science, each of the sections met five times a day for fifty-minute periods. During a week, however, the low-ability section spent more hours in language drill than did the high-ability section; the reverse was true for the hours in reading and in laboratory. The poorer students required more work to form a sound basis before advancing to the extensive reading.

Textbooks used were: Fred Lukoff, English for Koreans; Clifford Prator, Manual of American English Pronunciation; Audrey L. Wright, Practice Your English; Kitchen and Allen, Reader's Digest Readings.

Various orientation activities supplemented the instruction. Four times a week the sections met as a single group for an informal brief talk by a staff member. Six documentary films were shown: Minnesota Profile; The Family; The Legislative Process, 6,000 Partners; Agricultural Portrait; Miracle at Your Front Door. For each of ten days one hour of class time was released so that Professor A. N. Christensen could give his scheduled two-hour lectures on American political institutions. One day was devoted to a staff-conducted tour of the Minnesota State Fair. The night following the final examinations the English staff gave the Koreans an American party.

In terms both of the final tests in Korea and of the pre-testing in the U. S. the 1958 group compared with the 1957 group on fairly even terms. However, in both reading and composition, most of the 1958 group scored somewhat lower

than the 1957 group. But, again, the superiority of both groups over the 1956 group must be attributed to the intensive instruction in Seoul under Miss Helen D. Sims. The program there laid a good basis for the continuation in the English-speaking environment of the United States.

In all but one area of language activity, the 1958 Korean group attained a measure of progress comparable to that of the 1957 contingent. Reading skill increased satisfactorily in each section as a whole; ability to write expository prose improved correspondingly; habits of correct pronunciation in context also improved. But in listening comprehension, two sections, those with middle and high ability, failed to show any gain; and the low section gained only slightly.

Upon the basis of the final testing and of the recommendation of the instructors in the program, about half of the group were advised to supplement the coursework by further instruction, either by tutoring or through special classes which might need to be arranged during the fall quarter. Some of the Koreans, particularly in Public Administration, require this additional assistance because their field of study is highly verbalized.

Had it been possible to continue the English program for another month, even the poorest students in English language ability probably would have so improved that tutoring or class instruction would not be necessary.

Two New Deans. Dean Hwang, Yung Mo, who had served as Dean of the College of Engineering, Seoul National University, ever since the ICA contract began, retired from his deanship during the period covered by this report. Acting Dean Kim, Moon Sang, professor of textile engineering was appointed.

Dr. Rhee, Young So, who spent the year 1956-57 at the University of Minnesota, has replaced Dr. Oh, Sun Sup as Dean of the College of Veterinary Medicine.

Equipment Procurement. Slowly but surely, in spite of almost insurmountable difficulties, books, equipment, and supplies procured through funds provided by the U. S. International Cooperation Administration are reaching their final destination in the colleges of Agriculture, Engineering, Medicine (including Nursing), and Law in Seoul National University and in the National Officials Training Institute in the Office of General Affairs of the Government of the Republic of Korea.

Actual expenditures through September 30, 1958 in the original contract areas of Agriculture, Engineering, and Medicine totalled \$1,311,421.51. Outstanding obligations totalled \$434,357.77 for the same period. Of this obligated sum, \$130,238.45 constitutes moneys set aside but not yet spent to cover costs of transportation, packing, insurance, and charges of the forwarding agents. The balance, \$304,119.32, represents actual orders placed but not yet delivered. Thus equipment and supplies valued at \$1,615,540.83, including transportation, export packing, insurance and charges of the forwarding agent had been ordered and were either on their way or actually had arrived at their destination in Korea.

Reports from the Chief Adviser in Korea indicated that the unadjusted invoice value of equipment and supplies in the original contract areas received in Korea through September 30, 1958, totalled \$1,099,791.93. These totals, it must be kept in mind, do not include the cost of such items as transportation, insurance, the preparation of required documents, or other services provided by the forwarding agents. These additional items add an estimated 25 per cent to the actual costs of the equipment and supplies.

Actual expenditures through September 30, 1958 for the procurement of books, periodicals, and equipment for Public Administration (including chargeable salaries and indirect costs) totalled \$17,093.92. In addition,

outstanding obligations covering orders placed but not yet delivered to the forwarding agents and sums set aside for forwarding agent's charges and the like, totalled \$12,004.27. Thus books and periodicals valued at \$29,098.19, including transportation, export packing, procurement costs and indirect costs had been ordered and were either on their way or actually had arrived at their destination.

Reports from the Chief Adviser in Korea indicated that the unadjusted invoice value of books for the two Public Administration libraries received in Korea through September 30, 1958, totalled \$7,153.73. These totals, like the others mentioned earlier, do not include transportation, insurance, and other services provided by the forwarding agents. Neither do they include the cost and the shipping charges for the automobile procured for Public Administration more than a year ago.

Present total of sums allocated for procurement of equipment, supplies and books is \$2,250,500, of which \$55,500 is for Public Administration and \$2,195,000 for the field of Agriculture, Engineering, and Medicine.

President Honors New Korean Faculty. President J. L. Morrill was host at a coffee hour in the Campus Club on Monday, October 6, 1958. Honored on this occasion were the twenty-two Korean faculty members who had arrived in early August to begin graduate study at the University of Minnesota. Also guests of President Morrill at this time were the members of the Korean Advisory Committee, together with a few other individuals having important responsibilities for the Korean undertaking.

Gifts. The following gifts, among others, have been made to Seoul National University, on behalf of the University of Minnesota, during the period covered by the present report:

The winter quarter, 1958 student nurses in the School of Nursing contributed 43 large cartons of used uniforms to the School of Nursing, Seoul National University. They were shipped on June 26, 1958 and, following their arrival in Korea were presented officially on August 1, 1958 by Miss Margery Low, adviser in nursing to Seoul National University.

Dr. Richard C. Lester, assistant professor of radiology, contributed 34 back issues of the Journal of the American Medical Association to the College of Medicine, Seoul National University. They were shipped on June 6, 1958 and reached their destination in late July.

The Mechanical Engineering Department, University of Minnesota, donated one stoker, one domestic oil burner, and one industrial oil burner to the College of Engineering, Seoul National University. These reached Korea and were acknowledged by Professor Clarence E. Lund on September 23, 1958.

Dean Harold Macy, Institute of Agriculture, donated to the College of Agriculture, Seoul National University, Volumes 10 and 20 of the Journal of Milk Technology and Volumes 10 and 11 of Food Technology.

II. OFFICE OF THE CHIEF ADVISER IN KOREA

General Comments. This report covers the last six months (April 19 - October 19, 1958) of a four-year span of operation in Korea (October 19, 1954 to October 19, 1958) under the ICA-University of Minnesota contract involving Seoul National University and the National Officials Training Institute of the Republic of Korea. During these four years substantial changes have occurred in areas coming within the scope of this technical assistance effort. Since faculty makes the institution, the greatest potential for progressive improvement in teaching, research, organization and administration has its source in the staff exchange segment of the undertaking. In this regard, though numbers alone are not the most significant statistic, they do provide a basis for picturing both the breadth and depth of what has occurred through efforts to assist Korean staff members to improve their teaching and research. Thus it is mentioned that there have been 157 Korean participants under the project to date (see accompanying table), 36 in Agriculture (including 6 in Veterinary Medicine), 55 in Engineering, 40 in Medicine, and 26 in Public Administration. Of those in Public Administration 19 are from Seoul National University and 7 from the National Officials Training Institute of the Republic of Korea Government's Office of General Affairs. Of this total number 109 have completed their graduate study and observation periods abroad and returned to Korea for work with their sponsoring agency. Of these returnees (70 per cent of all who have participated) 27 are in Agriculture (including 3 in Veterinary Medicine), 40 in Engineering, 33 in Medicine, and 9 in Public Administration. Of the latter, 7 returned for service at the new School of Public Administration at Seoul National University, and 2 for work at the National Officials Training Institute.

Regarding depth of study abroad, periods of stay have varied from six months or less for some deans and department heads (whose prime concern is to gain, through observation, inquiry and discussion, primarily, up to date information on curricula, teaching and research methods and techniques, organizational structure and administration, and the public service aspect of the broad activities engaged in by major United States institutions) to the four-year programs designed for a limited number of staff members requiring this deeper preparation for their intended work on returning to Korea. Intermediate are the 1-, 2-, and 3-year categories in which there have been 87, 34, and 8 participants, respectively. (For further detail regarding participants, including scholastic attainments, see the accompanying table and Part I of this report.)

DISTRIBUTION OF KOREAN PARTICIPANTS

Source of Participants	Total	Number of Participants			Distribution by Approximate Length of Stay					
		Began Fall 1958	Ret'd. to Korea	Studying in U. S.	6 mo.	1 yr.	2 yrs.	3 yrs.	4 yrs.	
<u>College of Seoul Natl. University</u>										
Agriculture	30	2	24	6	6 a	12	8	1	3	
Vet. Med.	6	2	3	3	1 b	4	1	-	-	
Engineering	55	1	40	15	10 c	24	13	5	3	
Medicine	40	4	33	7	3 d	25	8	2	2	
Law (Pub.Ad.)	19	8	7	12	-	15	4	-	-	
<u>Off. of Genl. Affairs ROK</u>										
NOTI	7	5	2	5	-	7	-	-	-	
<hr/>										
TOTALS	No.	157	22	109	48	20	87	34	8	8
	Percent	100	14	70	30	13	55	22	5	5

- a Includes dean, 3 department heads, and 2 other senior professors.
- b Former dean (present dean has been at Minnesota for 1 year).
- c Includes 6 department heads and 3 other senior professors.
- d Former dean and 2 department heads

The nature and extent of changes that are occurring in all contract areas as a result of opportunities provided Korean faculty members for study abroad, coupled with the efforts of Minnesota staff members who have participated and are participating in contract activities in Korea, lead to the conclusion that the basic objective - improvement of teaching and research - has without question been achieved to some degree in all areas and that additional substantial improvement changes are in prospect. Information in support of this conclusion has been presented in previous semi-annual reports; more is included later in this report.

It will be apparent that improvements in physical plant, coupled with the provision of a great deal of equipment for teaching and research, have contributed substantially to the effectuation of changes desired. The extent to which these operational facilities have been provided in support of the ICA/Minnesota contract is brought out in following sections of this report. Planning for further physical plant improvements continued during the past six months, and further work was done in all contract areas regarding the determination of additional equipment needs.

During this report period close and mutually beneficial cooperative relationships continued to be enjoyed with Seoul National University, the Republic of Korea Office of General Affairs, Republic of Korea Ministries concerned, OEC, and other agencies engaged in educational endeavors in Korea.

Participants selected during this 6-month period for study abroad were given great assistance by the OEC segment of the Foreign Language Institute of Korea in improving their understanding and use of spoken English.

The situation regarding OEC-supplied housing improved markedly during this report period. Contractor personnel benefit from this improvement to the same degree as OEC employees. As of October, 1958 there was a total of 29 persons, including 6 wives and 9 children, in Korea attached to the Minnesota staff.

During this report period Minnesota staff members were present in Korea and working with their Korean colleagues in the areas of agriculture, medicine, engineering and public administration. In addition to Chief Adviser Arthur E. Schneider and Administrative Secretary N. Gertrude Koll, during the past 6 months the Minnesota staff in Korea consisted of:

<u>Name</u>	<u>Assignment</u>	<u>Date of Arrival in Korea</u>	<u>Planned Total Period of Service in Korea</u>
Prof. Roy O. Bridgford	Overall adviser, College of Agriculture; specialized area, Agronomy	March '57	2½ years
Prof. C. E. Lund	Overall adviser, College of Engineering; specialized area, Mechanical Engineering	April '58	1½ years
Prof. C. E. Schwartz	Adviser in Chemical Engineering, College of Engineering	August '58	1 year
Dr. James H. Matthews	Overall adviser, College of Medicine; specialized area, Anesthesiology	May '57	1½ years
Prof. Margery S. Low	Adviser in Nursing, College of Medicine	March '57	1¾ years
Mr. Glenn R. Mitchell	Adviser in Hospital Administration, College of Medicine	May '57	1½ years
Dr. George Schimert	Adviser in Medicine; specialized area, Surgery; College of Medicine	July '58	1 year
Dr. E. B. Brown	Adviser in Physiology, College of Medicine	July '58	½ year
Dr. E. R. Draheim	Adviser in In-Service Training, National Officials Training Institute, Republic of Korea	January '58	1½ years
Dr. S. A. MacCorkle	Adviser in Public Administration, School of Public Administration, Seoul National University	March '58	1 year

<u>Name</u>	<u>Assignment</u>	<u>Date of Arrival in Korea</u>	<u>Planned Total Period of Service in Korea</u>
Dr. William O. Farber	Adviser in Research, School of Public Administration, Seoul National University	August '58	$\frac{1}{2}$ year
Prof. Leigh W. Hunt	Public Administration Asst. and Librarian, School of Public Administration, Seoul National University	August '58	1 year

The total number of Minnesota staff members who have served or are now serving in Korea under the project is 32, excluding 6 administrative personnel who have been here for inspection tours or in connection with the planning of new projects. Among the latter was Associate Dean Marion W. McCrea of Minnesota's School of Dentistry who, during the period May 5-26, 1958, made a study of Seoul National University's College of Dentistry and prepared recommendations for its further improvement regarding faculty, curricula and facilities.

Dr. Sherwood O. Berg, Professor and Head of Minnesota's Department of Agricultural Economics, spent two weeks in Korea - most of this time at Seoul National University's College of Agriculture - under the auspices of the Council on Economic and Social Affairs. Dr. Berg, with the full cooperation of Korean colleagues concerned, inquired in detail into the teaching and research programs in Agricultural Economics in Korea, with special reference to Seoul National University's College of Agriculture, and left for the consideration and guidance of those concerned specific suggestions for improvement and possible ways of accomplishing some of the changes agreed upon as desirable. At a later date and under the same auspices, Dr. S. A. Engene, Professor of Agricultural Economics at Minnesota, spent three days at the College of Agriculture as a partial basis for helping him to better understand the needs of

Korean faculty members who come to Minnesota for advanced work in this field and to encourage a greater amount of consultation on ways and means of investigating agricultural economics problems of joint interest and concern. Both of these visits were of great value to the contract undertaking in this field.

During this report period the general plan of action for University of Minnesota staff members serving on the cooperative project in Korea continued to be to learn the fundamentals of organization and administration of Seoul National University and/or the National Officials Training Institute, with particular reference to the component with which they are concerned and its relationship to the whole; to become personally acquainted with their Korean colleagues and leaders in the technical area or areas concerned; to establish appropriate liaison with technical societies or agencies in their fields; to avail themselves of every opportunity to gain first-hand knowledge of the country, its people and their aspirations, potentialities and limitations, and Korea's need in their areas of specialization; to familiarize themselves with the details of curricula, courses, teaching methods and procedures currently in effect and of major problems affecting teaching in their areas; to note and appraise differences in curricula, course content, and teaching methods and procedures in their fields at Seoul National University and the National Officials Training Institute as compared with those of Western institutions and agencies, to bring significant differences to the attention of their Korean colleagues, to make to the latter specific recommendations for change and, where there is a desire on the part of Korean colleagues to effect suggested changes, to render all possible assistance relative thereto; to become acquainted with the kind, amount and quality of research being undertaken, to learn of the major problems affecting research in their areas, to review research needs, programs and specific projects in their fields of

competence and to assist in every way possible to improve all aspects of endeavor in this vital area; to work with their Korean colleagues in determining sound needs for the physical things (buildings, facilities, equipment) needed in teaching and research and, when provided, to assist in all ways possible to place them in effective use; and, through all of the foregoing to carry out to the best of their ability the contract objective of assisting to improve teaching and research in the fields of their responsibility.

In addition, all of Minnesota's experience in organization, administration, teaching, research and service is available to Seoul National University's President and administration and to the National Officials Training Institute upon request. Minnesota, through both its staff in Korea and in the United States, stands ready at all times to be of service to its Korean colleagues concerning all of these matters.

Following are summaries of activities to date and future plans for each of the areas included in the ICA/Minnesota contract:

Agriculture (Professor Roy O. Bridgford, Adviser). Since the inception of this technical assistance program Minnesota has supplied eight advisers for work at the College of Agriculture in the specialized areas of Agricultural Chemistry, Agricultural Engineering, Soils, Physics, Forestry, Plant Pathology, Entomology, and Agronomy. In addition, Minnesota's Institute of Agriculture has also supplied an adviser for the College of Veterinary Medicine and a librarian who has served not only the College of Agriculture but each of the other Seoul National University colleges coming within the scope of the contract, as well as assisting Seoul National University's central library. Professor Bridgford, whose specialized area is Agronomy, serves the College of Agriculture as overall adviser.

During this report period Professor Bridgford has placed particular emphasis on assisting to improve teaching and research in Agronomy. A major aspect of this improvement is the introduction and development of more practical laboratory work and research, the latter at both student and staff levels. With the concurrence and support of the Dean and staff members concerned, action along this line, started during the 1957 field season, was continued and expanded during 1958.

During the 1958 field season this teaching and research activity primarily was concerned with ways and means of obtaining improved varieties of winter barley, wheat, corn, soybeans, and potatoes. Each aspect of this undertaking was tied in closely with the teaching program so as to offer students an opportunity to learn principles and procedures involved in plant breeding and crop improvement - two areas of vital importance to Korea.

Included in this teaching and research improvement program were: (1) Varietal testing and improvement of soybeans, with rod row yield trials and particular attention to the effect of date of planting; (2) Varietal improvement of winter barley through observation of the adaptability and performance of known strains from the United States, and the preliminary testing of 554 strains from the World Collection, these strains coming from 44 countries and 19 states of the United States; (3) Varietal improvement of winter wheat. In this sub-project seed from 33 countries of the World Collection was employed, and rod row yield trials of 15 strains from the University of Minnesota were made; (4) Corn improvement involving observation of the performance of 5 Minnesota hybrids and 1 open pollinated strain, the growing of the parental inbred strains of these hybrids for making single crosses for the continuation of the lines, and the growing of one strain of Minnesota #13 for inbreeding purposes and to note its performance under Korean conditions; (5) The varietal

improvement of potatoes, involving observation of the adaptation and performance of ten varieties recommended by and obtained from Minnesota; and (6) A College project involving the varietal testing of 88 strains of grapes, the scions for which were obtained from the University of California's College of Agriculture at Davis, California, through contract assistance.

As a part of the teaching aspect of the above projects, complete establishment reports were prepared for each. These are to be followed by progress reports as data are gathered and analyzed and conclusions reached.

In addition to the instructional value of these projects, practical results include learning that, from the initial 25 known strains of barley tested, 5 are worthy of continued testing, and that, from the World Collection, 235 lines of barley showed enough merit to warrant further consideration. Regarding wheats from the World Collection, only 35 showed sufficient resistance to stem rust to warrant consideration for further testing. However, 10 varieties of Minnesota winter wheat look very promising and will be tested further. In corn, suprisingly good yields were obtained from the 5 Minnesota hybrids. All corn was ripe and suitable for silage by August 15.

For both student and staff training and research purposes it is planned to build on the above results during the next field season, and plans to that effect are already in progress. In addition, tentatively planned are projects involving varietal tests of legumes and grasses; a limited trial of sweet corn; rod row tests of spring wheat and barley; fertilizer tests on grain and soybeans; lime demonstrations on soybeans, grain, grasses, and legumes; a trial of herbicides, with particular attention to crab grass control; and the importation of a limited number of apple scions for testing.

Another teaching and research undertaking of basic importance during this period was the collection, and sending to the University of Minnesota

for determination of physiologic forms, of a large number of samples of rust from wheat and barley, this information being essential in any program of grain improvement.

An additional research project of some potential was the collection, and sending to the University of Minnesota for analysis of food value, of a large number of samples of polished rice from the Suwon-Seoul area.

During this report period two additional College of Agriculture and two additional College of Veterinary Medicine staff members were sent to Minnesota under the Cooperative Project for graduate study and eight, all from the College of Agriculture, returned. Of the eight returnees, six earned Master's Degrees while at Minnesota. All have resumed their teaching and research at Seoul National University.

During the next 6-month period further attention will be given, with Korean colleagues, to curricula and course content; to the greater use and improvement of seminars for graduate students; to bring about closer working relationships between allied departments; to improve opportunities for the study and use of the English language; to physical plant completion and efficient use; and to the efficient use and care of classroom and laboratory equipment.

Engineering (Professor C. E. Lund, Adviser). Minnesota has thus far supplied nine advisers (one of whom, Professor C. E. Lund, is now in Korea for the second time) for work at Seoul National University's College of Engineering in the specialized areas of Architecture, Electrical Engineering, Mechanical Engineering, Mining Engineering, Textile Engineering, Civil Engineering, Naval Architecture, and Chemical Engineering. Three of the nine served as overall advisers, the position now filled by Professor Lund. The other two were Professors William R. Weems and William W. Staley.

During this 6-month period Professor Lund, with his Korean colleagues, has paid particular attention to the fullest possible use of personnel who have participated in the Cooperative Project and to the efficient utilization of the physical plant and the new classroom and laboratory equipment provided. Professor Lund, who also served under the Project in Korea in 1955, has an excellent basis for determining and evaluating changes that have occurred at the College of Engineering during the past three years. His views on these matters are as follows:

"Forty participants have completed their training in the States and have returned to assume their duties in the College. Such training has been reflected in the following improvements: (1) A complete and new curricula was put into effect in 1957 with emphasis on courses being coordinated within and between departments; (2) The number of courses required to be taken by students each semester has been reduced from 16 to 8, or by 50 per cent, which has resulted in a higher quality of instruction and training of students; (3) Greater discipline and the raising of course requirements have been effected through required regular attendance, outside work assignments, a larger number of quizzes in addition to the more rigid mid-semester and final examinations, and greater stress on reports; (4) The general atmosphere at the College has changed to a positive, well-organized and objective situation as compared to the opposite in 1955; (5) Faculty members appear to be more determined and confident in their academic work; (6) Laboratories are being given serious attention relative to planning and equipping, definite schedules of experiments have been initiated, and more rigid requirements on analyzing and preparation of reports have been placed in effect."

Fifteen College of Engineering staff members are now in the United States with 14 expected to received advanced degrees by September of 1959. One new participant in Chemical Engineering departed for the University of Minnesota in August of this year for a 1-year period of study, and during the summer and early fall three staff members (in Civil Engineering, Mining Engineering, and Naval Architecture) completed their studies abroad and returned to Korea and the College of Engineering.

Minnesota's most recent arrival for service at the College of Engineering is Dr. C. E. Schwartz, who arrived in Korea on August 11, 1958 to serve as

adviser to the Chemical Engineering Department. Dr. Schwartz is also acting as adviser to the Department of Chemistry, with additional assistance to the Department of Physics when necessary.

Dr. Schwartz's major task is the review of progress which has been made in the division of Unit Operations. A considerable amount of detailed design work is involved, including the selection of highly specialized equipment. Laboratory planning and equipment installation in other areas also require his special attention. As a demonstration teaching project, Dr. Schwartz is also lecturing one hour per week to approximately 40 senior and junior students on Special Topics in Chemical Engineering. Students are assigned outside work and required to submit reports for which they receive one credit per semester.

Relative to College of Engineering administration, Dean Hwang, Yung Mo completed a four year term of office on May 3, 1958 and was replaced on that date by Acting Dean Kim, Moon Sang. Accordingly, a new assistant Academic Dean and a new assistant Dean of Students as well as other new administrative personnel were appointed.

Major advisory activities at the College of Engineering during this report period included a great deal of work in determining laboratory equipment needs for Textile Engineering and the initiation of procurement. This will be a continuing project for some time to come, though substantial progress has been made in recent months. Much work of the same nature was done during this period with other departments.

Assistance was given, and continues to be given, regarding laboratory layouts. Existing plans are being reviewed for the purpose of planning the most efficient location and layout of laboratories yet to be allocated. In this regard very careful planning is evidenced in the laboratories recently established for Chemistry, Physics, and Civil Engineering.

During the next 6-month period it is planned to carry out detailed studies of curricula, schedules, and teaching loads; to study space needs and utilization in relation to student enrollment; to emphasize the need for installing and using in teaching and research at the earliest date possible classroom and laboratory equipment procured for the College; to continue and perhaps expand the demonstration teaching now being undertaken; to work further with the Dean and his staff regarding additional equipment needs and the completion of laboratories; and to study the present and potential utilization of engineering graduates.

Medicine (Dr. James H. Matthews, Adviser). At the conclusion of his 1½ years of service with the Seoul National University Cooperative Project as overall adviser in Medicine, Dr. Matthews summarizes past actions, current status and future plans as follows:

"Since inception Project activities in Medicine have been conducted in Minnesota and Korea on a person-to-person basis:

1. Through faculty exchange, aimed at transmission of the most applicable knowledge of education, science, and administration to the greatest possible number of Korean staff of all ranks and specialties by demonstrations, guidance, refreshment, reorientation, discussion, and teaching. (By April, 1958, 36 staff had gone to Minnesota and the balance had been contacted by 5 advisers in Korea.)
2. Through assistance in planning rehabilitation and by providing material and financing, aimed at restoration of destroyed, damaged, or deteriorating facilities to a status more compatible with the needs of a modern medical center for teaching, research, and health care. (\$683,500 had been allocated for this purpose by 1958.)
3. Through assistance in planning re-equipment and by provision of permanent and expendable equipment and supplies, aimed at restoration and advancement of the level of operations conducted in such a center devoted chiefly to undergraduate preparation of general practitioners and undifferentiated physicians and to graduate-postgraduate preparation of specialists and academicians. (\$520,000 allocated by 1958).
4. Through discussion, evaluation, reporting, and other means, aimed at assisting Seoul National University and others to appreciate and to benefit from the wealth of knowledge, ability, and ambition contained in the College of Medicine and available for use in Korea.

"While the size of the undertaking is measured to some extent by the statistics given, success is estimated best by the nature and extent of the changes accomplished, the new skills in teaching, research, and treatment introduced, and new opportunities made available through the Project. By April, 1958 the faculty, assisted by Minnesota advisers, had: given increased importance to the place of public health teaching in their objectives; submitted plans for re-organization to include in the College a graduate level school of public health and a collegiate level school of nursing; started preparation of faculty for the new nursing program; consolidated public health faculty preparations in the current Department of Preventive Medicine; exchanged the majority of the professorial faculty to and from Minnesota; reorganized practically every facet of the College and Hospital to strengthen administration and provide a stronger structure representing broadened objectives in other traditional areas; given greater freedom and flexibility to the Dean and Hospital Superintendent; elevated the importance and status of hospital administrative skills and nursing arts; increased the permanent faculty members representing new teaching disciplines; introduced new treatment methods and facilities; revised the medical and nursing curricula to show more laboratory and bedside exercises and less didactic activities; affiliated with other institutions to provide more specialized experience for nurse and medical students; introduced new teaching methods and facilities, including audio-visual techniques; restarted research activities in most departments; renovated the basic service facilities of the Hospital and school buildings or planned such measures; planned additional remodeling to add new service and treatment spaces in the Hospital; started construction of a new nurses' school building and planned a new nurses' dormitory; satisfied the basic equipment needs for undergraduate teaching and treatment activities; planned purchase of essential research equipment and

rehabilitation of research areas; centralized and restored essential library materials needed; and taken many administrative measures to integrate these steps and plan for the future years.

"During the April to October 1958 period, by continuing to utilize the methods listed earlier, the Project had assisted the faculty wholly or partially in the following activities and accomplishments:

1. The Department of Anatomy sent its two professors to study at Minnesota, rearranged its lecture schedule to accommodate their absence without undue difficulty, and utilized new audio-visual and equipment supplies to improve lecture and laboratory courses.
2. The Department of Physiology prepared for the arrival of Dr. Brown as their adviser in Physiology, oriented him to their activities and those in other basic science departments of this and other medical schools in Seoul, and assisted him in preparing equipment, lecture material, seminar material, and other facilities for future activities. They have already begun seminars on respiratory function, research projects in cardio-vascular and cardio-respiratory problems, and use of special equipment in teaching, research, and therapy.
3. The Department of Preventive Medicine sent one of its assistants to study at Minnesota (recently promoted him to instructor), and with the cooperation of the College and Hospital staffs, has begun to send the Junior Class in groups to the National Health Center for one week's observation of facilities and services offered there, and to send the Senior Class in groups on home visits to conduct health surveys with the faculty's supervision.
4. The Departments of Biochemistry, Pharmacology, Pathology, Surgery, Pediatrics, and Oto-Rhino-Laryngology have improved graduate, undergraduate, research and/or treatment activities through use of their staff recently returned from Minnesota.
5. The Department of Microbiology and other units located on the top floor of the basic science building have benefitted from completion of a water tank and the water pressure now available to power previously idle apparatus and service them. New equipment, chiefly glassware, has increase the laboratory offerings to students.
6. The Department of Surgery agreed to the extension of one of its staff studying Cardio-vascular surgery in Minnesota, prepared for the arrival of Dr. Schimert as their Adviser in Surgery, oriented him to their activities, initiated thoracic surgery seminars under his guidance, arranged for him to begin lectures to the Senior Class, and made possible a number of thoracic surgery demonstrations by him. They also assisted in the establishment of the Post-Anesthesia Recovery Room, the promotion to full time instructor of Dr. Rhee, Dong Shik, and the arrangements for demonstration lectures by Dr. Matthews to the Junior Class.

7. The Department of Medicine, with the cooperation of other Departments and advisory assistance, has followed the recent encephalitis epidemic closely, testing new concepts of treatment with the Anesthesiology section, outlined a research problem in encephalitis, and lately has submitted to the Eighth U. S. Army a protocol and request for a research grant to study encephalitis further.
8. The Departments of Medicine, Surgery, Pediatrics, and Physiology have cooperated to develop joint chest conferences, congenital heart disease conferences, to perform cardiac catheterization research and diagnostic studies, and to make more patients available for thoracic surgery demonstration operations.
9. The Departments of Internal Medicine, Surgery, Pediatrics, Radiology, Dematology, Obstetrics-Gynecology, Oto-Rhino-Laryngology, Ophthalmology, Clinical Pathology, Psychiatry, and the Hospital have benefitted particularly through the arrival of a large quantity of specialized apparatus useful for teaching, treatment, and research.
10. The Departments of Pathology and Surgery, respectively, received \$2,000 and \$3,000 research grants from the Daymon Runyon Fund for Cancer Research which will be aided in part by equipment provided for basic operations and in part by Project exchanged faculty.
11. The School of Nursing sent one of its instructors to Minnesota, and continued to plan implementation of the program calling for collegiate level teaching, a new school building, and a new dormitory. Miss Low assisted in these activities and in discussions of nursing service administration and patient care at the Hospital.
12. The Dean recommended to the University President that an "Administrative Committee" of Department Chairmen replace the executive Faculty Meetings; that the Table of Organization be reorganized to provide for new Departments of Clinical Pathology, Anesthesiology, and Physical Therapy, to abolish Physical Training from the curriculum, and to make Legal Medicine a subsection of Pathology, that petitions for a new school of laboratory technicians be reviewed and forwarded for legislative action; that a revised plan for residencies be adopted so that they conform more closely to the American Board and Graduate School requirements in specialties; that increased emphasis be placed upon securing final legislation creating the School of Public Health and Department of Nursing. In other actions, plans for a centralized photography laboratory and isotope laboratory were advanced; regulations on performance of teaching and treatment duties were strengthened; requests for assistance in establishing a home delivery system were submitted to outside authorities; three groups of senior and junior students accompanied faculty members to doctorless area clinics during the summer; a formal rotating internship program was started; College objectives were re-examined; needs for the next few years were predicted and long range plans started; a plan for contract extension was prepared, submitted and defended; equipment and rehabilitation programs for FY 1958 and 1959 were planned and finalized as much as possible.

13. The Hospital informally established the Central Supply Room, Post-Anesthesia Recovery Room, and set up an Admissions Office. Other management needs were analyzed, with considerable attention being given to the need and plans for a medical record room. Drafts of a law to place the financial system of the Hospital on a solvent basis were discussed in the Hospital, and with legal and financial advisers. Construction projects financed under previous periods were integrated with each other and a master plan for work contract supervision and integration was started.

"As for the current needs of the College, the faculty and advisers have jointly proposed in other documents that these are chiefly: additional time in study abroad to prepare certain junior faculty members who cannot be prepared here now because rehabilitation and re-equipment programs do not yet provide facilities adequate for these purposes, additional national budget to maintain a reasonable and normal level of operations, sources of research assistance, specialized equipment and building funds, finalization of current reorganization plans.

"The solutions proposed by the faculty and advisers are: a contract extension for at least another two years, added national budget and revision of national laws on financing hospitals, action upon re-organization plans submitted and being prepared for submission.

"During the next six months it is planned that current advisory activities should be continued (see introductory statement). Final reports from three long-term advisers and the results of the College's review of recommendations should be useful as guides to the detailed plans upon which the Project can give continuing assistance. Preparation for termination or extension of the contract will determine the character of additional work also."

Public Administration, Seoul National University (Dr. Stuart A. MacCorkle, Adviser). Under Amendment 10 of the ICA/Minnesota contract a new undertaking by Minnesota was to assist Seoul National University in the establishment of a School of Public Administration. Dr. Stuart A. MacCorkle, who heads

this advisory effort in Korea, has briefed action to date, the present situation, and plans for the continuing program as follows:

"1. Activity Prior to April, 1958:

- a. Prior to April, 1958 Professor George A. Warp of the University of Minnesota presented a plan for the development of the public administration program under the ICA/University of Minnesota Contract. The program was approved.
- b. In August of 1957 eleven Korean participants (professors and instructors) were sent to Minnesota for one year's graduate training in public administration.
- c. Minnesota began the process of selecting books and materials which were to form the core library in public administration at Seoul National University.
- d. On March 28, 1958 Dr. Stuart A. MacCorkle arrived in Korea to serve as Adviser in Public Administration at Seoul National University.

"2. Major Activities During Period:

- a. Arrival of staff: Dr. William O. Farber, Research, August 6, 1958; Mr. Leigh W. Hunt, Jr., Assistant and Librarian, August 8, 1958.
- b. The staff has made an effort to learn what Korean materials are available in public administration and to gain some understanding of the Korean governmental organization and its method of operations.
- c. A Steering Committee on public administration was established within the College of Law; eight participants and one alternate were selected for the 1958-59 Minnesota graduate training program; an orientation program in cooperation with the National Officials Training Institute participants was organized for the purpose of better preparing both groups for their year's study on the Minnesota campus.
- d. A statement regarding the graduate program in public administration at Seoul National University (following the outline of the Warp report) was prepared and submitted to Dean Shin of the College of Law for consideration by the Committee on Public Administration. This statement includes such topics as: (1) goals and program; (2) faculty; (3) admission requirement; (4) degree requirements; (5) internship; and (6) thesis.
- e. An observation and study tour for Dean Shin and Dr. MacCorkle to Manila, Saigon and Bangkok for the purpose of examining the program, organization, course offering, degree requirements, placement of graduates, library and other facilities at these institutes

of Public Administration was planned for the period September 12 to October 2, 1958, but due to unforeseen circumstances could not be accomplished within this report period.

- f. Research activities have been primarily concerned with two types of projects: (1) the supervision of thesis preparation by the nine University of Minnesota returnees (seven at Seoul National University and two at National Officials Training Institute); and (2) assisting them with the collection and organization of materials to be used in connection with the courses to be offered in the new School. The latter activity has involved consideration of the need to translate English materials into Korean. In addition, Professor In Hung Chung and Professor Tae Yun Han both of the College of Law have started research projects dealing with the topics 'Korean Administrative Organization' and 'Local Government in Korea' respectively.
- g. A survey of the various libraries at other universities in Seoul has been made for the purpose of becoming acquainted with their cataloging systems, particularly with their methods of handling Korean and other oriental materials.
- h. Throughout the period there has been much discussion of the physical needs of the College of Law and the School of Public Administration, such as classrooms, seminar and conference rooms, library, and equipment.
- i. Plans for renovating the library facilities at both the School of Public Administration and National Officials Training Institute have been reviewed and recommendations made.
- j. Plans for the remodeling of the building which will house the School of Public Administration have been completed.
- k. Much time throughout the period has been given to matters concerning the extension of the contract in public administration.

"3. Results of Item 2 Activity:

- a. At all times Dean Shin and his faculty have been enthusiastic and cooperative in their attitude and most desirous that the new School of Public Administration be organized and started properly. Likewise government officials have been both encouraging and helpful in the undertaking. The same is true of the Division of Public Administration of OEC.
- b. The graduate program probably will become firm during the next few months.
- c. The preparation of theses by August returnees has been slow, but thus far, satisfactory.
- d. Good progress is being made in the establishment of the Public Administration Library at Seoul National University. Approximately 1,440 volumes have been received to present.

- e. The remodeling of the building to house the School of Public Administration has made progress slowly.

"4. Current Needs and Recommendations:

- a. An American secretary is badly needed in the offices of the School of Public Administration. This position should be filled as soon as possible.
- b. Specialists in the fields of organization and management, finance, and personnel should be added to the present staff as soon after January 1959 as is possible.
- c. In equipment the most pressing requirement is a cataloging typewriter with appropriate characters and especially a card platen for the typing of catalog cards. There is also a need of an electric stylus for the marking of call numbers on books.
- d. There is every reason for rushing the remodeling of the building which will house the School of Public Administration.
- e. Until item d. is taken care of there will be need of adequate heat being provided in the present offices. Especially is this true in the library where dampness can lead to the rapid deterioration of books and magazines.

"5. Plans for the Next Six Months:

- a. All activities during the next six months will be directed towards the opening of the new School of Public Administration on April 1, 1959.
- b. Efforts will be made towards the completion of a substantial number of theses by the 1958 Minnesota returnees group.
- c. Course materials will be prepared including some translations for teaching purposes.
- d. Plans will be made for a publication series in public administration to be issued by the new School.
- e. Assistance will be given to the Korean Society of Public Administration in the preparation of a glossary of public administration terms.
- f. A temporary catalog will be established and the library arranged so as to facilitate study and research by students and faculty.
- g. With the receipt of Library of Congress catalog cards steps will be taken to classify and catalog our collection."

Public Administration, National Officials Training Institute (Dr. E. R. Draheim, Adviser). The second phase of activity in Public Administration undertaken by the University of Minnesota under Contract Amendment 10 was to assist the Republic of Korea, primarily through the National Officials Training Institute, to improve its in-service training programs. Dr. E. R. Draheim has headed this advisory work in Korea since January 3, 1958. His summary of activities and plans in this field is briefed as follows:

Recommendations made prior to April 1, 1958 for strengthening the In-Service Training Program in the Republic of Korea Government and status of action thereon to date:

To initiate this project the Adviser, on arrival, working with the Director, Office of General Affairs, and the Dean, National Officials Training Institute, contacted all 12 Ministers, Vice-Ministers, Directors of Staff Offices, other top Republic of Korea Government officials, several local University officials, the OEC Public Administration Division and others concerned with In-Service Training. This proved to be an excellent approach toward getting this project under way. These contacts also helped to establish the following jointly agreed upon recommendations for action:

1. National Officials Training Institute Report 1949-57. In initiating this project it seemed essential to develop a factual report that would detail the past activities carried out at the National Officials Training Institute. It appeared that such a report would be a valuable record to the Republic of Korea Government and also serve as a "guide line" against which we could measure progress under this contract.

Status of action taken: Such a report was completed for distribution March 15, 1958, and has been distributed widely within the Government.

2. Steps should be taken to develop an overall government-wide In-Service Training Policy. If properly developed and used this should form the foundation for a much more effective in-service training program. To be effective such policy must be written, adopted, accepted and used by Koreans.

Status of action taken: As of May 26, 1958 a Presidential Decree was drafted to establish such a policy. On September 15, 1958 copies of the Korean translation of U. S. Public Law - 85-507 "Government Employees

Training Act" were furnished to Director Shin, Office of General Affairs, and other top level Republic of Korea Government officials. Both documents are currently under discussion at the Vice-Minister level of the Republic of Korea Government.

3. Establish a 14 member government-wide training committee. It was recommended that Director Shin, Office of General Affairs, serve as Chairman with Dean Kim, National Officials Training Institute, as Secretary, and that each of the 12 Ministers of the Republic of Korea Government name a member to this committee, preferably from their bureau chiefs. The plan would be for this committee to give overall guidance and direction to general across-the-board in-service training. More important, such a group could do much toward developing better understanding of the need for In-Service training at the higher levels in government.

Status of action taken: Director Shin, Office of General Affairs, has concurred with this recommendation and has agreed to take necessary steps toward its adoption by scheduling the matter for consideration by the Vice Ministers. Following this, if approved, it will be placed on the agenda for consideration by the Republic of Korea Government State Council (Cabinet).

4. Steps should be taken to have each Minister of the Republic of Korea Government designate someone at a relatively high level now on the payroll in each Ministry as the Training Officer.

Status of action taken: This recommendation is currently under discussion at top government levels but is being delayed due to the 100 per cent increase in Government salaries scheduled to begin October 1, 1958. Accompanying this pay increase is a request for a general decrease in the number of government employees. It is still hoped to carry out this recommendation when the timing is right.

5. Establish new courses in management for top level government officials. This will meet the need for training top level government officials, essential to improving management in the government.

Status of action taken: On June 12, 1958 Director Shin, Office of General Affairs, made the decision to move forward immediately with this program. Course content has been determined and instructors have been selected. The establishment of this course was discussed at the weekly Vice-Ministers meeting on September 15 and again on September 22, 1958, at which time it was approved. It was next placed on the agenda for approval by the Republic of Korea Government State Council (Cabinet) at the meeting held on September 23, 1958, but was not reached for discussion. It will be rescheduled for consideration by the Cabinet in the near future.

6. Improve course content and method of instruction at the National Officials Training Institute for employees in Grades 3, 4 and 5. This should include evaluation and reorganization of course content, and the introduction and use of visual aids.

Status of action taken: The Dean and Adviser at the National Officials Training Institute have agreed on reorganization of course content for these courses. As of June 2, 1958 an official request was made for purchase under this contract, for the National Officials Training Institute, of visual aids equipment amounting to \$2,417.00.

7. Repair and improve the National Officials Training Institute Buildings. This is important in order to establish a more desirable environment for instruction. Under this plan one of the present classrooms will be fixed up as a library. This room will also be used for seminars and training sessions for top level government officials. During this period the Director, Dean and Adviser at the National Officials Training Institute worked with architects and engineers from the Office of General Affairs in developing details for this rehabilitation project to be submitted for action to proper authorities.

Status of action taken: The request for counterpart funds for this job has been approved and work is expected to begin soon.

Participants. The two National Officials Training Institute-connected participants who spent the 1957-58 school year at the University of Minnesota studying Public Administration returned to Korea in early August, 1958. As previously planned both men returned to their positions in the Office of General Affairs and were assigned responsibilities to help develop and draft specific recommendations for improving the Civil Service System of the Republic of Korea Government. Both are also taking positive steps toward completing their Master's Degree theses.

Five Republic of Korea Government participants were selected to go to the University of Minnesota in early August, 1958 for a year's study toward their Master's Degree in Public Administration. These men will be on leave from their government jobs during the year they are at the University of Minnesota. On their return to Korea they will be employed in the same, comparable, or better jobs in their Ministries. Thus these men will have the opportunity in their respective jobs in government to apply and practice the knowledges and skills in public administration gained in their respective fields of study while at the University of Minnesota. These men will also be reserve faculty members for the National Officials Training Institute, available to teach there on request of Director Shin, Office of General Affairs, and Dean Kim, National Officials Training Institute.

During the month of June these men, together with the participants from Seoul National University, attended a carefully planned Pre-Departure Orientation Seminar. This was exceptionally well received by the participants.

Minnesota Staff. The University of Minnesota is recruiting a staff member to fill the position of Assistant In-Service Training Officer to serve with Dr. Draheim at the National Officials Training Institute.

Additional Recommendations Developed and Initiated During this Period.

1. Steps were taken to help the National Officials Training Institute organize, establish, and make available for use library materials now here, plus other publications that have arrived or will be furnished under the Minnesota Contract. An American adviser under this contract trained in the field of library service is assisting both the National Officials Training Institute and the new School of Public Administration at Seoul National University in this field.
2. Organize follow-up training sessions for present government officials who have been in the United States for at least one year under the participant program. The Dean and Adviser at the National Officials Training Institute have developed course content and selected instructors for this course.
3. Reorganize course content for Pre-Service Training. This has been accomplished. New course content and improved methods of instruction will be reflected in this course now scheduled to begin in October, 1958.
4. Include basic training in Statistics in all courses given at the National Officials Training Institute. A request has been made by the Director, Office of General Affairs, to the Economic Coordinator asking that the OEC contractor in this specialized area train Koreans to handle this instruction at the National Officials Training Institute.
5. Include basic training in filing system and records management in all courses given at the National Officials Training Institute. Initial steps have been taken to carry out this recommendation.
6. Include some basic English conversation in all courses given at the National Officials Training Institute. It is planned that this will be handled by a staff member from the Foreign Language Institute with the assistance of the Dean, National Officials Training Institute.

Miscellaneous activities of adviser. The Adviser met several times with the officers and Board of Directors of the Korean Association for Public Administration to advise on content, format and classification of Public Administration

words and terms to be included in a glossary that Organization is planning to publish in both English and Korean. He also filled a number of speaking engagements on Public Administration topics. (Although not so planned or designed, it develops that these speaking engagements are helping to get top officials in government, industry, colleges, etc., to recognize the need for and the positive action necessary to improve In-Service Training.)

Special Problems in the Republic of Korea Government that need more adequate attention. A more adequate pay scale for government employees; the establishment of simple job standards for government employees; the development of a simple job classification plan for government employees; the initiation of a more systematic promotion plan for government employees based on training and ability to perform; and the provision of a more adequate retirement system. Director Shin of the Office of General Affairs has appointed a committee to develop proposals and recommendations for meeting the needs of all except the first of these proposals. (Government salaries were increased substantially on October 1, 1958).

Reception of program by Republic of Korea Government officials. Enthusiastic support is being received from Korean colleagues and there is keen interest among top Republic of Korea Government officials toward improving In-Service Training. Accomplishments to date on this project are in line with the goals and target dates established in early January, 1958. Overall objectives, recommendations for action, and target dates for accomplishment are being established on a mutually agreed upon basis within the existing cultural, economic, and social environment. With the continuation of this kind of support and progress, it is hoped to make a valuable contribution toward materially improving management at all levels in the Government of Korea.

Plans for the next six months include the carrying out of approved recommendations as commented upon above; emphasizing the organization, development,

and initiation of courses in leadership development for top level government employees; the observation of all courses given at the National Officials Training Institute, and the providing of assistance to all instructors in improving course content and methods of instruction; and the continuation of assistance to government officials and others who are coming to the National Officials Training Institute in increasing numbers for consultation and advice in the field of Public Administration.

Operational Facilities. In support of contract staff exchange activities the supplying of material things such as assistance in rehabilitating and improving the physical plant and in providing equipment, library materials, etc., for teaching and research has had an increasing effect on the ability of staff members to use to the advantage of all concerned their knowledge and skills in teaching and research. The extent of dollar-funded assistance to Seoul National University for these purposes is set forth in the following table:

SUMMARY OF ICA/MINNESOTA CONTRACT OPERATIONAL FACILITIES DOLLAR FUNDS ALLOCATED
FOR FYS 55, 56, 57 AND 58
FOR SEOUL NATIONAL UNIVERSITY REHABILITATION, IMPROVEMENT, EQUIPMENT AND SUPPLIES

	<u>FY 1955</u>	<u>FY 1956</u>	<u>FY 1957</u>	<u>FY 1958</u>	<u>TOTAL</u>
<u>Agriculture</u>					
Rehabilitation and Improvement	\$422,300	\$ 650,000	\$ 159,000	\$ 5,000	\$1,236,300
Equipment & Supplies	---	260,000	50,000	20,000	330,000
Sub-total	422,300	910,000	209,000	25,000	1,566,300
<u>Engineering</u>					
Rehabilitation and Improvement	65,200	100,000	676,000	---	841,200
Equipment & Supplies	---	730,000	500,000	134,000	1,364,000
Sub-total	65,200	830,000	1,176,000	134,000	2,205,200
<u>Medicine</u>					
Rehabilitation and Improvement	63,500	275,000	345,000	102,700	786,200
Equipment & Supplies	---	450,000	70,000	171,300	691,300
Sub-total	63,500	725,000	415,000	274,000	1,477,500
<hr/>					
L.A.&S. - Equipment		50,000		40,000	90,000
Vet. Medicine - Equipment		50,000		27,000	77,000
SNU General - Equipment		35,000		---	35,000
		135,000		67,000	202,000
<hr/>					
Total Rehabilitation	551,000	1,025,000	1,180,000	107,700	2,863,700
Total Equipment	---	1,575,000	620,000	392,300	2,587,300*
TOTAL	\$551,000	\$2,600,000	\$1,800,000	\$500,000	\$5,451,000

*Excludes \$52,000 provided in Contract Amendment 10 for Public Administration. Most of this will go to SNU, but some to the National Officials Training Institute.

In addition local currency in the amount of Hw 3,133,110,000 (equivalent to \$6,266,220 at the official conversion rate of 500:1) has been allocated for these purposes by the Combined Republic of Korea-U. S. Economic Board. Of this total amount Hw 1,325,110,000 (equivalent to \$2,650,220) has been released to date.

For rehabilitation and improvement work at the National Officials Training Institute a sum of Mw 16,607,850 (equivalent to \$33,216) has been allocated by the Combined Economic Board.

The status of physical plant projects undertaken to date with Cooperative Project support funds is as follows:

College of Agriculture. A new third story has been added to the present main building; an addition to the library has been built; five quonsets for the storage and protection of building materials and supplies were erected (later to be converted for shop, livestock, and recreation use); a complete water system has been installed; dormitories and a kitchen-dining hall building have been constructed; a livestock building, silo, two farm equipment storage shop structures, and the framing for two greenhouses, have been erected; and work has started on the construction of a new main classroom, laboratory, and staff office building, an auditorium, and a central heating plant.

College of Engineering. All repairable present buildings have been rehabilitated, including such items as repair of roofs; replacement of windows; replacement of floors; providing new doors; and overhaul and improvement of electrical, water and heating systems; a towing tank for Naval Architecture has been constructed; a start has been made on providing security facilities such as window bars and fences; and site preparation for the planned new dormitories and ancillary structures has been started.

College of Medicine. Rehabilitation improvement work completed or under way includes roof, window, floor, water system, heating system and electrical system repairs, some painting; construction of two water tanks; improvement of the sanitation system; and the construction of a new School of Nursing building which is about 70 per cent completed.

Additional repair and improvement work required at these colleges includes, for the College of Agriculture, completion of the new main building,

auditorium, central heating plant, and greenhouse structures; conversion of storage quonsets to other intended uses; rehabilitation and/or reconstruction of the Kwangyang Experimental Forest structures and facilities; installation of heating facilities in the old classroom-laboratory buildings; construction of a new chemistry laboratory building to replace one destroyed by fire; establishment of laundry facilities; construction and installation of additional classroom, laboratory, office and dormitory furnishings; erection of security fences; and provision of hard-surfaced roads and sidewalks for the campus area.

Uncompleted physical plant projects at the College of Engineering include additional work required to ready for student use laboratories for Mechanical Engineering (internal Combustion Engines), Naval Architecture and Aeronautical Engineering (Aeronautical Engines), Department of Metallurgy (Ore Dressing); to complete and improve for use other laboratories; to provide a machine shop for Mechanical Engineering; to rehabilitate one warehouse and construct another; to erect security fences; and to construct the new dormitories and ancillary facilities.

At the College of Medicine the major uncompleted projects are hospital and ancillary structures rehabilitation and improvement, completion of the new School of Nursing building, and construction of a new dormitory for the School of Nursing. Additional improvement work is still needed at the main Basic Science Building and for its ancillary structures. Hard-surfaced roads and sidewalks must be provided for the College of Medicine (including School of Nursing and Hospital) campus, and some security fences have still to be erected.

At the College of Law a project of immediate importance is the rehabilitation and improvement of the building intended for the new School of Public Administration.

At the National Officials Training Institute major rehabilitation and improvement work has been approved, financed, and will soon start.

Regarding classroom and laboratory equipment, supplies and library materials, as of September 30, 1958 the invoice value of such items purchased by Minnesota and received in Korea totalled \$1,106,994. This amount is made up of the following sub-totals:

Seoul National University

College of Agriculture	\$184,331
College of Engineering	\$539,642
College of Medicine	\$207,696
College of Veterinary Medicine	\$ 30,154
College of Liberal Arts and Sciences	\$ 37,967
School of Public Administration	\$ 6,969

National Officials Training Institute (P.A.) \$ 185

Much of this equipment is already in use. Some items must await provision of additional laboratory space and facilities prior to installation and use. All such needs are receiving attention.

Status Summary of Contract Operations. Minnesota advisers have left with Korean colleagues many recommendations for change during the past four years. Relative to these recommendations the following comments continue to be applicable and significant:

1. By and large suggestions for change as a basis for improving instruction and research in all areas are developed through close working relationships effected between Korean and American staff members concerned. Thus written reports, in most cases, simply make a matter of record conclusions and courses of action already subjects of much discussion and close agreement.
2. Seoul National University's President and Deans concerned indicate great interest in changes proposed and, in the main, have given the impression of accepting them as desirable guides for action in the fields concerned. The same is true of the Director, Republic of

Korea Office of General Affairs, and the Dean, National Officials Training Institute with respect to recommendations relating to in-service training.

3. Minnesota staff members respect the competence of their Korean colleagues. Both Korean and American staff members recognize that the advanced study programs of individuals now participating in the cooperative project will further advance the level of faculty competence in specific technical areas concerned.
4. The physical elements (structures, facilities, equipment) needed for carrying out certain recommendations are in the process of being supplied through the operational facilities portion of the Cooperative Project and in some areas are already exerting a beneficial effect on teaching and research.
5. The basic elements which make possible the effecting of instructional and research changes agreed upon as desirable are either present now in some degree or will be supplied, according to present plans.
6. Many of the changes desired by both Koreans and their American colleagues will come about only through the dedicated efforts of Korean officials and faculty members, and Republic of Korea Government officials, over a long period of time. Many recommendations have already been placed in effect; some may be carried out at an early date with staff and facilities now available; others will require more time.
7. At this stage of the Cooperative Project it appears that the improvement in depth objective of those formulating, funding and administering the undertaking is in the process of being achieved in the original contract fields of agriculture, engineering, and medicine, and that a substantial start in this direction has been made in the last-added contract area - public administration. It is becoming more and more evident that as a result of the Cooperative Project significant changes have occurred in the knowledge level, skills, outlook and attitude of staff members who have had study opportunities abroad under the program. Of corollary importance are considered to be the specialized area analyses, improvement recommendations, and other forms of assistance provided by Minnesota staff serving in Korea.

Changes Effected by Project. In evaluating the results of a technical assistance project of the nature here concerned the character, extent and importance of changes which have occurred in consequence of the program are factors upon which determinations must largely rest. In this regard we are concerned not only with the views of advisers but with the more intimate knowledge of individual Korean faculty members, department heads and deans.

To obtain the best possible appraisal of these factors the President of Seoul National University was again asked, as he has been prior to the preparation of preceding reports, for the University's views on this matter. It was requested that material be provided for each college concerned (except Law, since the new School of Public Administration to be organized there is just in the process of development) on the basis of the following outline:

1. The nature and extent (as specifically as possible) of additional changes in teaching, research, and administration that have come about wholly or partially as a result of the Cooperative Project.

NOTE: Regarding this and the following item please consider contributions to improvement which have been made by staff exchange, equipment and buildings.

2. The nature and extent of changes in teaching, research and administration which will be placed in effect during the next semester as a result of the Cooperative Project. Of particular interest regarding teaching will be added and improved laboratory offerings.
3. Physical improvements (building repair and improvement and new construction) which have been completed during this 6-month period. A brief description of each will suffice.
4. The nature of building repair and improvement, and new construction which will be continued or started during the next 6-month period, and the planned completion date for each project.
5. Major obstacles which prevent the introduction of desired changes in teaching and research. Please specify the changes concerned and why it has not been possible to make them.
6. Whether or not hwan financing is sufficient for
 - a. the effective utilization of staff members who have had advanced study opportunities abroad under the Project, and
 - b. for the full and efficient use and maintenance of equipment and facilities provided.

Where deficiencies exist, please comment upon them specifically.

7. The extent to which new library materials are in use.

Reports submitted by the Deans concerned in response to this request reflect support of the general conclusions set forth above, indicate further changes in instruction and research stemming from the graduate study

opportunities afforded staff members, provide considerable detail (beyond the summaries given above) concerning the status and future plans regarding physical plant rehabilitation and improvement, give more examples of how equipment and supplies provided under the project have contributed to teaching and research, and comment on some of the continuing problems which affect the obtaining of the fullest possible good from the training and facilities provided. Concerning the latter, the main problem continues to be financing.

Contract Extension. The present termination date of the ICA/Minnesota contract is September 28, 1959. Republic of Korea authorities concerned have indicated they would like to have this technical assistance project continued for an additional two years. During this 6-month period Minnesota staff members in Korea spent a great deal of time with Korean colleagues in developing a feasible 2-year continuation program for present contract areas aimed at fuller achievement of contract objectives. (See "Summary of Contract Extension Program Suggested", following, for information on the nature of further staff exchanges considered.) This program, later presented by the Ministry of Education to OEC as part of a broader Republic of Korea proposal, has been discussed by Korean authorities concerned with OEC and Minnesota's Chief Adviser in Korea, has been transmitted by the latter to the University of Minnesota for consideration and was transmitted via Airgram to ICA/Washington on October 11, 1958.

SUMMARY OF PROPOSED CONTRACT EXTENSION PROGRAM

College of Agriculture

Korean Staff to Minnesota

<u>Department</u>	<u>Field</u>	<u>No. of New Participants Proposed</u>	<u>No. of Man-Years Proposed</u>
Agriculture	Agronomy (Crop relation; forage crops)	1	2
Agricultural Chemistry	Food Technology (nutrition)	1	2
Biology	Plant Pathology	3	6*
Biology	Entomology	1	2**
Biology	Entomology	--	1 (Extension for FY 1959 participant)
Biology	Zoology	1	2
Sericulture	Protein Chemistry	1	2
Agricultural Economics	Prices; Farm records	1	2
Agricultural Economics		--	1 (Extension for FY 1959 participant)
Home Economics (Recently approved new department; specific fields yet to be selected)		<u>3</u>	<u>4</u>
Total		12	24

*6 future man-years would be required to complete Ph.D. programs

**2 future man-years would be required to complete Ph.D. programs

Minnesota Staff to Korea

Three man-years are proposed, with 1 man-year allocated to Agricultural Engineering, 1 to Plant Pathology, and 1 to Agricultural Economics (possibly 2 staff members for 6 months each).

College of Veterinary Medicine

Korean Staff to Minnesota

<u>Major Field</u>	<u>No. of New Participants Proposed</u>	<u>No. of Man-Years Proposed</u>
Three of the following:	3	6
Medicine (large animal medicine and hospital management)		
Pathology		
Pharmacology		
Biochemistry		
Veterinary Parasitology		
Veterinary Medicine (small animal medicine)		
Radiology		
Public Health		
(Extensions of time for present participants)		
For Ph.D. program	--	4
For M. S. program	--	<u>1</u>
Total	3	11

Minnesota Staff to Korea

Two man-years are proposed - each for a staff member of broad knowledge and experience in Veterinary Medicine who could provide overall technical and administrative advice to the Dean and give specific assistance toward the improvement of teaching and research in one of the areas of Internal Medicine, Surgery, or Pathology. Particular assistance is needed in the organization and conduct of laboratory offerings, and considerable actual demonstration teaching by American staff members would be desirable.

College of Engineering

Korean Staff for Study Abroad

<u>Major Field</u>	<u>No. of New Participants Proposed</u>	<u>No. of Man-Years Proposed</u>
Chemistry	1	2
Chemical Engineering	1	2
Chemical Engineering	--	1 (Extension for FY 59 participant)
Mathematics	1	2
Physics	1	2
Textile Engineering	1	2
Textile Engineering	--	1 (Extension for present partic.)
Mechanical Engineering	1	0.5
Nuclear Engineering	2	4
Dean	<u>1</u>	<u>0.5</u>
Total	9	17

Minnesota Staff to Korea

Two man-years are proposed for an overall adviser in Engineering, 1 for Nuclear Engineering, an additional $\frac{1}{2}$ man-year for Chemical Engineering (Unit Operations), and $\frac{1}{2}$ man-year for Aeronautical Engineering.

College of Medicine

Korean Staff to Minnesota

<u>Area</u>	<u>No. of New Participants Proposed</u>	<u>No. of Man-Years Proposed</u>
College of Medicine - Basic Science	7	14
College of Medicine - Clinic	8	14
School of Nursing	4	6
Hospital Nursing	4	4½
School of Public Health (If approved by National Assembly)	4	6
Hospital Administration	3	3½
Clinical Pathology	<u>2</u>	<u>4</u>
Total	32	52

Minnesota Staff to Korea

Ten additional man-years of American staff time are recommended under a 2-year extension. An overall adviser is desired for 2 man-years, 2 man-years are desired for medical specialists, and 2 man-years each are needed in the fields of Nursing, Public Health and Hospital Administration.

Public Administration

Korean Staff to Minnesota

<u>Area</u>	<u>No. of New Participants Proposed</u>	<u>No. of Man-Years Proposed</u>	<u>Remarks</u>
Seoul National University			
College of Law	2	1	For two observation tours of 6 months each
	--	4	To complete present graduate programs
	--	7	To complete new graduate programs
Total	2	12	
<hr/>			
National Officials Training Institute			
	4	4	
	--	2	1-year extension for each of 2 present participants
Total	4	6	
<hr/>			

Minnesota Staff to Korea

Seoul National University College of Law -- A total of 13 man-years: 2 years overall adviser; 2 years adviser in research; 1 year 9 months each for advisers in personnel administration, in financial administration, in organization and management; 1 year each for advisers in accounting, local government, and public relations and reporting; 3 months each for 3 special consultants.

National Officials Training Institute -- A total of 3 man-years; 2 years overall adviser; 1 year assistant to adviser.

Plans for the Next Six Months. The major plans for each contract area.

for the next six months have been set forth in preceding sections of this report. In addition,

1. Planning will continue looking toward bringing the project to an orderly and satisfactory conclusion by the present contract termination date pending definitive, reasonably early action to extend.
2. If the contract termination date is extended, staff exchanges for the lengthened period will be given appropriate further attention.
3. During this period Minnesota staff members will continue their education concerning Korea and the frame of reference pertaining to their areas of responsibility, will guide their activities as set forth under "Minnesota Staff in Korea", and will continue to strive to be of utmost assistance to Seoul National University and to the National Officials Training Institute of the Republic of Korea Office of General Affairs in helping to effect improvements in teaching, research, organization and administration.
4. Authorities concerned will continue to be assisted in working out plans and procedures concerning the receipt, installation and use of equipment procured for the project. Assistance will also continue to be given relative to determining additional well-justified needs for equipment and supplies.
5. Physical plant rehabilitation and improvement needs will continue to receive appropriate attention. Particular attention will be paid to the expeditious planned use of building materials and supplies received.
6. Close liaison will continue to be maintained with those who have participated in the cooperative project and returned to Korea. The objectives of this liaison will be:
 - a. To determine how the continuing program might be improved, and
 - b. To assist them in any way feasible, through appropriate channels, to carry out effectively their part of cooperative project objectives.
7. The bearing which assistance to Seoul National University in areas such as the teaching of English and basic sciences could have on better attaining the objectives of the ICA/Minnesota contract will continue to be explored with OEC and Embassy Education personnel.

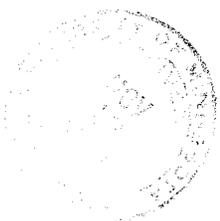
Seoul National University - General.

1. Dr. Paul Kichyun Ryu, Professor of Law, has been appointed Academic Dean.
2. Professor Kim Moon Sang has been appointed Acting Dean of the College of Engineering.

3. Dr. Rhee Young So has been appointed Dean of the College of Veterinary Medicine.
4. Approval has been received for the establishment of a Department of Home Economics at the College of Agriculture and a Department of Nuclear Engineering at the College of Engineering.
5. A new building for Veterinary Medicine has been constructed on the Seoul campus.
6. Dr. Kim Dong Ik has been reappointed for another two-year term as Superintendent of the University Hospital.
7. The Minnesota portion of the student-faculty exchange of art work between Seoul National University and the University of Minnesota arrived in Korea during this period, was very attractively displayed at Seoul National University, and is currently on exhibit in other parts of South Korea.

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Ninth Semi-Annual
PROGRESS REPORT
to
INTERNATIONAL COOPERATION ADMINISTRATION
SEOUL NATIONAL UNIVERSITY OF KOREA
and
OFFICE OF GENERAL AFFAIRS, REPUBLIC OF KOREA
in behalf of
REGENTS OF THE UNIVERSITY OF MINNESOTA
covering the period
October 19, 1958 - April 19, 1959



Minneapolis 14, Minnesota
April 19, 1959

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I. OFFICE OF THE CAMPUS COORDINATOR

Why This Report? The report which follows is the ninth in a series of semi-annual progress reports which provide valuable information and data relating to operations involving Seoul National University of Korea and the National Officials Training Institute of the Republic of Korea, and the University of Minnesota. This report, as did its predecessors, calls attention to significant developments, points out major problems which have arisen, with an indication of attempts at their solution, sets forth progress that has been made toward the objectives of the program, and outlines major plans being made for the future. These reports are required by the contract (Article II-B).

Technical Assistance, A Basic Element. One of the basic elements in United States foreign policy is the provision of technical assistance to underdeveloped nations. University contracts, designed to assist in strengthening educational institutions in these countries, constitute significant, long-range technical assistance efforts involving the most important resources any nation possesses-- its human resources. The University of Minnesota considers itself fortunate in being able, through its sister relationship with Seoul National University of Korea and the National Officials Training Institute, to assist in a small way in contributing to the development of the Republic of Korea.

Historical Background. United Nations officials, following the Korean war, were convinced that higher education in the Republic of Korea needed substantial assistance if it were to contribute significantly to the development of that war-ravaged country. There were a great many universities and colleges, both public and private, in Korea. Not all of them could be assisted directly by means of the limited U. N., U. S., and Korean funds available. However, it was believed that assistance to Seoul National University, the preeminent higher educational institution in Korea and also the largest, would be the most profitable investment. This institution would then be able to

supply more and better trained individuals. Those who in the future earned degrees in its Graduate School, particularly, would constitute an important resource from which other Korean institutions would be able to draw in the future to meet, at least in part, their faculty needs.

Upon the invitation of the U. S. Foreign Operations Administration (now the International Cooperation Administration) the University of Minnesota, in 1954, signed a contract designed to strengthen Seoul National University in its teaching, research, and public service activities in certain specified areas. Presently, not all of the twelve colleges of Seoul National University are being assisted. The original contract limited assistance to the broad fields of Agriculture, Engineering, and Medicine (including Nursing). This was later interpreted to involve Veterinary Medicine, a field closely associated with Agriculture. Still later, through a contract amendment, Public Administration was added, involving assistance in the establishment of a School of Public Administration in the College of Law and the provision of assistance to the National Officials Training Institute in the Office of General Affairs of the Republic of Korea Government.

Report Distribution. Because these detailed reports do provide both interesting and significant background, the University of Minnesota has discovered that they are of interest to a much larger audience than the International Cooperation Administration, the Office of the United Nations Economic Coordinator for Korea, Seoul National University, the Office of General Affairs of the Republic of Korea Government, administration and staff members of the University of Minnesota concerned with contract operations, and others immediately involved. As a consequence, it has been the policy to distribute copies to members of the Minnesota Congressional Delegation, to the American-Korean Foundation (both in the U. S. and Korea), to the Committee on

Institutional Projects Abroad of the American Council on Education, and to interested institutions and individuals requesting copies for study.

Korean Advisory Committee. A committee appointed by the President of the University of Minnesota advises him on policy matters relating to contract operations. Members also serve as a source of advice and counsel on an informal basis to the Campus Coordinator when perplexing operational problems arise from time to time.

The committee presently consists of Dr. Malcolm M. Willey, Vice President, Academic Administration, Chairman; Mr. William T. Middlebrook, Vice President Business Administration; Dr. Harold Macy, Dean, Institute of Agriculture; Dr. William T. S. Thorp, Dean, College of Veterinary Medicine; Dr. A. F. Spilhaus, Dean, Institute of Technology; Dr. Robert B. Howard, Dean, College of Medical Sciences; Mr. L. R. Lunden, Comptroller; Dr. Gaylord W. Anderson, Director, School of Public Health; Professor John C. Kidneigh, Director, School of Social Work; Dr. Lloyd M. Short, Chairman, Department of Political Science and Director, Public Administration Center; and Dr. Tracy F. Tyler, Professor of Education and Campus Coordinator, Secretary.

Three meetings of the committee were held during the period covered by the present report (November 17, 1958; January 7, 1959; and January 27, 1959).

The November 17, 1958 meeting was called so that committee members could discuss contract matters with Mr. William E. Warne, UNC Economic Coordinator for Korea and Mr. Edward E. Kunze, Director, Office of Contract Relations, ICA/Washington.

Mr. Warne was enthusiastic in his appraisal of the work that Minnesota had carried out under the contract. However, he insisted that the time had come for reappraisal and redirection. And he expressed the hope that the contract would be extended for two additional years and that Minnesota would

continue, thus capitalizing on the interest both institutions had developed in the project.

He referred frequently to the fact that the time had come to be concerned with effective utilization of the facilities which had been improved and amplified and the staff which had been upgraded under the contract. He also provided numerous illustrations of problems that needed to be solved now that the period of preparation was drawing to a close. He spoke, for example, of facilities unused because of limitations on enrollment; of the inability of Seoul National University to secure essential operation and maintenance funds from the National Assembly; of influences which might prevent well-trained younger staff members from rendering the effective service for which their preparation in the United States had fully qualified them.

Mr. Warne proposed that much more rapid progress would be insured during the proposed two-year extension, provided a competent adviser were secured to serve the President and the Academic Dean and if similar advisers were provided for the top-level administrators in each of the colleges being aided under the contract.

Here there was extended discussion with committee members of the "tour of duty," with stress by Mr. Warne on the two-year term, at least for the "generalists" in each contract area.

Mr. Warne concluded his remarks by stressing the hope that the relationship between Minnesota and Korea would continue indefinitely. He indicated that, in his judgment, there was no end in sight. Certainly, he insisted, the Minnesota-Korea contract relationship should continue as long as the U. S. operates a program in Korea. And, as time goes on, progress should be carefully assessed at two-year intervals to determine further needs, and the forms cooperation might take.

In the discussion which followed, Mr. Warne was asked whether staff required for the proposed two-year extension had to be supplied from Minnesota. Staff need not be exclusively from Minnesota, Mr. Warne assured the committee, but Minnesota staff, he felt, would profit from contract experience in Korea. Furthermore, it was his judgment that the needs of the sister school in Korea should be included in all of the University of Minnesota's future planning.

After further detailed discussion, the committee agreed that Mr. Lunden and the Coordinator should be prepared to negotiate the contract with ICA officials when all details, including budget, had been settled, and they were invited to do so by ICA/Washington.

The January 7, 1959 meeting was called primarily to plan for the impending visit of Dr. Yun, Il Sun, President, Seoul National University of Korea, and to decide what contract problems might profitably be discussed with him during his visit to the Twin Cities.

It was decided, in view of the proposed survey of Seoul National University, that President Yun should spend a substantial amount of time with central administration officers of the University of Minnesota so as to become more familiar with overall administration of an American university.

In a discussion of staffing plans, it was agreed that a two-year contract extension should be agreed to only if sufficient flexibility were secured with respect to staff periods of service. It was also agreed that, insofar as Agriculture, Engineering, and Medicine were concerned, the proposed two-year extension would be expected to complete the project.

During the balance of the meeting Dr. James H. Matthews, a staff member who had served in Korea and recently returned, provided the committee with significant background relating to operations in Korea. He also suggested corrective measures which might be taken to solve some of the problems referred to through proper safeguards in the extended contract.

The January 27, 1959 meeting was convened so that committee members would have the opportunity to discuss such contract problems as he wished with President Yun, Il Sun during his official visit to the University of Minnesota.

Dr. Yun indicated his pleasure at visiting the University of Minnesota. He stated that he was strongly in favor of contract extension. He was also, he said, appreciative of the assistance which Minnesota staff members had rendered to his institution and of the privilege so many Korean faculty members had of carrying on further study in the United States.

President Yun expressed the hope that, with the extended contract, OEC would provide additional funds for rehabilitation, new construction, and the procurement of additional laboratory equipment, books, periodicals, and supplies.

Seoul National University's President agreed with Minnesota representatives that two additional years would suffice for the original contract areas. More time, he felt sure, would be required in Public Administration and, subsequently, he hoped that other SNU colleges would receive similar assistance. He also noted the importance of extending the faculty exchange as soon as possible to such sciences as physics, chemistry, and biology because of their importance to pre-professional study.

President Yun's Visit. President Yun, Il Sun spent a period of some seven weeks in observations and consultations at the University of Minnesota and at institutions and establishments in other parts of the United States, in Hawaii, and in Japan during the period covered by the present report.

Dr. Yun left Seoul, Korea by plane on January 16, 1959 and reached Minneapolis in the early morning of January 17.

A full schedule was arranged for President Yun during the period he planned to spend on the University of Minnesota campus (January 17 to 29, 1959).

His schedule involved observation and consultation with administration and faculty in the University units involved in the contract. He discussed overall administrative procedures with representatives of the central administration. He was a guest at breakfasts, luncheons and dinners given by President J. L. Morrill, the two Vice Presidents, the Coordinator, the Director of the University Theatre, the staffs of the colleges involved in the project, the School of Social Work, and the School of Dentistry. He was honored at a luncheon in the Capitol given by Governor Orville L. Freeman. He was guest at a dinner at the Skylight Club in Minneapolis. He attended the Diehl Hall Dedication Dinner and a luncheon honoring medical symposium guests. He spent an entire day at the Mayo Clinic in Rochester in the company of Assistant Dean N. L. Gault of the College of Medical Sciences. He attended a weekly luncheon of the St. Paul Rotary Club as the guest of a Minnesota faculty member.

A special meeting of the Korean Advisory Committee was held while Dr. Yun was in Minneapolis so that there would be an opportunity to discuss with him various matters relating to the Korean Project. He also met press, radio and television representatives at two press conferences during his campus visit. These conferences resulted in stories and photographs in the press and appearances on television.

Prior to his departure, President Yun gave a tea in Coffman Union for his Korean and American friends. Guests were members of the Korean Advisory Committee, Minnesota staff who had served in Korea, advisers to Korean participants, Korean participants, other Koreans studying at Minnesota, and others of his friends.

Among other events which Dr. Yun was privileged to attend were the Mary Martin musical program, the Alexander Brailowsky concert, a program at Walker Art Center, and the Minnesota-Purdue basketball game. He was also entertained

on several occasions by members of the Korean contingent in the Twin Cities, and by others.

The day before President Yun's departure he was presented with an official citation from the Regents of the University of Minnesota by President J. L. Morrill. Photographs were taken of the ceremony for use in various publications.

Dr. Yun left Minneapolis on a five-week tour of other institutions on January 29, 1959 and reached Korea on March 7, 1959. He visited Purdue University, the University of Chicago, Northwestern University, the Argonne Laboratory, and the University of Michigan. From Ann Arbor he flew to Washington, D. C.

He spent a week in Washington, D. C. where, as a result of a schedule carefully planned by ICA, he was able to confer with ICA officials and to visit the National Institutes of Health, the Korean Embassy, Georgetown University, George Washington University, and American University. While there he was also a guest at luncheons and dinners given by ICA officials and others.

Following his departure from Washington, President Yun visited Princeton, Columbia, New York University, Yale, Harvard, MIT, Lowell Technological Institute, Oak Ridge, University of Tennessee, George Peabody College, Washington University, University of California, and University of Hawaii.

Dr. Yun's final stop was in Tokyo where he visited educational institutions for two days before his departure for Seoul.

College-Level Advisers. With the return from Korea on March 23, 1959 of Clarence E. Lund, professor of Mechanical Engineering, two college-level advisers are once again serving under the contract. Professor Lund serves the Institute of Technology and Dr. Clyde H. Bailey, Dean and Professor Emeritus, Institute of Agriculture, continues to serve the Institute of Agriculture and the College of Veterinary Medicine.

Dr. Gaylord W. Anderson, Mayo Professor of Public Health and Director of the School of Public Health, continues to provide advisory service in the medical fields at no cost to the contract.

Advisers in Agriculture. Roy O. Bridgford, associate professor emeritus of Agronomy, continues his service in Korea as overall adviser in Agriculture and, in addition, as special adviser in Agronomy. During the period covered by the present report, Professor Bridgford, with ICA approval, returned to the United States for project conferences at the University of Minnesota and to take annual leave for personal business, and to visit with relatives and friends. He left Korea on December 17, 1958 and returned to Korea on January 23, 1959.

It had been agreed to between ICA/W and the University of Minnesota that Professor Bridgford would continue his service in Korea for a full year following his return to Korea.

The visit of Professor Bridgford to the St. Paul Campus of the University of Minnesota did much to further local cooperation with the Korean project. During his visit he was able to confer with numerous members of the local staff who serve as advisors to members of the Seoul National University faculty engaged in study here. Also he completed arrangements for the despatch of horticulture planting materials to Suwon, where, it is hoped, they will be able to serve as parent materials in Korean plant breeding, or directly as seed for propagation.

No agreement has yet been reached between the University of Minnesota and Seoul National University with respect to the provision of a specialist in Animal Husbandry.

The Chief Adviser, a professional forester, continues his availability as a consultant in his specialty in addition to the multiplicity of duties

as "representative of the Contractor in Korea" and, as such, "responsible for the supervision of the performance of all duties undertaken" by the University of Minnesota and its staff serving in Korea.

Engineering Advisers. Professor Clarence E. Lund completed his service in Korea during the period covered by the present report. Professor Lund had hoped to continue his service through September 28, 1959. A serious illness which sent him to the hospital on December 5, 1958, led to his decision to bring his advisory activities in Korea to an end at an earlier date. Professor Lund left Korea on February 13, 1959 and reached Minneapolis on March 23, 1959 after visits to various countries enroute home.

Dr. Clarence E. Schwartz, associate professor of Chemical Engineering, University of Virginia, continues his service in Korea as adviser in Chemical Engineering which began on August 11, 1958. He expects to complete his one year of Korean service and, with his family, begin his return trip to the United States in August, 1959.

Medical Advisers. Two medical advisers were serving in Korea as this report was being written. They are Dr. George Schimert and Miss D. Joan Williams. Dr. James H. Matthews left Korea on November 7, 1958 after serving in Korea since May 6, 1957; Miss Margery S. Low left on December 30, 1958 after serving since March 19, 1957; Mr. Glenn Mitchell left on November 11, 1958 after serving since May 6, 1957; and Dr. Ernest B. Brown, Jr. left on January 24, 1959 after serving since July 28, 1958.

Dr. Matthews did an extremely effective job as chief medical adviser as well as technical adviser in the field of anesthesia during a service in Korea that covered a period of eighteen months. During this time, tremendous progress has been made in SNU's College of Medicine not only in physical rehabilitation but also in the College's organization. It would be difficult to say how much

of this had occurred during the six months presently being reported upon. The period does, however, constitute a definite landmark in the medical program as it brings to a close the first long-term assignment of a medical adviser.

Like Dr. Matthews, Mr. Mitchell has been extremely successful not only in his dealings with the College of Medicine but as an adviser to the University Hospital. Here again, it would be difficult to pinpoint how much of the progress had been made during the past six months. During the eighteen months of his service, however, striking progress has been made in hospital organization and management. Not only is there local tangible evidence of this but the recently expressed desire of Seoul National University to send its hospital administrator to this country for a period of observation, consultation and study and their request for assignment of a replacement for Mr. Mitchell all indicate the value that the Korean institution attached to Mr. Mitchell's services.

Miss Low served twenty-five and one-half months under the contract, twenty months of this time in Korea. It was the longest period of service so far of any individual in the medical field. It is clear from all reports, especially those of Dr. Matthews and Mr. Mitchell, that she was extremely successful in instilling new ideas into the School of Nursing, ideas which were greatly needed. Dr. Brown was the first staff member to serve in Korea in the basic science field. During his six months of service, he was able to render important assistance to Dr. Nam, Kee Yong with the program of instruction in Physiology and to help establish the research program on a more firm foundation. Dr. Brown did much to convince the College of Medicine of the value of a basic science adviser, a significant development in view of their earlier desire for assistance in the clinical fields only.

Dr. Schimert, who now serves as overall adviser in Medicine, in addition to specialist advising in Surgery, continues a service which began with his

arrival in Korea on July 9, 1958. He plans to complete his one-year service and leave with his family to return to the United States in July, 1959.

Miss D. Joan Williams, assistant professor of Nursing, reached Korea on December 17, 1958 and thus had time to become oriented to her new duties prior to the departure of Miss Low. Miss Williams has agreed to serve in Korea for a minimum period of one year.

The services rendered by the eight medical advisers who, thus far, have been sent to Korea, the feeling of need for assistance in other fields, and the recent authorization to re-establish a School of Public Health have resulted in demands for specific personnel for the future.

Dr. N. L. Gault, assistant dean of the College of Medical Sciences and a staff member in the Department of Internal Medicine, has agreed to begin a service of at least one year in Korea by September, 1959.

Unfilled so far are the requests for a cardiologist and a pediatrician for service during the present contract period, though negotiations are presently under way for the latter. Search is also underway for a replacement in Hospital Administration for Mr. Mitchell and there seems to be a reasonable prospect of filling the post if, as in Mr. Mitchell's case, the Korean authorities are willing to accept one of the younger men.

There is no immediate prospect of satisfying requests for staff in the field of Public Health. In each of the fields at Minnesota there is but one faculty member except in Biostatistics, Physiological Hygiene, and Public Health Nursing, none of which are fields appropriate to the needs of the proposed School at SNU. Staff members, if available, will need to be recruited from other sources. This may present difficulties since all schools of public health in the United States are presently seeking personnel and many have positions which have been vacant for more than a year because suitable personnel have been unavailable.

Public Administration Advisers. Dr. Stuart A. MacCorkle, Dr. Erwin R. Draheim, and Mr. Leigh W. Hunt, Jr., continued their service in Korea which began during previous report periods.

Mr. William B. Berg began a period of service of one year in Personnel Training on October 12, 1958. He and his family reached Korea on November 12, 1958. Mrs. Elsie G. Hagelee began work on the project as secretary to Dr. MacCorkle on February 6, 1959. She has agreed to serve in Korea for a period of two years.

Dr. William O. Farber ended on January 16, 1959 a period of service in Korea which began on July 31, 1958. He provided advice on the development of a research program at the School of Public Administration, Seoul National University, as well as participated in the in-service training program at the National Officials Training Institute.

Both Dr. MacCorkle and Dr. Farber visited the University of Minnesota during February. Dr. Farber reported to Dr. Short, Professor Warp, and the Coordinator on the tour of duty he had just completed in Korea. Dr. MacCorkle, similarly, discussed plans for the official opening and dedication of the new School of Public Administration on April 8, 1959 and other topics relevant to the contract. Returning to Korea, Dr. MacCorkle stopped off for observation and consultation on contract matters in Honolulu and Manila.

Agricultural Programs. Shortly before the beginning of the current period, (actually in August, 1958) two members of the SNU College of Agriculture faculty arrived on the St. Paul Campus. One of them is engaged in advanced studies in Entomology, the other in Agricultural Economics.

In addition, there were four other members of the same faculty who had arrived prior to 1958, and who continued their studies during the current period. One of them, Pyo, Hyun Koo completed the requirements for the Ph.D. degree,

with a major in Horticulture, and departed for Korea via California, Hawaii, and Japan in mid-January 1959. Two of them, who arrived in June, 1955, and September 1955 respectively, are majoring in agricultural physics and related fields of engineering, and are pursuing advanced courses in mathematics. The fourth individual, who also arrived in June, 1955, is pursuing advanced studies in Soils as a candidate for the doctorate.

It is fortunate that a select few of the members of the SNU College of Agriculture faculty have thus been privileged to engage in extensive graduate study, not only in regular courses, but also in research. Thereby they are being prepared to elevate instruction in SNU to a higher level, as is occurring in other leading universities. This, in turn, means that they become competent to train Korean students for effective service to their country. The experience they are gaining in research is not the least important in this connection, since they are becoming familiar with new techniques, and the application of modern equipment that should find important application in their country.

Veterinary Medical Programs. One member of the SNU College of Veterinary Medicine faculty who arrived in Minnesota in the fall of 1957 continued his advanced studies in veterinary microbiology during the current period. Two other members of the same faculty arrived in August 1958, and have been enrolled in classes concerned with microbiology and histology, respectively, during the current period. This makes a total of six members of that faculty who have been assigned to study at the University of Minnesota thus far.

Public Administration Programs. Special courses arranged for the public administration participants included the three quarters of the core seminar in Public Administration, the special project course for the spring quarter in which each participant prepares a course plan or other project under the direction of University of Minnesota professors, and special (no credit) English instruction.

American graduate students were designated as counterparts for each of the public administration participants. Wherever possible, students of similar interests and maturity were assigned. Both the American and Korean students appear to profit from this counterpart arrangement.

The Korean public administration participants took part in the activities of the University of Minnesota Chapter of the American Society for Public Administration. Mr. Lee, Hong Soo, a NOTI participant, is the Vice President of the Chapter. The meetings included addresses by Mr. P. A. Schillings, Director General of the International Institute of Administrative Sciences, and Professor Walter C. H. Laves, Chairman of the Political Science Department at Indiana University.

Between the fall and winter quarters, field trips were arranged to state and local government offices and business enterprises in the Twin Cities area. The 14 public administration participants who had just completed their first quarter's work took part in the field trips.

Between the winter and spring quarters, the participants attended a series of three seminar sessions on research techniques in public administration. The topics of "Orientation toward Research," "Interviewing," and "Survey Research" were considered. All of the 18 public administration participants took part in the sessions.

From April 1 to 5, the entire group of public administration participants attended the National Conference of the American Society for Public Administration at the Statler-Hilton Hotel in Washington, D. C. At least one of the participants attended each of the panels and clinics and prepared a written report. The reports, after editing, will be sent to Korea.

Public Administration Equipment. Procurement of equipment continues on a day-by-day basis. Requisitions are prepared under the direction of Miss

Myrtle J. Eklund and are then routed through the Coordinator's Office to the Purchasing Agent. During the period covered by the present report, books, periodicals, movies, film strips, a Vu Graph, and other equipment were selected and ordered for the special public administration libraries in the new School of Public Administration, SNU, and at the National Officials Training Institute.

Service in Korea. The previous report provided a tabulation of the staff members who had, by that time, served in Korea under the ICA contract. The accompanying table brings these data up to date. It reveals that 35 staff members have served in Korea. Their total service adds up to $389\frac{1}{2}$ man-months or $32\frac{11}{24}$ man-years. These 35 individuals represented 27 academic fields. Of this total, 2 individuals served 102 man-months or $8\frac{1}{2}$ man-years in project administration; 9 individuals served $64\frac{1}{2}$ man-months or $5\frac{3}{8}$ man-years in Agriculture; 9 individuals served 73 man-months or $6\frac{1}{12}$ man-years in Engineering; 8 individuals served $93\frac{1}{2}$ man-months or $7\frac{19}{24}$ man-years in Medicine; 1 individual served $3\frac{1}{2}$ man-months or $\frac{7}{24}$ man-years in Veterinary Medicine; and 6 individuals served 53 man-months or $4\frac{5}{12}$ man-years in Public Administration.

TOTAL SERVICE OF STAFF MEMBERS SENT TO KOREA
September 5, 1954 to April 19, 1959

Name	Date Service Began	Last Day Served	Man Months	Man Years	Prof. Field	Rank
<u>Project Administration</u>						
Arthur E. Schneider	9- 5-54		55½		Chief Adviser	Prof.
N. Gertrude Koll	5-31-55		46½		Secretarial	Adm. Secy.
TOTALS			102	8½		
<u>Agriculture</u>						
Clyde H. Bailey	9- 3-55	12-17-55	3½		Ag. Biochem.	Prof. & Dean Emer.
Philip W. Manson	9- 3-55	2- 2-56	5		Ag. Eng.	Prof.
Paul M. Burson	6- 1-56	12-14-56	6½		Soils	Prof.
Harald Ostvold	6- 1-56	9-18-56	3½		Library	Asst. Prof.
Andrew Hustrulid	8- 1-56	1- 5-57	5		Ag. Eng.	Prof.
Frank H. Kaufert	8-13-56	11-28-56	3½		Forestry	Prof. & Head
Roy O. Bridgford	2-25-57		26		Agronomy	Assoc. Prof.
Thomas H. King	3-29-57	9-13-57	5½		Pl. Path.	Prof.
Clarence E. Mickel	3-29-57	9-26-57	6		<u>Entomology</u>	Prof. & Head
TOTALS			64½	5¾	8 fields	
<u>Engineering</u>						
William R. Weems	2- 1-55	7-17-56	17½		Overall Eng.	Prof.
Carl Graffunder	9- 9-55	12-12-55	3		Architecture	Lecturer
Sidney C. Larson	9-16-55	12-19-55	3		El. Eng.	Assoc. Prof.
Clarence E. Lund	9-26-55	12-23-55	3		Mech. Eng.	Prof.
	4- 1-58	3-16-59	11½			
Chapin A. Harris	6- 4-56	9- 1-56	3		Text. Eng.	Prof.
William W. Staley	6-16-56	9-27-57	15½		Mining Eng.	Prof.
Paul Andersen	7-31-56	12-22-56	4½		Civil Eng.	Prof.
J. Harvey Evans	4- 1-57	7-12-57	3½		Naval Arch.	Prof.
Clarence Schwartz	8- 7-58		8½		<u>Chem. Eng.</u>	Assoc. Prof.
TOTALS			73	6½	8 fields	
<u>Medicine</u>						
William F. Maloney	3-24-56	7-11-56	3½		Int. Med.	Asst. Prof. & Asst. Dean
Margery S. Low	1- 1-57	2-10-59	25½		Nursing	Asst. Prof.
James H. Matthews	5- 2-57	12- 6-58	19		Anesthes.	Asst. Prof.
Glenn R. Mitchell	5- 2-57	12-10-58	19		Hosp. Adm.	Assr. Dir. Univ. Hosp.
Edmund B. Flink	8- 1-57	2-18-58	6½		Int. Med.	Prof.
George Schimert	7- 6-58		9½		Surgery	Asst. Prof.
E. B. Brown, Jr.	7-25-58	2-12-59	6½		Physiology	Prof.
D. Joan Williams	12-15-58		4		<u>Nursing</u>	Asst. Prof.
TOTALS			93½	7½	6 fields	
<u>Veterinary Medicine</u>						
Willard L. Boyd	9- 7-57	12-24-57	3½		Genl. Vet. Med.	Prof. & Dean Emer.
TOTAL			3½	7	1 field	
<u>Public Administration</u>						
E. R. Draheim	12-19-57		16		Pers. Trng.	Prof.
Stuart MacCorkle	3-16-58		13		Govt.	Prof.
Leigh W. Hunt, Jr.	7- 1-58		9½		Library	Asst. Prof.
William O. Farber	7-31-58	1-16-59	6		Res. in Govt.	Prof.
William B. Berg	10-12-58		6		Asst. Prs. Trng.	Asst. Prof.
Elsie G. Hagelee	2- 6-59		2½		<u>Secretarial</u>	Senior Secy.
TOTALS			53	5	4 fields	
GRAND TOTALS			389½	32½	27 fields	

Korean Faculty Participants. The accompanying table reveals that of the 48 Korean faculty members studying in the United States at the time of the previous report, 3 have completed their studies and returned to Korea. One of these was from Agriculture and 2 from Engineering. In addition, two new participants arrived. One, the President of Seoul National University, became a participant during the period covered by the present report and completed his observations and consultations at the University of Minnesota and in other parts of the United States and returned to Korea. This raises to four the number of departures during the period. The other, from Public Administration, began studies at the University of Minnesota. This raises to 159, the total number of participants since the program began. One hundred thirteen of these have returned to Korea and 46 are presently studying in the United States. Of these 46 Korean faculty members, 44 are studying at the University of Minnesota, one is studying at Lowell Technological Institute and the other at Massachusetts Institute of Technology. Both of the latter two are studying Textile Engineering, a discipline not offered at the University of Minnesota.

The 46 Korean faculty members presently studying in the United States are divided as follows: Agriculture 5; Veterinary Medicine 3; Engineering 13; Medicine 7; Public Administration 18. Of the Public Administration participants, 12 are from the College of Law, SNU, and 6 are from the National Officials Training Institute of the ROK Government.

SEMI-ANNUAL STATISTICAL DATA BY COLLEGES
FOR KOREAN PARTICIPANTS

	Total No. of Particip.					Still Participating					
	Arrivals	Ag.	Eng.	Med.	Pub.Ad.	Departures	Ag.	Eng.	Med.	Pub.Ad.	Total
1st Report	7	2	4	1	0	0	2	4	1	0	7
2nd Report	44	11	19	21	0	3	9	19	20	0	48
3rd Report	7	16	20	22	0	5	13	17	20	0	50
4th Report	44	25	46	31	0	26	16	31	21	0	68
5th Report	1	25	47	31	0	6	15	29	19	0	63
6th Report	32	32	54	36	13	36	19	17	10	13	59
7th Report	0	32	54	36	13	7	13	17	9	13	52
8th Report	22	36	55	40	26	26	9	15	7	17	48
9th Report	2	36	55	41	27	4	8	13	7	18	46
TOTALS	159	36	55	41	27	113	8	13	7	18	46

Man-Months and Man-Years of All Participants. A second table concerning Korean participants provides data on arrivals, departures, number of participants during each quarter, and cumulative man-months and man-years by calendar quarters beginning January 1, 1955 - the first quarter during which there were Korean faculty participants brought to the United States under the ICA contract. The last two columns show the cumulative man-months and man-years for each of the 17 quarters involved and enable the reader to estimate the magnitude of the educational program which has been provided for the Koreans. Specifically the tabulation reveals that a total of 203.4 man-years of observation, consultation, and graduate study had been provided under the ICA contract for the 159 Koreans who had been supported through March 31, 1959.

QUARTERLY MAN-MONTH AND MAN-YEAR
DATA FOR KOREAN PARTICIPANTS

	Arrivals	Departures	Participating	Cumulative Man Months	Man Years
1-1-55					
to	1	0	1	1	.1
3-31-55					
4-1-55	21	1	21	38½	3.5
6-30-55					
7-1-55	29	2	48	117	9.8
9-30-55					
10-1-55	3	3	48	260	21.7
12-31-55					
1-1-56	0	2	46	400½	33.4
3-31-56					
4-1-56	13	2	57	568½	47.4
6-30-56					
7-1-56	35	19	73	767	63.9
9-30-56					
10-1-56	0	6	67	970	80.8
12-31-56					
1-1-57	1	5	63	1,163½	97.0
3-31-57					
4-1-57	0	7	56	1,352	112.7
6-30-57					
7-1-57	32	28	60	1,509½	125.8
9-30-57					
10-1-57	0	4	56	1,686	140.5
12-31-57					
1-1-58	0	3	53	1,853½	154.5
3-31-58					
4-1-58	0	2	51	2,009½	167.5
6-30-58					
7-1-58	22	25	48	2,159	179.9
9-30-58					
10-1-58	1	2	47	2,299½	192.1
12-31-58					
1-1-59	1	2	46	2,440	203.4
3-31-59					

Data Concerning Returning Koreans. A third table shows the man-months and man-years for the 113 Korean participants who have completed their tours in the United States and returned to Korea. The table shows for each of the colleges and the ROK Government agency involved the number of individual participants, the man-months and the man-years. It will be seen from the table that the 133 Korean participants who have returned to their duties in Korea have been supported under the ICA contract for a total of 1,600 man-months or 133 1/3 man-years.

MAN-MONTHS AND MAN-YEARS
OF 113 RETURNED KOREANS

	Ag.	Vet.		Med.	Public Adm.		Total
		Med.	Eng.		Law	NOTI	
No. of Individuals	25	3	42	34	7	2	113
Man-Months	391	32	554½	521½	78½	22½	1,600
Man-Years	32½ ₁₂	2½ ₃	46½ ₂₄	43½ ₂₄	6½ ₂₄	1½ ₈	133½ ₃

Academic Achievement of the Koreans. The present report continues the tabulations for presenting academic achievements which were initiated with the sixth report. Members of the faculty and administration brought to the United States are again divided into groups: those who came only for observation and consultation; those who either audited all courses or registered for a program of less than 9 credits; and those who enrolled for a program and received marks in courses totalling 9 or more credits. No attempt was made to prepare a separate distribution for each of the SNU colleges involved since it appeared that such a distribution would serve no good purpose.

There has now been a total of 159 Koreans who have been supported under Minnesota's ICA program. They might be accounted for as follows:

President and Deans of Agriculture and Medicine who came only for observation and consultation		3
Participants who either audited all courses or registered for less than 9 credits		
Returned to Korea	41	
Still in U. S.	<u>1</u>	42
Participant who enrolled for no course work but earned a Doctor's degree solely through research at Pasteur Institute in Paris		1
Participants who registered for 9 or more credits		
Completed studies and returned to Korea	68	
Still studying in the U. S.	<u>45</u>	<u>113</u>
Total number of Koreans receiving contract support		159

The marks earned by the 113 members of the group who had registered for 9 or more credits were secured. This resulted in the accompanying tabulation.

MARKS EARNED BY 113 KOREAN FACULTY MEMBERS REGISTERED FOR 9 OR MORE CREDITS

Grade	All 113 Koreans	68 Koreans Completing Studies	45 Koreans Still Studying in U. S.	33 Koreans Who Earned Master's Degrees	3 Koreans Who Earned Doctor's Degrees
	No. of Qtr. Cr. Hrs.	No. of Qtr. Cr. Hrs.	No. of Qtr. Cr. Hrs.	No. of Qtr. Cr. Hrs.	No. of Qtr. Cr. Hrs.
A	1,694½	971½	723	1,018	159½
B	2,005¼	1,082¼	923	839½	77
S*	793½	626½	167	252	46
C	<u>619</u>	<u>330</u>	<u>289</u>	<u>238</u>	<u>15</u>
TOTAL OF ABOVE	5,112¼	3,010¼	2,102	2,347½	297½
Audit	1,538½	1,089	449½	492½	68
Fail	21½	9	12½	4½	0
Other (D, Incomplete, dropped, etc.)	<u>652</u>	<u>328½</u>	<u>323½</u>	<u>148</u>	<u>4</u>
SUB-TOTAL	2,212	1,426½	785½	645	72
GRAND TOTAL	7,324¼	4,436¾	2,887½	2,992½	369½
No. of individuals	113	68	45	33	3
No. of Quarters of individual registration	623	370	253	285½	38
Average No. of quarters per individual	5.51	5.44	5.62	8.65	12.67

*Used to denote grade of "B" or better.

The following significant conclusions may be drawn from the preceding table:

1. The average number of graduate credits earned per quarter:
 - a. All 113 Koreans 8.21
 - b. 68 Koreans completing studies 8.14
 - c. 45 Koreans still studying 8.31
 - d. 33 Koreans who earned Master's degrees 8.22
 - e. 3 Koreans who earned Ph.D. degrees 7.83

2. The average number of credits per quarter taken on an audit basis:
 - a. All 113 Koreans 2.47
 - b. 68 Koreans completing studies 2.94
 - c. 45 Koreans still studying 1.78
 - d. 33 Koreans who earned Master's degrees 1.73
 - e. 3 Koreans who earned Ph.D. degrees 1.79

3. The average number of credits per quarter resulting in failure:
 - a. All 113 Koreans 0.035
 - b. 68 Koreans completing studies 0.024
 - c. 45 Koreans still studying 0.049
 - d. 33 Koreans who earned Master's degrees 0.016
 - e. 3 Koreans who earned Ph.D. degrees 0.000

4. The average number of credits per quarter resulting in grades of D, Incomplete, dropped, etc.:
 - a. All 113 Koreans 1.047
 - b. 68 Koreans completing studies 0.888
 - c. 45 Koreans still studying 1.279
 - d. 33 Koreans who earned Master's degrees 0.518
 - e. 3 Koreans who earned Ph.D. degrees 0.105

A further table provides comparisons on a percentage basis between the four categories of grades acceptable for credit in the Graduate School.

GRADE DISTRIBUTION PERCENTAGES

Grade	All 113 Koreans	68 Koreans Completing Studies	45 Koreans Still Studying	33 Koreans Who Earned Master's Degrees	3 Koreans Who Earned Ph.D. Degrees
A	33.15	32.28	34.40	43.37	53.62
B	39.22	35.95	43.91	35.76	25.88
S	15.52	20.81	7.94	10.73	15.46
C	<u>12.11</u>	<u>10.96</u>	<u>13.75</u>	<u>10.14</u>	<u>5.04</u>
TOTALS	100.00	100.00	100.00	100.00	100.00

It is interesting to note that the percentages of "A" grades are similar to those found in the immediately preceding report. The highest percentage (53.62) was earned by those who earned Ph.D. degrees; the next highest (43.37) by those who earned Master's degrees; third (34.40) those still studying; and last (32.28) those who had completed their studies. The percentage of "A" grades for all Koreans who registered for 9 or more credits was 33.15.

The unusual achievement indicated by the preceding data cannot be stressed too often. Although all of our studies have revealed the high level of competence of the average Korean participant who has been privileged to study under the program, it still seems remarkable that, on the average, each has maintained such a high level of academic achievement in a new and unfamiliar environment and compelled, as he is, to receive instruction in a completely different language from that to which he has been accustomed.

Ph.D. Degrees Conferred. During the period covered by the present report, three Korean participants completed the requirements for the Ph.D. degree and the degrees were formally conferred. Special attention was called to the program and its significance at the December 1958 commencement exercises as the first two Ph.D. degrees were conferred. Following are the names, dates degrees were conferred, college, academic rank, and field of specialization for the three recipients:

<u>Name</u>	<u>Date Degree Awarded</u>	<u>College</u>	<u>Academic Rank</u>	<u>Field of Specialization</u>
CHOI, Jong Wan	12-58	Engineering	Teach. Asst.	Civil Engineering
LEE, Socker	12-58	Engineering	Teach. Asst.	Mechanical Engineering
PYO, Hyun Koo	3-59	Agriculture	Instructor	Horticulture

Master's Degrees Conferred. The accompanying table provides an alphabetical listing of the 33 Korean faculty members who have earned Master's degrees since contract operations began. Also indicated are the date of the award of each degree, the college, the academic rank, and the field of specialization.

The table reveals that Master's degrees have been received by Korean faculty members from 24 different departments. Distribution among the colleges and schools is as follows: Agriculture 16; Engineering 12; Medicine 4; Public Administration 1. The breakdown by ranks is as follows: Teaching Assistant 18; Instructor 5; Assistant Professor 4; Associate Professor 3; Lecturer 3.

To this list of 33 individuals should be added the name of Dr. Lee, Ki Young who, in January, 1956 received the degree, Doctorat de l'Universite de Paris and that of Dr. Kim, Chu Wan who, in September, 1957 passed his examination before the American Board in Diagnostic Roentgenology. This brings to 38 the number of advanced degrees earned by Korean faculty participants, counting certification by the American Board in Roentgenology as equivalent to a graduate degree.

THIRTY THREE KOREAN FACULTY MEMBERS EARNING MASTER'S DEGREES
December, 1955 through March, 1959

Name	Date Degree Awarded	College	Academic Rank	Field of Specialization
CHO, Chai Moo	6-57	Agriculture	Teach. Asst.	Soils
CHO, Kun Chan	6-57	Engineering	Lecturer	Electrical Engineering
CHOI, Jong Wan	3-57	Engineering	Teach. Asst.	Civil Engineering
CHUNG, Hoo Sup	12-57	Agriculture	Teach. Asst.	Plant Pathology
CHUNG, Myung Sik	3-59	Engineering	Teach. Asst.	Civil Engineering
HAHN, Mansop	7-57	Engineering	Teach. Asst.	Aeronautical Engineering
HAHN, Tae Hee	6-57	Engineering	Instructor	Chemical Engineering
IM, Hyong Bin	8-58	Agriculture	Instructor	Plant Pathology
KANG, Woong Ki	6-57	Engineering	Teach. Asst.	Chemical Engineering
KIM, In Kwon	12-56	Agriculture	Assoc. Prof.	Agronomy and Plant Genetics
LEE, Chul Choo	6-57	Agriculture	Teach. Asst.	Agricultural Engineering
LEE, Chung Han	6-57	Engineering	Asst. Prof.	Electrical Engineering
LEE, Ho Wang	12-57	Medicine	Teach. Asst.	Bacteriology
LEE, Socker	12-56	Engineering	Teach. Asst.	Mechanical Engineering
LEE, Su Rae	8-58	Agriculture	Teach. Asst.	Agricultural Biochemistry
LEE, Tai Hyun	6-56	Agriculture	Asst. Prof.	Horticulture
LEE, Yong Bin	12-55	Agriculture	Assoc. Prof.	Animal Husbandry
LIM, Jung Kyoo	3-58	Medicine	Teach. Asst.	Pharmacology
OH, Bong Kug	12-57	Agriculture	Teach. Asst.	Poultry Husbandry
PAIK, Woon Hah	8-56	Agriculture	Assoc. Prof.	Entomology
PARK, Hong Nai	12-58	Agriculture	Lecturer	Agricultural Economics
PARK, Sung Woo	12-58	Agriculture	Asst. Prof.	Agricultural Engineering
PARK, Won Hee	8-57	Engineering	Teach. Asst.	Chemical Engineering
PARK, Zin Hwan	7-57	Agriculture	Teach. Asst.	Agricultural Economics
RHEE, Sang Don	12-57	Medicine	Teach. Asst.	Physiology
RYU, Han Yeol	3-57	Agriculture	Teach. Asst.	Agricultural Engineering
SIM, Bo Sung	12-57	Medicine	Instructor	Surgery
SUH, Chai Chin	7-57	Engineering	Teach. Asst.	Mechanical Engineering
WIE, Sang Kyoo	6-58	Engineering	Lecturer	Aeronautical Engineering
WOO, Jae Lin	6-58	Engineering	Instructor	Textile Technology
YIM, Kyong Bin	8-58	Agriculture	Instructor	Forestry
YU, Hoon	3-59	Law	Teach. Asst.	Public Administration
YUK, Chong Yung	8-58	Agriculture	Asst. Prof.	Dairy Husbandry

Equipment Procurement. Slowly but surely, in spite of innumerable difficulties, books, periodicals, equipment, and supplies procured through funds provided by the U. S. International Cooperation Administration are reaching their final destination in the colleges of Agriculture, Engineering, Medicine (including Nursing), and Law in Seoul National University and in the National

Officials Training Institute in the Office of General Affairs of the Government of the Republic of Korea.

Actual expenditures through March 31, 1959 in all present contract areas totalled \$1,567,054.88. Outstanding obligations totalled \$417,019.87 for the same period. Of this obligated sum, \$123,597.72 constitutes moneys set aside but not yet spent to cover costs of transportation, packing, insurance, and charges for the forwarding agents. The balance, \$293,422.15, represents actual orders placed but not yet delivered. Thus books, periodicals, equipment, and supplies valued at \$1,860,477.03 (including transportation, export packing, insurance and charges of the forwarding agent in the case of books, periodicals, equipment, and supplies already in or enroute to Korea) had been ordered and were either on their way or actually had reached their destination in Korea.

Reports from the Chief Adviser in Korea indicated that the unofficial unadjusted invoice value of books, periodicals, equipment, and supplies received in Korea through March 31, 1959, totalled \$1,211,617.97. These totals, it must be kept in mind, do not include the cost of such items as export packing, transportation, insurance, the preparation of required documents, or other services provided by the forwarding agents. These additional items add an estimated 25 per cent to the actual costs of the books, periodicals, equipment, and supplies.

Present total of sums transmitted to the University of Minnesota for the procurement of books, periodicals, equipment (including one automobile for Public Administration), and supplies is \$2,642,800.00 of which \$55,500.00 is for Public Administration and the balance, \$2,587,300.00, for the other colleges involved in the project.

Contract Negotiations. For many months there have been discussions concerning a proposed two-year extension of the ICA-Minnesota contract. These discussions, of course, began in Korea and initially involved Seoul National University and Minnesota staff in Korea. Later, officials of the Republic of Korea Government were also included in the discussions.

These discussions led eventually to an airgram (TOICA A - 1148) sent to ICA/W by OEC on October 11, 1958. This document proposed a two-year extension of the contract and a project modification to include new objectives. It concluded with a recommendation that the contract be extended for two years, and set forth for the several colleges concerned the proposed man-years for Korean participants and Minnesota staff. The totals were 122 and 35 respectively. (For details consult 8th Report, pages 72-77.) It also included two new proposals: 1. The provision of a full-time adviser to the President of Seoul National University, and 2. The provision of a team of consultants to supervise and direct a survey of Seoul National University and assist with the development of a long-range plan.

Further discussions concerning the proposed contract extension took place at Minnesota on November 17, 1958 when Mr. William E. Warne, then UNC Economic Coordinator for Korea, and Mr. Edward E. Kunze, Director, Office of Contract Relations, ICA/W were in Minneapolis.

President J. L. Morrill, on January 9, 1959, addressed a letter to Mr. James H. Smith, Jr., then Director, International Cooperation Administration, indicating his belief that a two-year extension was needed and setting forth the conditions under which the University of Minnesota would agree to such an extension.

President Morrill had written also that the Coordinator and Comptroller would be willing to go to Washington to discuss the conditions for the proposed

contract extension at any mutually-satisfactory time at the invitation of ICA/W. Finally, at the invitation of ICA/W they, together with the Assistant Comptroller, spent April 15 and 16, 1959 in Washington negotiating with ICA staff concerning disputed issues involved in the proposed contract extension. These discussions proved fruitful to both parties.

Although no definitive contract had been signed as this is being written nor had any valid commitments been made by ICA/W or OEC, there is every expectation that agreement will be reached in the near future between the Republic of Korea Government, the International Cooperation Administration, and the University of Minnesota and that a contract for a two-year extension, agreeable to all parties, will be signed.

Education Division Head Visits Minnesota. Dr. Clarence Hendershot, Chief of the Education Division, OEC, who was enroute to Washington, D. C. for conferences with ICA officials, stopped in Minneapolis on January 17, 1959 to spend the day at the University of Minnesota. His flight from Seoul to Minneapolis was made in company with President Yun, Il Sun, who was beginning a seven-week tour of higher educational institutions in the United States.

Dr. Hendershot spent the morning discussing contract matters with the Coordinator. During luncheon at the Campus Club he met with Dr. Lloyd M. Short and Professor George A. Warp of the Program in Public Administration. With them at that time were Dr. and Mrs. John A. Dettmann of the Duluth Branch. Dr. Dettmann, it is expected, will go to Korea in June or July to serve at least one year under the contract in the field of Public Administration.

The Minnesota visit of Dr. Hendershot came at an unusually appropriate time in view of the discussions concerning contract extension which were then being carried on both in Korea and the United States.

Coordinator Entertains Koreans. The Coordinator and Mrs. Tyler gave a tea in their home on November 10, 1958 in honor of the 47 Korean participants studying at the University of Minnesota. Other invited guests in addition to the Koreans were President and Mrs. Morrill, Vice President and Mrs. Willey, Vice President and Mrs. Middlebrook, other members of the Korean Advisory Committee and their wives, and college-level advisers and their wives.

Koreans Celebrate Holiday. Koreans resident in the Twin Cities, including contract participants from Seoul National University, celebrated the "Bloodless Revolution" of March 1, 1919 by a reception and program in Coffman Memorial Union on March 1, 1959. Special guests were Minnesota faculty members concerned with the Korean project and their wives and other American friends of the Koreans. Sponsors were the Twin Cities Chapters of the Korean Association and the Korean Student Association. The Americans present considered it a real privilege to assist in celebrating this important anniversary with their Korean friends.

Asian Fair. Korean art objects and other items distinctly Korean, including antique bronzes, old Buddhas, modern brass, lacquer ware, Korean textbooks, native costumes, and fully-dressed dolls, were among the objects shown at an Asian Fair on April 12, 1959 from three until five, in St. Paul's St. Anthony Park branch library. Dr. Clyde H. Bailey, College-Level Adviser in Agriculture, sponsored the Korean portion of the exhibit and Mr. Cho, Chai Moo served as official representative of his country.

Other Asian nations represented at the exhibit, were China, the Philippines, Thailand, Japan, Pakistan, and India.

The Asian Fair constituted the St. Anthony Park community's colorful contribution to the St. Paul program marking the opening of National Library Week. The community, which includes the St. Paul Campus of the University

of Minnesota, is one of the most cosmopolitan of the entire Twin Cities area because of the large number of students from foreign lands who have come there to study agricultural subjects, including Veterinary Medicine.

Korean Editor Visits Minnesota. Mr. Hong, Chong-In, Chief Editor, Chosun Ilbo of Seoul, Korea visited briefly in the Twin Cities during a short tour of the U. S. following attendance at the World Press Congress held at the University of Missouri. His tour was sponsored by the Governmental Affairs Institute, Washington, D. C.

Mr. Hong spent March 9, 1959 on the Minneapolis Campus of the University of Minnesota. During the morning he observed the facilities and consulted with staff members of the School of Journalism. The Coordinator joined him, Dr. J. Edward Gerald, and other staff members at luncheon. The Korean Project, and other topics of mutual interest, were discussed with the Coordinator in the early afternoon.

Later in the afternoon he was a tea-time guest in the home of Mr. Carl Graffunder, Lecturer in Architecture, and Mrs. Graffunder. He was entertained at dinner by members of the Korean contingent.

Korean Service Stimulates Adoptions. Three Korean orphans have been adopted into the families of staff members who served in Korea under the Minnesota contract. Dr. and Mrs. Ernest B. Brown, Jr., while in Korea, adopted a girl, now 11 years old, through the Child Placement Bureau of the Ministry of Health and Social Affairs of the Republic of Korea Government. Dr. and Mrs. George Schimert who are presently in Korea under contract auspices adopted a 5-year-old boy recently through the same agency. Dr. and Mrs. Chapin A. Harris, Lowell Technological Institute, adopted a girl through the Holt Orphanage on March 17. Dr. Harris served in Korea under the Minnesota contract in 1956.

Gifts to Seoul National University. The following gifts, among others, have been made to Seoul National University, on behalf of the University of Minnesota, during the period covered by the present report:

Dr. Chapin A. Harris, Director of the Graduate School, Lowell Technological Institute, Lowell, Massachusetts, donated two pieces of textile machinery to the Department of Textile Engineering, Seoul National University. One was a 12 spindle Prince Smith Ring Spinning Frame and the other an 8-head French Finisher, Porcupine Frame.

Professor John D. Akerman donated a substantial number of publications in the aeronautical field to the Department of Naval Architecture and Aeronautical Engineering, Seoul National University. This donation came about largely as a result of his friendship for Mr. Wie, Sang Kyoo who is in his third year of graduate study at the University of Minnesota in the field of Aeronautical Engineering. This gift consisted of 27 volumes of NACA Annual Reports, 998 Technical Notes, 190 IAS Journals, 108 Aeronautical Engineering Reviews, 107 Royal Aeronautical Society Journals, 40 SAE Journals, 25 Aviation Weeks, 16 Aviation Ages, and 25 other professional books.

The Department of Entomology of the University of Minnesota donated a substantial number of professional journals to its sister department in Seoul National University.

The Burgess Publishing Company of Minneapolis, through its Field Auditor, Mr. Chuck Hutchinson, Jr., donated 90 new books valued at \$295.70 to Seoul National University as follows: 31 books for the College of Agriculture, 22 books for the College of Engineering, and 47 books for the College of Medicine.

Professor and Mrs. Winston A. Close donated the 1958 Architectural Catalog File, a classified, cross indexed collection of manufacturers catalogs, known as Sweets Catalogs and published by the S. W. Dodge Corporation of

New York, to the Department of Architecture, Seoul National University. Professor and Mrs. Close are both architects. He serves as Professor and University Advisory Architect. Mrs. Close heads the Minneapolis Architectural firm of Elizabeth and Winston Close.

Two residents in surgery at the University donated medical books through the University of Minnesota to the Medical Students' Library, Seoul National University. Dr. Raymond C. Doberneck provided 20 volumes and Dr. Richard DeWall, one volume. Negotiations leading to this donation were undertaken by Dr. Lee, Yung Kyoan.

Dr. T. K. Ree, Department of Chemistry, University of Utah, donated a collection of mineral specimens weighing approximately 200 pounds to the College of Engineering, Seoul National University.

The Department of Geography, University of Minnesota, contributed a number of maps to the sister department in the College of Liberal Arts and Science, SNU. The University of Minnesota provided the cost of transportation. Although the maps reached their destination on August 21, 1958, mention of their arrival had been overlooked in the previous report.

II. OFFICE OF THE CHIEF ADVISER IN KOREA

General Comments. This ninth semi-annual report, for the period October 19, 1958-April 19, 1959, is the next to last in the series under the present five-year ICA-University of Minnesota contract involving Seoul National University and the Republic of Korea's Office of General Affairs. The present contract terminates on September 28, 1959.

The past four and a half years have seen great changes at Seoul National University, many of which are attributable, at least in part, to the Cooperative Project. To the outsider the more obvious changes are those of a physical nature - improved buildings and ancillary facilities, better-equipped classrooms and laboratories. To those close to the institution it is apparent that changes of basic significance have occurred in the all-important areas of teaching and research and that more such changes are in prospect. This is of course the major measure of worthwhileness of an undertaking of this kind. Faculty development is the central objective of the Cooperative Project; the provision of an adequate physical plant, suitably equipped, supports this objective, aids in the efficient use of faculty, and makes possible in many areas markedly improved instruction and encouragement of research. Much support of this nature has been provided; more is planned.

Progress in In-Service Training at the National Officials Training Institute has also undergone marked changes since the inclusion of this area as a contract activity a little more than two years ago. In support of this educational activity improvement in the Institute's physical plant has been provided; some library materials and equipment needed in instruction have been received and are in use, and more are to be supplied.

Korean Participants. There have been 159 Korean participants under the Cooperative Project to date; 113 of this total number have returned to Korea

for work with their sponsoring agency. The following table provides detailed information on the areas from which participants have been drawn and their length of stay abroad:

DISTRIBUTION OF KOREAN PARTICIPANTS

Participants	Total	Number of Participants			Distribution by Approximate Length of Stay				
		Began Fall 1958 or later	Ret'd to Korea	Now Study- ing in U.S.	6 mo. or less	1 yr.	2 yrs.	3 yrs.	4 yrs.
<u>Office or College of SNU</u>									
President	1	1	1		1				
Agriculture	30	2	25	5	6 a	12	8	1	3
Vet. Med.	6	2	3	3	1 b	4	1	-	-
Engineering	55	1	42	13	10 c	24	13	5	3
Medicine	40	4	33	7	3 d	25	8	2	2
Law (P.A.)	19	8	7	12	-	15	4	-	-
<u>Off. of Genl. Affairs ROK</u>									
NOTI	8	6	2	6	-	8	-	-	-
TOTALS	No. 159	24	113	46	21	88	34	8	8
	Percent 100		71	29	13	55	22	5	5

- a Includes dean, 3 department heads, and 2 other senior professors.
- b Former dean (present dean has been at Minnesota for 1 year).
- c Includes 6 department heads and 3 other senior professors.
- d Former dean and 2 department heads.

Minnesota Staff to Korea. As of April, 1959 there was, in Korea, a total of 28 persons, including 5 wives and 12 children, attached to the Minnesota staff.

During this report period Minnesota staff members were present in Korea and working with their Korean colleagues in the areas of Agriculture, Medicine,

Engineering and Public Administration. In addition to Chief Adviser Arthur E. Schneider and Administrative Secretary N. Gertrude Koll, during the past 6 months the Minnesota staff in Korea consisted of:

Name	Assignment	Date of Arrival in Korea	Departure Date or Length of Korean Service*
Roy O. Bridgford	Overall adviser, Agric., specialized area, Agronomy	3-19-57	3 years
C. E. Lund	Overall adviser, Eng., specialized area, Mech. Eng.	4- 4-58	2-13-59
C. E. Schwartz	Adviser in Chem. Eng.	8-11-58	1 year
James H. Matthews	Overall adviser, Med., specialized area, Anesthesiology	5- 6-57	11- 7-58
Glenn R. Mitchell	Adviser in Hosp. Adm.	5- 6-57	11-11-58
Margery S. Low	Adviser in Nursing	3-19-57	12-30-58
George Schimert	Adviser in Medicine, specialized area, Surg.	7- 9-58	1 year
E. B. Brown, Jr.	Adviser in Physiology	7-28-58	1-14-59
E. R. Draheim	Adviser in In-Service Trng., NOTI	1- 3-58	2 years
S. A. MacCorkle	Adviser in P. A., SNU	3-28-58	2 years
W. O. Farber	Adviser in Res., SNU	8- 6-58	1-16-59
Leigh W. Hunt	P. A. Asst. & Lib., SNU	8- 8-58	1 year
William B. Berg	Asst. Adviser in In-Service Trng., NOTI	11-12-58	1 year
D. Joan Williams	Adviser in Nursing	12-17-58	1 year
Elsie Hagelee	Secretary, P.A., SNU	2- 9-59	2 years

*Service periods beyond September 28, 1959 are contingent upon contract extension.

The total number of Minnesota staff members who have served or are now serving in Korea under the project is 35, excluding 6 administrative personnel who have been here for inspection tours or in connection with the planning of new projects.

Plan of Action, Minnesota Staff in Korea. During this report period the general plan of action for University of Minnesota staff members serving on the Cooperative Project in Korea continued to be to learn the fundamentals of organization and administration of Seoul National University and/or the National Officials Training Institute, with particular reference to the component with which they are primarily concerned and its relationship to the whole; to become personally acquainted with their Korean colleagues and leaders in the technical area or areas concerned; to establish appropriate liaison with technical societies or agencies in their fields; to avail themselves of every opportunity to gain first-hand knowledge of the country, its people and their aspirations, potentialities and limitations, and Korea's need in their areas of specialization; to familiarize themselves with the detail of curricula, courses, teaching methods and procedures currently in effect and of major problems affecting teaching in their areas; to note and appraise differences in curricula, course content, and teaching methods and procedures in their fields at Seoul National University and the National Officials Training Institute as compared with those of comparable Western institutions and agencies, to bring significant differences to the attention of their Korean colleagues, to make to the latter specific recommendations for change and, where there is a desire on the part of Korean colleagues to effect suggested changes, to render all possible assistance relative thereto; to become acquainted with the kind, amount and quality of research being undertaken, to learn of the major problems affecting research in their areas, to review research needs, programs and specific

projects in their fields of competence and to assist in every way possible to improve all aspects of endeavor in this vital area; to work with their Korean colleagues in determining sound needs for the physical elements (buildings, facilities, equipment) needed in teaching and research and, when provided, to assist in all ways possible to place them in effective use; and, through all of the foregoing, to carry out to the best of their ability the contract objective of assisting to improve teaching, research, and other University activities in the fields of their responsibility.

In addition, available to Seoul National University's President and administration and to the National Officials Training Institute, is all of Minnesota's experience in organization, administration, teaching, research and service through both its staff in Korea and in the United States.

It will be apparent that Minnesota staff members coming to Korea at this stage of the Cooperative Project find their indoctrination period in most of the areas above commented upon greatly shortened by the written records and recommendations of those who preceded them and by cordial working relationships long established. Also, with the return to Korea of a great number of personnel from their periods of graduate study abroad, and with the accomplishment of many physical plant improvements and the initial stages of re-equipping classrooms and laboratories, it has become possible to begin to build soundly on the foundations painstakingly laid during the early years of the ICA/Minnesota contract. The future will see further substantial change in the direction of contract objectives as more participants return to their teaching and research duties and as additional facilities in support of these activities become available. Limiting factors will be the success which Seoul National University and the National Officials Training Institute have in retaining and further developing high quality faculties, and the adequacy of funding of these institutions.

Summaries and Future Plans. Following are summaries of activities to date and future plans for each of the areas:

Agriculture. (Professor Roy O. Bridgford, Adviser). Thus far under the Cooperative Project Minnesota's Institute of Agriculture has supplied ten advisers for service in Korea, one each in the fields of Agricultural Chemistry, Agricultural Engineering, Soils, Physics, Forestry, Plant Pathology, Entomology, Library Science, Veterinary Medicine, and Agronomy. Professor Bridgford, whose specialized area is Agronomy, serves the College of Agriculture as overall adviser.

Each of these advisers has proceeded as set forth under the "Plan of Action" as briefed above. It will be evident that recommendations of advisers necessarily involve all aspects of assisting to improve teaching, research and allied functions - staff training, physical plant improvement, equipment, and to some extent organization, administration and financing.

The Agricultural portion of the eighth semi-annual report stated that during that 6-month period particular emphasis had been placed upon assisting to improve teaching and research in Agronomy through the introduction and development of more practical laboratory work and research, described the specific nature of projects undertaken, and mentioned plans for further work of a similar nature.

During the past six months planned student and staff training in data analysis was accomplished and, with Korean colleagues, plans worked out for student-staff teaching and research projects for the coming field season. The portion of these projects requiring fall plantings were completed during that season. During the winter months action was taken to obtain for spring plantings the other seed and stock required. A part of this was accomplished during Professor Bridgford's period of TDY at Minnesota during last December and early January.

Review and analysis with Korean colleagues of the place which projects of this nature should have in teaching and research at the College indicates enthusiastic acceptance. On this basis further development has been planned. The specific projects to be undertaken by students and staff this field season have been selected in part on the basis of data analyses completed during this 6-month period. These analyses indicated that from the initial 25 known strains of winter barley tested 5 are worthy of continued testing with 2 being outstanding, and that from the World Collection, 235 lines of barley showed enough merit to warrant further consideration. Of the wheats from the World Collection, only 35 showed sufficient resistance to stem rust to warrant consideration for continued testing. Ten varieties of the Minnesota winter wheat showed much promise both as to yield and rust resistance. They will be tested further. In corn, exceptionally good yields were obtained from the 5 Minnesota hybrids with all lines mature and suitable for silage by August 15. Success was also attained in single crossing, with enough seed secured to continue the double crosses in 1959.

Four late maturing varieties of soybeans showed enough potential value to warrant further consideration and testing in 1959. Results this season also indicated that better yields and quality were secured from American varieties of beans by planting late in June.

In addition to a continuation of past projects as indicated, arrangements have been made to obtain for testing through this teaching-research approach certain additional seed stocks of corn, soybeans, potatoes, grasses and legumes as well as a quantity of apple scions from desirable Minnesota varieties. Again, students will be taught the practical aspects of laying out field blocks, replications, and planting, and will themselves assist with planning, prepare the land and do the planting, periodically take data on agronomic characteristics,

harvest the crops, analyze data and draw conclusions, and prepare project reports.

During this period considerable time was spent with both Korean and American colleagues on evaluating progress to date at the College and in further planning the form and content of the proposed 2-year contract extension as it involves Agriculture and in determining how best these plans might be carried out.

A continuing problem given much attention during this period regarding all departments of the College was laboratory and classroom equipment - that on hand and its appropriate care and efficient use, as well as unsatisfied needs.

With a number of student-use structures (dormitories and cafeteria) now completed, it has become apparent that appropriate maintenance and care have become problems of some magnitude. Regarding these matters suggestions have been given to the Dean, who is cognizant of these problems and has taken steps that will aid in their solution. More must be done along this line, however, and further assistance will be given toward that end.

During this period one College of Agriculture staff member, Dr. Pyo, Hyun Koo, completed his Ph.D. program in Horticulture at Minnesota and returned to Korea. Dr. Pyo's completion of his graduate program and return to the College strengthens appreciably the Department of Agriculture. In addition to his teaching responsibilities, Dr. Pyo is continuing the vegetable improvement research he started at Minnesota.

During the next 6-month period the teaching-research projects above described will be continued as indicated and ways and means of further extending this plan to other departments explored; ways and means of extending the use of and improving graduate seminars will be given further attention; periodic meetings of the Dean and Department Heads to discuss overall College problems

and plans will be attended and appropriate assistance given; closer cooperation between departments, especially those in closely related areas, will be given further encouragement; appropriate use and care of buildings and equipment will receive additional attention; continued assistance will be given staff members regarding the preparation of scientific papers in English; and help as required will be given in the selection and processing for departure of participants from the College under the proposed 2-year extension, if effected.

Engineering. (Professor C. E. Lund, Adviser to February 13, 1959). Nine advisers have been supplied by Minnesota for Cooperative Project service at the College of Engineering. Through these advisers specialized area attention has been given to Architecture, Electrical Engineering, Mechanical Engineering, Mining Engineering, Textile Engineering, Civil Engineering, Naval Architecture, and Chemical Engineering. Dr. C. E. Schwartz is currently at the College of Engineering serving as adviser in the latter area.

During this 6-month period the overall adviser's major effort was directed toward determining and taking action to satisfy major continuing needs for classroom and laboratory equipment, and much progress was made in this direction. Major effort was also made through the Dean to complete and equip laboratories still in need of these actions. In this regard, in addition to the reasonably adequate laboratories previously reported upon for Chemistry, Physics and Civil Engineering, those for Mechanical Engineering (Materials and Stress Analysis, Power Plant, Physical Testing, and Air Conditioning and Refrigeration) and the testing portion of the laboratories for Textile Engineering are practically completed. Also, the general machine and woodworking shops have been relocated and equipped.

The completion of laboratories for other departments must await further space rehabilitation and improvement and receipt and/or procurement of

additional equipment. A principal effort in this regard during the past six months has been the specification and initiation of procurement of suitable equipment, the design of building facilities, and the design of utility piping for the Unit Operations Laboratory of Chemical Engineering by Professor Schwartz.

Regarding Unit Operations, a detailed check of the design of all major pieces of equipment has been made and vendors' drawings of equipment reviewed for approval or revision. In the case of heat exchange equipment, as well as for absorption equipment, entirely new specifications were drawn up. Also, particular attention was given to floor specifications for the Unit Operations Laboratory and detailed plans prepared for the improvement work required. Special attention was given requirements for the installation of the steam generator and related facilities.

Utility piping and wiring, and equipment location, drawings were also given attention during this period and are now about 50 per cent completed.

Dr. Schwartz, as a matter of demonstration teaching, handled a course in "Applied Mathematics in Chemical Engineering" during the September-March semester. Among his observations of this group were that home assignments and calculational work require more emphasis at the College and that class attendance needs more rigid enforcement.

Further attention was given by the overall adviser and Dean during this period to the selection of participants for the proposed 2-year extension of the contract.

During this period two of the College of Engineering's younger staff members returned from their graduate studies at Minnesota where they earned Ph.D. degrees - Dr. Lee, Socker, in Mechanical Engineering and Dr. Choi, Jong Wan in Civil Engineering. They are expected to greatly strengthen the College's staff in these areas.

During the next six months effort will continue to assist the College to complete and carry out plans for the establishment of unfinished laboratories and to equip same; to carry out the participant portion of contract extension plans proposed; to continue efforts looking toward the more efficient use of staff, space and equipment; to appraise needs of the embryo Department of Nuclear Engineering and to make them known for assistance action; to encourage the further carrying out of recommended changes in curricula and courses; and to give further attention to the status of faculty research and its limiting factors. In Chemical Engineering, specifically, Dr. Schwartz will pay particular attention to the completion of unfinished laboratory improvement plans and specifications, to the erection of equipment and related facilities, to the present and potential utilization of chemical engineers in Korea, and to the curriculum. Time permitting, a Laboratory Instructor's Manual for Unit Operations will be prepared, and recommendations will be made regarding the construction of small demonstration type equipment for use in conjunction with classroom lectures, for the construction of some items of Unit Operations equipment which can be fabricated locally, and for the design of a Unit Process Laboratory.

Medicine. (Dr. George Schimert, Adviser). Minnesota has supplied eight advisers for the medical field under the contract to date. Specialized areas represented include Internal Medicine, Anesthesiology, Nursing, Hospital Administration, Physiology and Surgery.

Dr. Schimert views with some optimism changes which have occurred in medical teaching, research and administration as a result of the Cooperative Project, though he cautions that the development of staff is a long-term proposition and that the full result of present efforts in this regard will be felt in terms of decades rather than during any period as short as the

current contract, its final evaluation being left to the judgment of another generation.

Among the changes which encourage modest optimism is the establishment of four new departments headed by Minnesota-trained specialists - Anesthesia, Clinical Pathology, Neurosurgery and Plastic Surgery. Three other departments - Genito-Urinary Surgery; Eye, Ear, Nose and Throat; and Radiology - are in charge of returned participants. A number of returned participants have been promoted. Others, previously on the special staff, have been appointed to the regular staff. Thus program participants on their return have earned and have been given increased responsibilities in the teaching of students, interns, and residents.

Another encouraging note commented upon by Dr. Schimert is that teaching methods in major clinical departments such as Internal Medicine, Obstetrics and Gynecology, Pediatrics, and Radiology are undergoing reorganization approaching standards of undergraduate and graduate instruction recommended by the AMA Council on Medical Education.

Also significant is that project participants in Anesthesia, Biochemistry, Internal Medicine, Pathology, Pediatrics, Physiology and Surgery who engaged in research as a part of their training at Minnesota have been able to engage in active and at times fascinating research programs of their own on their return. Some cancer research in the Departments of Surgery and Pathology is supported by grants from the Damon Runyon Fund.

Among the important changes which have come about are curriculum revision to stress more laboratory and bedside teaching, the organization of rotating internships and the preparation of plans for residency training programs and for the recently authorized School of Public Health. In the basic science and clinical departments new teaching methods and facilities have been introduced and in most departments research activities have been encouraged. The

Department of Internal Medicine has been carefully studied and plans for its reorganization submitted.

On the administrative level almost every facet of hospital administration has been revised and strengthened. The importance of personnel possessing administrative skills has been recognized and their status has been upgraded accordingly in the eyes of medical personnel. A Central Supply Room, Post Anesthesia Recovery Room, and modernized Admissions Office have been established. Management needs, medical records, financing, physical plant and re-equipping projects, have all been subjects of much discussion and joint planning.

At the School of Nursing the curriculum has been revised to include more laboratory exercises and bedside nursing. Plans for elevation of the School to collegiate level are in the process of being carried out. A new School of Nursing building has been completed and is in use; plans for a new dormitory for nurses have been completed.

A large part of the equipment ordered by Minnesota since the start of this project has arrived and is in use. This provides a modest amount of basic teaching aids, hospital and out-patient clinic technical facilities, and a beginning toward re-equipping research laboratories.

The basic hospital facilities for diagnosis and treatment are in functioning order. The Central Laboratory performs any standard clinical test, including blood chemistry. The Radiology Department is well equipped and the quality of service is excellent. Operating room facilities are sound but more instruments and other equipment are needed for major and sub-specialties surgery. Anesthesia and bloodbank services compare favorably with those of first-rate institutions in the United States.

During the past six months advisory activities have shifted somewhat from the planning, organizational and administrative aspects of the College of

Medicine and its attached hospital to more specialized fields. Particular attention has been given the newly established Schools (Nursing - College level, and Public Health) and to areas where there are newly returned participants or new diagnostic, teaching and research equipment.

Some of the more important developments and activities during this period were legalization of the new School of Public Health and elevation of the School of Nursing to collegiate level by Presidential Decree on January 14, 1959; the establishment of integrated, 5-year residency programs in the clinical fields at the University Hospital leading to eligibility to take Board examinations on successful completion; the survey of basic science departments by Dr. E. B. Brown, Jr., and his recommendations for improvement in both teaching and research; specific assistance to the Department of Physiology by Dr. Brown; the training of Korean personnel in new techniques and in the use of complicated diagnostic equipment in the fields of heart and pulmonary diseases; the setting up of an artificial heart and lung machine by Dr. Schimert and the training of a Korean team in its use; the demonstration of practically all thoracic surgical procedures, including heart surgery, by Dr. Schimert, these demonstrations preceded by the usual thoroughgoing pre-operative evaluations and followed by the indicated post-operative care; the holding of numerous conferences by the Nursing Adviser with the nursing administrative staff for the purpose of establishing standard nursing policies and regulations; and the spending of much time with Korean colleagues in the selection of personnel to be given graduate study opportunities abroad under the proposed 2-year extension of the contract.

Plans for the next six months include support along lines already established. Further attention will be given curricula of new Schools and Departments, to the further development of bedside teaching in the clinical fields,

and to ways and means of increasing support of research programs. Further attention will be given to improving the financing of the Hospital. Nursing advisory activities will include further work with the Hospital nursing staff to improve nursing care and the character of participation in the supervision of student training experience, work with the nursing administrative staff to improve policy making, organizational relationships, and communication, including assistance with the planning of postgraduate nursing courses which eventually could serve the nursing profession throughout Korea.

Excerpts from Medical Reports. Four advisers in Medicine completed their services in Korea during the present 6-month period. The excerpts which follow are taken from the final reports of three of them. The report of Dr. James H. Matthews who served as Overall Adviser from May 6, 1957 to November 7, 1958 is still under preparation. Excerpts from it will appear in the next Semi-Annual Progress Report.

Glenn R. Mitchell - Adviser in Hospital Administration from May 6, 1957 to November 11, 1958, reports as follows:

Seoul National University Hospital is a 460 bed hospital attached to the College of Medicine. It has an old but well designed and soundly constructed physical plant.

Its organization within the University and Korean Government is similar to that in Western countries. It differs from them in that authority for its operation is less often delegated to the Hospital officials. The Medical staff is responsible to the Hospital Superintendent for the care of patients and to the Dean of the College of Medicine for teaching and research activities. Several organizational units are administered by the medical staff - Operating Rooms, X-ray Laboratory, Blood Bank, Outpatient Clinics, Electro-encephalogram, Electro-cardiogram, and Basal Metabolic Rate Units. There are three other main sections - Nursing, Pharmacy and General Affairs - which are responsible to the Superintendent for all other Hospital functions. Two Medical staff committees meet regularly to discuss general Hospital activities and to advise on Hospital operation.

Some major changes in operation had occurred previous to May, 1957. Some areas of the Hospital were being operated using new administrative methods which staff exchange participants had observed in the United States. A centrally-administered operating room suite, a central laboratory, and an area established for filing all X-ray films were all operating. Some equipment ordered with 1955 and 1956 funds had arrived and was in use. The kitchen, psychiatric

facility and one of the Hospital wings had been rehabilitated during January to March, 1957. A proposal for changing the financial system of the four National University Hospitals had been agreed upon and submitted to the National Government. There were many other problems being studied.

During the period from May, 1957 to November, 1958 several major activities have been performed: a study of the best use of all facilities has been made and much of the area reallocated; many 1955 and 1956 rehabilitation projects have been completed and others started. The 1957, 1958 and 1959 rehabilitation and improvement projects are all in various stages of planning. New concepts for procuring, storing, distributing and using all equipment and supplies have been developed for both ICA-financed and locally procured items. A central admissions office, central supply, post-anesthesia recovery room and emergency room have been established and are functioning. A pediatric ward for all children admitted was established. A central Medical Record Library has been planned and will begin operation on January 1, 1959.

To best utilize the limited operating finances and the limited number of staff the Hospital has decreased the number of nursing stations from thirteen to seven.

In the immediate future a new hospital financing plan, based on the retention by the Hospital of all income from patients, should be developed. Continuing efforts of Administration are needed to strengthen and expand all of the programs established. Also, the Hospital needs to expend increased effort to solve problems in the food service organization, to improve supervision of all employees, to establish the isolation station in the main Hospital building, to improve the training of employees, to develop a new patient clinic, and to further improve the purchasing system. In addition, the development of a new allocation of beds for each medical service, the establishment of the physical therapy unit, and a program to increase the number of autopsies performed, are areas for which major attention is needed.

A Hospital Association could make significant contributions to Korea. The Seoul National University Hospital officials should be instrumental in organizing such an association.

The future of Seoul National University Hospital is uncertain because many of the important factors are beyond the control of the Hospital's officials.

The changing responsibilities and functions of Seoul National University Hospital Administration will require a change in its internal organization. In the main body of the report a plan is suggested indicating principles which should be followed in initiating this change.

Professor Margery Low, R.N. - Adviser in Nursing from January 1, 1957 - December 30, 1958 (in Korea from March 19, 1957 - December 30, 1958), reports as follows:

School of Nursing Organization and Administration: Legal creation of the Department of Nursing within the College of Medicine seems imminent. When

this is done, the Attached Technical High School for Nurses will be gradually phased out and discontinued with the graduation of the last High School students. The organization and administration of the Department of Nursing will differ radically from that of the High School. In order to eradicate undesirable features, to strengthen the proposed Department, to permit its growth and the growth of its faculty, the following recommendations are made:

1. The Director of the Department of Nursing should retain, under the Dean of the Medical College, the authority and function of the Principal of the High School. The advantages of the latter organizational structure have been amply demonstrated in the rapid and solid rise towards the collegiate program.
2. The authority to apportion the number of faculty to the Department of Nursing should be retained by the University President, who would act upon the recommendations of the Department Director and the Dean.
3. The present faculty of the Technical High School should be retained as faculty of the Department under temporary appointments.
4. Seoul National University should make it possible, administratively, for faculty members who have been admitted through the regular University channels to take one or two classes each semester for credit, and should allow sufficient time in which to complete a given program (preferably in education). This is necessary in order that the faculty may be adequately prepared without loss to the Department of Nursing during the time of preparation.
5. A number of years, sufficient to permit the earning of a bachelor's degree, should be stipulated, after which time the minimum of a bachelor's degree should be required as one qualification for faculty membership.
6. Faculty members without an academic degree should be required to take a college or university course, with emphasis on education, each semester until requirements for at least a bachelor's degree are met.
7. As soon as possible the Director of the Department should be appointed to the rank of Professor. The remainder of the faculty should be promoted in rank as rapidly as they become qualified.
8. Consideration should be given now to ways and means for further education of the faculty in the future on the master's level.
9. Positions for future faculty should be included now in the organizational pattern. Thus positions would already be established for faculty members in nursing education and nursing administration when qualified teachers are available.

Curriculum and Teaching: The collegiate curriculum has been built carefully in terms of student and nursing needs of Korea. The advice and help of individual faculty members and of colleges within the University have been of great value. The curriculum is planned to utilize patient-centered teaching, by means of concomitant classes and clinical experience.

Consonant with the nursing needs of Korea, the faculty are planning future programs for graduate nurses on academic undergraduate and post-graduate levels.

Teaching methods are being constantly studied, revised, and practiced by the faculty, who seem tireless in their efforts for improvement.

Recommendations:

1. The curriculum must be constantly evaluated, based on the Department's written objectives and on the nursing needs of a changing society. Revision of the curriculum should be made, when necessary, to meet new needs and eliminate those parts of the curriculum which no longer meet these needs.
2. Course content and depth must be evaluated frequently to maintain teaching at the University level.
3. Daily ward assignments during clinical experience should be based upon the individual student's knowledge and ability. The patient should be the focal point of all clinical experience.
4. The student should have sufficient supervision to insure the safety of the patient and an increase in the student's knowledge.
5. The advisability of continuing to offer a course in midwifery should be questioned upon the basis of the needs of Korea and the facilities of the Department to meet these needs.
6. The Department should work closely with the proposed School of Public Health in developing its course in public health nursing in order to strengthen its program and avoid competition with the Graduate course.
7. Discussion type patient-centered ward classes should be held on each station at least once a week.
8. The Department should continue to develop the proposed programs in advanced nursing, both on the undergraduate and postgraduate levels, with other appropriate Colleges in the University.

Transition Period. The period of transition from a three-year high school level program to a four-year university program will be difficult. The School faculty and the Hospital nursing personnel have worked closely together in planning for this period, and will continue to do so. The faculty will continue to assist in the supervision of the students.

Still unsolved is the future of the students admitted in 1958.

Recommendations:

1. The Hospital should try to secure emergency funds for additional staff nurses during the transition time.
2. The faculty must continue to be aware of the needs of the Hospital.

3. The University should find the means to admit the students of the class of 1958 after the creation of the Department of Nursing.

Hospital Nursing Service: The organization of the Hospital is being strengthened, lines of authority clarified, and new departments created. All levels of nursing service are being given authority and responsibility as rapidly as capabilities and reorganization allow. The clear delineation of responsibilities, limitations, and authority of nurse administrators would speed this process considerably. As there are as yet almost no facilities in Korea for teaching and training of nurse administrators, there is need for continued assistance in this area.

It is possible to greatly improve the quality and quantity of nursing care under existing conditions although the number of nurses is now barely sufficient in terms of time coverage.

The number of relatives in the Hospital with the patient is being curbed, especially the number of children. The teaching opportunities inherent in the situation are not sufficiently used.

The Hospital continues to become cleaner and tidier. Equipment has been arriving steadily.

A regular in-service program is being carried on by and for the nurses. Few of the medical staff have recognized the fact that only they, in Korea, can teach the nurses the nursing care demanded by their specialty. In broad areas of nursing where the learning of special techniques, administration, and methods of care are obtainable in Korea, those facilities will be utilized. In those areas where further knowledge is not obtainable in Korea, plans are being made for experience abroad, if the Minnesota Contract is extended.

Faculty members are assisting in the supervision of the student nurses' clinical experience. Head nurses still assume little responsibility for student experience or supervision.

Recommendations:

1. Written policy books for nurses should be developed more rapidly.
2. The responsibilities, limitations, and authority of nurse administrators on all levels should be clearly delineated in written form, including those for evening and night supervisors.
3. A revised outpatient clinic schedule in which some clinics are open in the morning and some in the afternoon should be made to reduce the number of nurses required there.
4. Assignment of nursing personnel should be made in terms of the nurse's special knowledge and skill.
5. Careful planning of duty assignments on the stations, with attention to patient needs, student needs, and the students' and nurses' abilities and skills should be practiced.

6. Comprehensive nursing care of the patient should be given by the nurses.
7. The opportunities for patient and family teaching created by the presence of relatives in the hospital should be utilized to the fullest extent.
8. The head nurses should continue their emphasis on cleanliness and tidiness.
9. The University of Minnesota medical staff members with exchange Korean doctors under their tutelage should include the necessary new nursing procedures of their specialty in the Korean doctor's program.
10. Medical staff now in the Hospital should plan and teach to the nurses those special nursing skills necessary for the care of their patients and review with the nurses the complete nursing care.
11. The Hospital nurses should recognize and accept their teaching responsibilities for student nurses during the student's clinical experience.

Buildings and Equipment: The new school building was dedicated on December 15, 1958. Attempts are still being made to procure counterpart funds for the furniture. Most of the teaching equipment has arrived.

A much needed new dormitory is being planned as a 1958 project.

The need for nursing text books, especially those in the Korean language, still remains.

Recommendations:

1. Attempts to secure counterpart funds for furniture should be intensified.
2. Financing should be sought for the writing (or translation) and for the publishing of nursing text books.

Dr. E. B. Brown, Jr. - Professor of Physiology, Adviser to College of

Medicine from July 28, 1958 to January 24, 1959, reports as follows:

To date eight University of Minnesota faculty members have served as advisers to Seoul National University in the Medical fields. Of these only one, the writer, has been from the preclinical or basic medical science disciplines. With this in mind I have devoted most of my time to the basic science areas of the Medical School. This will be apparent in the remainder of this report and unless it is otherwise stated the observations and recommendations apply only to this area. The principal exception is in the area of research, where information has been obtained from and closer contact has been maintained with the clinical departments. Special attention has been given to establishing a cardio-pulmonary physiology laboratory. Although this has been carried out largely within the confines of the Physiology Department, it has been used by the Cardiac Catheterization group for their studies and by Capital Army Hospital for training two young Medical Officers with a view to establishing a pulmonary function laboratory there when they return...

Recommendations:

Physical Plant. It is recommended that the following rehabilitation projects be added to FY 1959 or included in FY 1960 and FY 1961 if the contract is extended:

1. New outside doors for the main buildings. Many of the present doors are little more than swinging gates held together by a hasp and lock. This looks unkept and these doors supply very little insulation against the cold. The latter factor is not important now but will be when the entire building is heated from a central heating plant.
2. Terrazzo floors in hallways and new smooth concrete or terrazzo floors in student laboratories and research laboratories of main building, biochemistry building, and anatomy-pathology annex.

Present floors are concrete and are in poor condition in most areas of the building. With the current rehabilitation of the plumbing system in these buildings, floors have been torn up and then patched in most rooms and in many areas of the hallways. These patched, rough, irregular level floors are difficult to keep clean and they look dark and dirty even when they are clean.

3. Fluorescent lights in the hallways of the main building. At present the long corridors of this building are dark and gloomy. Originally the halls were supposed to receive light through windows on the inside walls of offices and laboratories. All of these windows have been painted or made opaque by some other means to give privacy to professors' offices and laboratories. Better lighting of these long, dark halls is badly needed.
4. A large capacity still and distribution system for supplying distilled water to student laboratories and to research laboratories should be installed. Faucets should be the type that automatically turn off when released so that distilled water cannot be left running from an open faucet. If the cost of supplying distilled water to all research laboratories is prohibitive, at least one or two laboratories in addition to the student laboratory should be supplied. The present system of each department preparing its own distilled water is expensive and constitutes a fire hazard.

A gas fired still with a capacity of 30 gal/hour has been received and is in storage. This still can be used when the building is supplied with illuminating gas. It seems unlikely that this capacity is adequate for the Main Building. Either an additional large capacity still to be used along with the 30 gallon one now on hand should be purchased or the 30 gallon still should be installed in the biochemistry building and a much larger one purchased for the main building.

Admission Practices. It is recommended that a future participant from this school, preferably the Dean or a representative of his office, study admission practices at the University of Minnesota Medical School. It might also be possible to review admission practices at other Medical Schools in the United States. Medical aptitude, intelligence, personality, and vocational

interest scales used in the United States could not be used in Korea without modification but they would be helpful in developing similar materials here if it were decided that such were needed.

As long as the National Educational Law requires that students be admitted to Medical School at the beginning of their college work, it is recommended that a committee composed of members from both the Medical School and the College of Liberal Arts and Sciences be charged with the responsibility of establishing admission practices and standards and in carrying out the function of admitting students to the medical curriculum. The chairman of this committee should be the Dean of the Medical School or his representative. Since this is an inter-college committee, appointment should be from the Office of the President of the University.

It should be the prerogative of the College of Liberal Arts and Sciences to control standards of performance and promotion during the first two years just as this prerogative falls to the Medical Faculty during the last 4 years.

Textbooks and Written Teaching Materials:

1. Plans to produce textbooks in the Korean language for medical and dental courses should be expedited. Staff members are to be congratulated on their intention to write these books rather than to translate existing textbooks from some other language. A translated book might be useful but the members of this staff are competent to produce their own material in their native language and this they should do.
2. Elementary textbooks for nursing and other courses (pharmacy, medical technology, veterinary medicine, etc.) should be written and printed in the near future. Books at this level are much more readily produced since references and documentation are not ordinarily used.
3. When a textbook has been published or mimeographed it should be officially listed as the required textbook for the course. Textbooks in English should be recommended as supplementary reading.
4. Laboratory manuals for all courses where such are required should be written for the course by a member or members of the staff of that department. There is little excuse for using a laboratory manual in any foreign language. Furthermore, a laboratory manual written at and for one institution rarely fits the needs or equipment available in another institution. Staff members here should feel free to draw upon any source for student laboratory experiments and procedures, but these procedures should be modified to fit the conditions and equipment at this Medical School and directions should be written in Korean.

Graduate Education.

1. Plans under study to require a minor field of study should be expedited and put into effect.

2. All basic science departments should develop graduate courses and/or seminars which are open to graduate students of other departments including clinical departments.
3. Deans of the Colleges should begin studying ways and means to allow students in one college to take courses in another. This serious limitation to graduate training should be of concern to all of the colleges and certainly the College of Medicine must share deeply in this concern.

Research.

The Minnesota Contract has as its stated purpose the strengthening of teaching and research at Seoul National University in four areas, one of which is medicine. In the early years of the Contract primary attention in Medicine was given to the strengthening of the teaching function. This was a proper assignment of priority and there is still improvement to be made in this area as other sections of this report indicate. However it appears that the situation now is such that a greater emphasis can be placed on strengthening research during the extension of the contract without detracting from support of teaching and service (patient care); the other two major functions of any good medical school.

There is little doubt about the eagerness of staff members here to carry on research. In spite of many limitations work is under way in most departments and is being started in others..."

Dr. Brown's inquiry into the status of and plans for research at the College of Medicine indicated the following to be the more important limitations to this activity:

The most commonly mentioned limitation to research was shortage or absence of research budget. It is evident from even a casual review of the situation here that a few modest research grants in the hands of each department would offer the greatest stimulus possible to research at this medical school.

Another limitation mentioned frequently by clinical departments was lack of laboratories and equipment. A major contribution to research by clinical staff members will be the rehabilitation of the clinical research building. This large brick building should provide adequate space for all clinical departments. If the contract is extended, a major item in the equipment budget must be money to equip these laboratories.

Missing volumes of journals over the years 1941 to 1955 present a constant handicap to the scholars at this institution. These missing volumes need to be filled in as rapidly as funds are available and in the order of greatest need. The library committee under Dr. Nam, Kee Yong's chairmanship is at work on this problem now. Lists are being assembled and prices obtained from suppliers. Funds for beginning this task should be obtained from FY 1958 equipment budget.

One other limitation to research should be mentioned. With more and more electronic equipment coming to the medical school, maintenance and upkeep becomes increasingly important. The Medical School should begin now to plan for eventual employment of a full time electronics engineer to be available for this purpose. Part or all of the salary of such a person could be paid justifiably from research grants supporting projects utilizing electronic equipment.

Dr. Brown's further specific recommendations regarding research are as follows:

1. Investigators at the medical school should submit more papers to American or European journals. They should utilize contacts made while studying abroad or ask Minnesota advisers for advice and help in editing English language versions of manuscripts.
2. Staff members should make applications for research grants in increasing numbers to private foundations and to any other sources open to them. The United States Public Health Service may be establishing a section under the International Division which will offer research support to foreign medical investigators. This source should be thoroughly explored.
3. In assignment of space in the rehabilitated clinical research building, central interdepartmental laboratories should be kept to a minimum and confined to those areas where very expensive equipment is required.
4. After thorough study by a committee appointed by the Dean, space should be assigned to departments and the department should assign space to individuals.
5. Equipment for the laboratories in this building should take a high priority in FY 1960 and FY 1961 requests.
6. Title to all equipment bought on the Minnesota Contract for the clinical research laboratories should be retained by the Medical School or Hospital. Equipment should be checked out to individuals or departments to be used as long as the need exists and returned to central storage upon termination of need.
7. In future equipment requests from basic science departments top priority should be given to items having regular use in both teaching and research laboratories.
8. All departments should immediately begin a study of the long-range needs of the department and prepare a report which the Dean and his advisers could use in establishing policy and preparing equipment and rehabilitation requests for the extension of the Minnesota Contract.
9. The balance remaining in FY 1958 equipment funds should be used to purchase missing volumes of medical journals for the library. When these funds are exhausted additional funds should be assigned to this if the need exists.

Public Administration, Seoul National University (Dr. Stuart A. MacCorkle, Adviser), submits the following:

Activities Prior to October, 1958.

On January 13, 1959 President Syngman Rhee signed the presidential decree which legalized the new School of Public Administration at Seoul National University. This final step came approximately one year and six months after Professor George A. Warp of the University of Minnesota had presented a plan for the development of a Public Administration program in Korea under the International Cooperation Administration/University of Minnesota contract. Soon after the approval of the plan, steps were taken to put it into operation.

The first action taken was the selection of 11 Korean participants (professors and instructors) to be sent to Minnesota for graduate training in Public Administration. They arrived in Minneapolis in early August, 1957. This group will become a part of the staff of the School of Public Administration. In late July, 1958 another group of eight Korean participants was sent from Seoul National University to Minnesota for graduate training.

In addition to the sending of Korean professors and instructors in Public Administration to Minnesota, it was agreed that Minnesota would send an American staff to Korea for the purpose of serving as advisers to the Korean staff and to function as counterparts supplementing the efforts of their Korean colleagues when necessary. The first adviser to arrive at Seoul National University was Dr. Stuart A. MacCorkle who reached Korea on March 28, 1958. Dr. William O. Farber, research adviser, arrived on August 6, 1958 and Professor Leigh W. Hunt, Jr., librarian adviser, on August 8, 1958.

The University of Minnesota not only agreed to send American advisers to Korea to assist with the Public Administration project but it also undertook to establish a special reference and research library at the School of Public Administration. As of October 1, 1958 approximately 1,100 volumes had been received.

During this early period the American staff attempted to gain some knowledge of the political climate as well as an understanding of the Korean governmental organization and its method of operation. Special effort was made to learn what Korean materials were available in the field of Public Administration.

A Steering Committee on Public Administration was established within the College of Law, and detailed consideration was given by it throughout the period to the various factors affecting the program at Seoul National University. Discussions centered around such subjects as: (1) goals of the program, (2) admission requirements, (3) course offerings and degree requirements, (4) internship, (5) thesis, (6) research, (7) translations, (8) library materials and equipment, and the like.

It was during this period that nine of the first 13 Korean University of Minnesota participants returned (seven to Seoul National University and two to the National Officials Training Institute), and an additional group of eight was selected and sent to Minnesota. The supervision of the theses of the

returnees became the major responsibility of the research adviser. In addition, assistance was given them in the collection of materials to be used in connection with the courses to be offered at the School beginning April 1, 1959.

Throughout most of the time much consideration was given to the physical needs of the new School. Book lists were prepared, a temporary author catalog begun, and materials selected and ordered for the library. Plans for the remodeling of the building which was to house the new School were completed and consideration given to the need for additional equipment and furniture.

Finally, in order that this account be more complete, the fact should not be lost sight of that the extension of the contract in Public Administration and the method of financing the activities of this program were almost constantly under discussion throughout the period.

Major Activities October 1, 1958 - April, 1959.

For the sake of brevity a list of important activities for the period appears below:

1. On October, 1959 the Ministry of Education disclosed the fact that it had approved 18 full-time teaching positions for the School of Public Administration. On December 24, 1958 the National Assembly passed a total annual budget of 27,525,500 hwan for the School. This was for the fiscal year beginning January 1, 1959. Of this amount 8,744,400 hwan was designated for teaching staff, this staff to be composed of one professor, four associate professors, five assistant professors, and eight instructors. The remaining 18,781,100 hwan was to be used for guards, labor, utilities, travel, transportation, printing, supplies, and repair.
2. The building which is to house the School of Public Administration was vacated, remodeled, and furnished at a total cost of approximately 31,385,000 hwan - roughly 20,020,000 for remodeling, 11,365,000 for furniture.
3. During this period the graduate program and the rules and regulations for the School were drawn up and approved by the Committee on Public Administration and the faculty of the College of Law.
4. The plans for the opening of the new School were made and carried out. These included the publicity describing the program, the making and the printing of application forms for admission, the preparation and administration of both written and oral examinations, and the selection of the teaching staff. The distribution of application forms was restricted to 1,000 copies and this included those for both day and evening students. These applications were distributed between March 5 and 10, 1959, and they were returned to the administrative office between March 11 and 14. Of the 1,000 application forms distributed 385 were accepted from the day students. This number were permitted to take the written examination, 45 passing it. Seventy-four applications were selected from the various agencies of government. This

group did not take a written examination, but selection was made on the basis of their records. Both day and evening students took the oral examination, 35 of the 45 day applicants passing the examination and 65 of the 74 evening students successfully completing the oral examination. Thus 100 graduate students were admitted to the new School.

5. Throughout the period, the staff encouraged the preparation of teaching materials, considered a translation program of text materials, began a research program, and assisted the Korean Society of Public Administration with its program. Dr. Farber took the lead in these activities. Also under his direction Kim, Woon Tai and Kim, Hae Dong completed drafts of their theses, and they were transmitted to Minnesota for comment.
6. Professor Hunt continued his work with the libraries at Seoul National University and the National Officials Training Institute. At Seoul National University a detailed floor plan and furniture specifications for the Public Administration Library, both stack and reading rooms, were prepared. A questionnaire was composed and circulated to other public administration libraries under ICA contracts in Iran, Pakistan, Vietnam, and the Philippines.

In addition, he and Mr. Ahn continued their survey of local research centers and libraries making an effort to contact government ministries and agencies to obtain locally published materials and documents. Professor Hunt also instituted a training program consisting of suggested readings, and supervised classifying and cataloging operations in order that Mr. Ahn would be better prepared for his position as Librarian. Miss Hong and Miss Kim were instructed in simple library techniques and procedures. During January, an inventory of book accessions was started and with the arrival of the Library of Congress catalog cards and the control cards from Minneapolis, the permanent classification and cataloging of the collection were begun.

As of this date the Library at the School of Public Administration has approximately two thousand volumes.

The National Officials Training Institute Library requirements and proposed quarters were reviewed by Professor Hunt with Dean Kim, Dong Won and Dr. E. R. Draheim. Blueprints were discussed and lists of equipment and supplies submitted. Over two hundred books and pamphlets and some seven hundred Library of Congress catalog cards were forwarded from Seoul National University to the National Officials Training Institute.

7. The following provided funds for scholarhips in the new School:

Mr. Kim, Il Hwan, Minister of Home Affairs	HW 50,000
Mr. Sohn, Do Shin, President of Seoul Daily News	HW 50,000
Lt. Gen Yoo, Jae Hung, Chairman of Joint Chiefs of Staff, Republic of Korea	HW 50,000
Lt. Gen. Choi, Young Hi, Second Army Commander, ROK	HW 50,000
Mr. Lemuel Scarbrough, The Lemuel Scarbrough Foundation, Austin, Texas	\$300.00

Mr. John E. Elliott, Austin, Texas	\$125.00
Mr. Marvin M. Smith, Chief of Public Administration Division, Office of Economic Coordinator	\$ 50.00

8. During the period the following were appointed as staff members:

Korean - Miss Kim, Song Ja, typist, December 10, 1958
Mr. Lee, In Chan, clerk, January 31, 1959

American - Mrs. Elsie G. Hagelee, secretary, February 6, 1959

Dr. William O. Farber, research adviser, completed his term of duty on January 16 and departed for the States.

9. Plans were made for Dr. MacCorkle to return to the Minnesota Campus for consultation and to attend to personal matters while on annual leave. He left Seoul, Korea February 21, 1959 and returned March 23, 1959. On the return trip he made official stops in Honolulu and Manila.

10. A number of miscellaneous activities consumed some of the staff's time during the period. Some of the more important are listed below:

- a. Dr. Farber served as a judge in the National High School English Speaking Oratorical Contest sponsored by the College of Commerce, Seoul National University, on October 10, 1958.
- b. Dr. Farber spoke on "The Importance of Political Science" at the intercollegiate meeting of political science students at the Korean Information Center on November 24, 1958.
- c. Dr. Farber spoke at the regular OEC staff meeting on the subject "Factors Affecting Korean Public Administration" on January 7, 1959.
- d. Professor Hunt, at the request of Dr. Ryu, Paul, Academic Dean, Seoul National University, served on a committee with President Yun, Dean Ryu, Dr. Harlow, and Mr. John Harvey to examine candidates desiring to go to the United States under the Smith-Mundt Program.
- e. Throughout the period Professor Hunt has assisted Dean Ryu with minor research and editorial work. In addition he served on a committee to interview candidates from Seoul National University for the Visiting Scholarship Program at Harvard-Yen-Ching Institute for 1959.
- f. Dr. MacCorkle spoke to the Intercollegiate English Speaking Society on "The Opportunities in Public Administration" on November 10, 1958.
- g. Dr. MacCorkle spoke to the Seoul Rotary Club on "The New School of Public Administration at Seoul National University" on January 28, 1959.
- h. Dr. MacCorkle spoke to the Intercollegiate English Speaking Society of Seoul on "Opportunities in Public Administration" on February 10, 1959.

- i. Dr. MacCorkle spoke at the United States Information Service in Seoul on "Abraham Lincoln as a Public Servant" on February 12, 1959.
- j. An article by Dr. MacCorkle was published: "Training in Public Administration at Seoul National University," University Press (February 16, 1959), pp. 2.

Current Needs and Recommendations.

1. Personnel:

- a. Classes will start in the School of Public Administration on April 8, 1959. This means a need for additional American staff in Korea. Dr. John A. Dettmann and Professor William Larsen are scheduled to arrive in Korea during July of 1959. A research adviser could be put to good use now.
- b. Much emphasis is being placed upon the absence of statistical materials in Korea as well as their use. It is recommended that this point be borne in mind as future American staff is selected for Korea. Perhaps a combination of talents may be found in the same person.
- c. From the Korean side additional and more qualified staff will be needed at the Library at Seoul National University. Especially is this true since both day and evening courses will be conducted in the School.

2. Equipment:

- a. In equipment the most pressing need is a modern mimeograph machine. This could be used to good advantage in almost every phase of the School's activity. Second, some modern copying device would be of use to both the teaching and the research division of the School when they get under way. Third, a microfilm reader for the Library and an opaque projector for the teaching division of the School should be procured. Neither of these will be needed immediately.
- b. If the courses in accounting and statistics are to be taught effectively, laboratories must be provided in each case. This will mean providing the necessary equipment for them.

Plans for the Next Six Months.

1. One of the immediate actions of the School will be moving the offices and the library from their present quarters which are located in the College of Law Building to the new Building.
2. During the next few months a major activity of both the American and the Korean staff will be the development of course materials to be used for teaching purposes. It is also hoped that within this period some progress can be made on the translation project.

3. As soon as an American research adviser is added to the staff, we would hope that continued effort would be made toward the completion of theses by returning Minnesota participants. A plan for a publication series in public administration should get under way.
4. It is our hope to expand the collection of Korean materials in the Library and to take steps toward having this Library made a depository for Korean government documents, at least to a limited degree.
5. Depending on developments, it is hoped that by the end of the next six-month period serious consideration could be given to the transfer of the ordering of library materials from Minneapolis to Seoul.
6. Finally, it is planned that more attention be given to the scope and the functions of the Library. Perhaps new services should be initiated such as consultative and informational. In addition, there will be a constant need for the review of our periodical subscriptions, and thought should be directed to the time at which the Minnesota contract expires. It would be our hope that by the termination date some foundation in the States could be interested in providing additional funds for the Library and that some provision could be made for an American staff member who would serve in an over-all advisory capacity to the new School for a few years. This fact has been mentioned to Professor Lloyd M. Short of Minnesota.

Conclusion.

In conclusion, it may be stated that throughout the period there has been a most cooperative and harmonious working relationship between the authorities of Seoul National University and the American Public Administration staff. Dean Shin and his Committee on Public Administration have exercised their best efforts toward making the School a success. After one year of close joint effort, there seems to be a feeling on the part of both parties that substantial progress has been made toward the realization of the original purpose of the project.

Public Administration, National Officials Training Institute (Dr. E. R. Draheim, Adviser), submits the following:

1. Summary of Major Activity Prior to October 1, 1958:
 - a. In August, 1957, two Korean, National Officials Training Institute-connected participants left Korea for a year's graduate study in Public Administration at the University of Minnesota. They returned to Korea in August, 1958, and since their return both men have been actively engaged in teaching at National Officials Training Institute and otherwise assisting with improvement of the In-Service Training Program in the Republic of Korea Government.
 - b. On January 3, 1958, Dr. E. R. Draheim arrived in Korea to serve as Overall Adviser in Public Administration at the National Officials Training Institute.

- c. During August and October, 1958, six Korean, National Officials Training Institute-connected, participants left Korea for a year's graduate study in Public Administration at the University of Minnesota. Before their departure, careful plans were developed and agreed to by the Republic of Korea Government for efficient and effective utilization of these men when they return to Korea to help improve the In-Service Training Program in the Republic of Korea Government.
- d. By far the most significant accomplishment of the University of Minnesota Contract during this period in connection with this project was the intensive effort and marked success of the Director, Dean and Adviser at National Officials Training Institute in contacting and consulting with the Ministers, Vice-Ministers and other key Republic of Korea Government Officials, concerning appropriate steps necessary to improve the In-Service Training Program in the Republic of Korea Government. Major effort during this period was directed toward developing an understanding and acceptance of the importance of organizing, developing, initiating and carrying out an executive Development Program at National Officials Training Institute for Bureau Directors, the top career employees in the Republic of Korea Government.
- e. A careful study and analysis was made by the Adviser at National Officials Training Institute of course content and methods of instruction used in all courses previously conducted at National Officials Training Institute. Based on this survey, study and analysis, specific recommendations were made to the Republic of Korea Government on steps necessary to improve their In-Service Training Program. These recommendations included: who should be trained; what course content should be included; and how to improve instructional methods.
- f. Thirteen major and specific recommendations were developed and agreed to by the Director, Dean and Adviser at National Officials Training Institute as essential toward improving the In-Service Training Program in the Republic of Korea Government. Positive steps were taken to initiate action and follow up in carrying out each of these 13 important recommendations. (For details, see the 8th semi-annual progress report.)
- g. Initial steps were taken by the University of Minnesota to select books and materials for the core, Public Administration Library to be established at National Officials Training Institute. Minnesota also initiated action toward purchasing necessary Audio-Visual aids equipment and materials, essential to improving the instructional methods at the Institute.
- h. All essential steps were taken to plan for, request and secure counterpart funds to repair, improve and rehabilitate National Officials Training Institute buildings and facilities.

2. Major Activities During Period:

- a. Arrival of staff: Mr. William B. Berg arrived in Korea on November 12, 1958 to serve as Assistant to Dr. E. R. Draheim, Overall Adviser in Public Administration at National Officials Training Institute.

- b. Continuation of staff: Arrangements were completed during this period for Dr. E. R. Draheim to extend his service for an additional year.
- c. The following In-Service training courses were conducted at National Officials Training Institute during this period:
- 1) Pre-Service Training Course: From 10-1-58 through 12-20-58. Class hours - 8:30 a.m. to 4:30 p.m., six days a week. For 30 young men selected to enter service with the Republic of Korea government in 1958.
 - 2) Civilian Employees, Ministry of National Defense: From 10-15-58 through 11-20-58. Class hours - 1:00 p.m. to 4:10 p.m., five days a week. For 30 civilian administrative officers in grades 3-A, Ministry of National Defense.
 - 3) Future Diplomats - Ministry of Foreign Affairs: From 7-1-58 through 12-20-58. Class hours - 8:30 a.m. to 12:00 noon, five days a week. For 14 employees from the Ministry of Foreign Affairs, who have been selected to represent Korea in future diplomatic service.
 - 4) "First" Executive Development Seminar: From 1-28-59 through 3-17-59. Class hours - 2:30 p.m. to 4:00 p.m., five days a week. For 24 Directors and Bureau Chiefs. (The top career employees in the Republic of Korea Government.)
 - 5) Statistical Training for Employees - Bureau of Statistics: From 2-12-59 through 7-15-59. Class hours - 10:30 a.m. to 12:00 noon, each Thursday. For 30 staff members, Bureau of Statistics, Ministry of Home Affairs.
 - 6) Management Training - Civilian Employees - Ministry of National Defense: From 3-5-59 through 4-6-59. Class hours - 1:00 p.m. to 4:10 p.m., five days a week. For 33 civilian administrative officers in grades 3 and 3-A, Ministry of National Defense.
 - 7) "Second" Executive Development Seminar: From 3-23-59 through 5-11-59. Class hours - 2:30 p.m. to 4:00 p.m., five days a week. For 25 Directors and Bureau Chiefs. (The top career employees in the Republic of Korea Government.)
- d. The above 7 classes and seminars completed or now in session at National Officials Training Institute include 186 students. As indicated, this group ranges from Pre-Service employees to Bureau Directors of the Republic of Korea Government. The University of Minnesota Advisers at National Officials Training Institute rendered substantial assistance to all instructors of the above 7 courses in reorganization and improvement of course content along with the introduction and use of modern and up to date methods of instruction. The constructive attitude and willingness of the Director, Dean, Instructors and Seminar Leaders in accepting suggestions and changes in course content and adopting and using modern and up to date methods of instruction, recommended by the Advisers, has simply been phenomenal. Thus, with this excellent attitude and outstanding cooperation on the part of the Koreans involved,

major and important progress has been made during this period with improving course content and methods of instruction for all courses and seminars.

- e. By far the most significant accomplishment during this period was the acceptance, organization, initiation and actually conducting of the "first" Executive Development Seminar in Korea and to our knowledge in this part of the world. This has been an unusually successful program. The Republic of Korea Government, the University of Minnesota and OEC can all well be proud of this superior achievement and all concerned should leave "no stone unturned" to assure the continuance of this most worthy endeavor in Korea. This "first" Executive Development Seminar completed on 3-17-59 was so successful that the Republic of Korea State Council (Cabinet) requested National Officials Training Institute to organize and open a similar "second" seminar for top Republic of Korea Government officials on 3-23-59. This was accomplished on schedule.
- f. Remodeling of National Officials Training Institute buildings and facilities: During November, 1958 the contracts were awarded for the remodeling of National Officials Training Institute quarters. Winter weather has delayed the completion of this project to date. It is now expected that this total remodeling job, which includes the construction of a new modern library, will be completed by early May, 1959.
- g. Library books and Audio Visual Aids Equipment: The following library books and materials and audio-visual equipment, provided under the Minnesota Contract, have arrived at National Officials Training Institute to date:
 - (1) Library Books: 210 volumes
 - (2) Library Pamphlets: 147 volumes
 - (3) Library Periodicals:
 - 13 issues of "Personnel Journal"
 - 11 issues of "Journal of the American Society of Training Directors"
 - 4 issues of "International Review of Administrative Sciences"
 - 3 issues of "Administrative Science Quarterly"
 - (4) Library Special Working Tools: 60 copies of "Conference Leadership Manual"
 - (5) Audio Visual Aids Equipment:
 - 16 mm projector
 - Vu-graph
 - Combination slide and film strip projector.
- h. National Officials Training Institute staff members are in process of being trained in how to make their own Vu-graph slides. This same staff is also in process of being trained in how to set up, operate and take proper care of all visual aids equipment and materials that have or will be delivered to National Officials Training Institute under this contract.

- i. On February 13, 1959 policy was established which sets forth National Officials Training Institute's responsibility for all training in the Republic of Korea Government.
- j. The Director, Dean and Advisers at National Officials Training Institute continued assistance to government officials, representatives from the military, colleges, and universities, industry, professional organizations and others who continued coming to the Institute in increasing numbers for consultation and advice in the field of Public Administration.

3. Current Needs and Recommendations:

- a. Although phenomenal progress has been made to date in launching this project to assist the Republic of Korea Government with improving management, much still remains to be done. We have barely "scratched" the surface. This solid foundation established to date opens the door for possible great strides toward improvement, that will come only with aggressive, positive follow-up action now and during the next two to three years.
- b. Additional practical library books and materials need to be provided in order to round out the working library, originally planned to be established at the National Officials Training Institute, under this contract.
- c. Positive steps need to be taken to add more Korean publications now available in the various Republic of Korea Government Agencies to the National Officials Training Institute library.
- d. A Korean college graduate with a major in library science (preferably a woman) needs to be employed at National Officials Training Institute to organize, establish and service the library. Such a person is already at work at National Officials Training Institute on a non-pay status. Steps are being taken to establish such a position in the Office of General Affairs. The incumbent in such a position would be assigned to National Officials Training Institute.
- e. Some additional visual aids equipment, visual aids supplies, select movies, film strips and slides still need to be provided at National Officials Training Institute to round out the minimum needs for maximum results in improving instructional methods in all courses conducted at the Institute.
- f. Action is needed to develop Korean In-Service Training films, film strips, slides and flip charts. Korean sound tracks need to be developed for the English movies provided and Korean records need to be cut for the film strips, supplied under this contract. Negotiations are now underway between National Officials Training Institute and the Republic of Korea Government Office of Public Information to accomplish this job. It is not clear at this point who should or who will finance this effort.
- g. Practical Korean case studies need to be developed for use in improving instruction in all courses at National Officials Training Institute,

and especially for use in the Executive Development Seminars. We are hopeful that some of the more brilliant Bureau Directors, who are participating in the Executive Development Seminars, will be able to help accomplish this job.

h. Additional financing needed:

- (1) It is recommended that items "c" "d" "g" and possibly "f" immediately above be financed either through the regular Republic of Korea Government budget or through counterpart funds.
- (2) It is recommended that items "b" "e" and possibly "f" immediately above be financed by United States dollars through the University of Minnesota Contract.
- (3) In addition to the above, it is now estimated that approximately 3,000,000 Hwan and \$5,000.00 will be needed for equipment, furnishings and supplies at National Officials Training Institute through 1961 in order to provide minimum but adequate quarters for the National Officials Training Institute, for several years to come.

4. Plans for Next Six Months:

- a. Assist with selecting, processing, preparing and properly orienting the Korean National Officials Training Institute-connected participants, who will be leaving Korea for a year's study in Public Administration at the University of Minnesota during the 1959-60 school year.
- b. Assist with follow up to assure efficient and effective utilization of the Korean National Officials Training Institute-connected participants who are now at the University of Minnesota when they return to Korea in August, 1959. It is expected that all of these men will become an integral part of the positive program now underway to improve the In-Service Training Program in the Republic of Korea Government.
- c. Continue the Executive Development Seminars for Bureau Directors of the Republic of Korea Government and continue training outstanding Koreans to serve as Discussion leaders for these and future seminars.
- d. Assist with organizing, establishing and conducting management improvement seminars for employees in the middle management level of the Republic of Korea Government.
- e. Observe all courses and seminars being given at the National Officials Training Institute and assist all instructors and seminar leaders with improving course content and methods of instruction.
- f. Follow up and where necessary initiate action on all previously jointly agreed-to recommendations for improving the In-Service Training Program in the Republic of Korea Government.
- g. Assist as the needs arise with developing additional agreed-upon recommendations that will lead to action in improving In-Service Training.

- h. Take positive action to develop work plans, finance, initiate action, follow up and carry out the specific needs outlined under "3" above.
- i. Continue to organize and make available for ready use all library books, pamphlets, periodicals, newspapers and other materials that will be housed in the new library at National Officials Training Institute, now scheduled for completion in early May, 1959. This will include the selection and proper training of a librarian.
- j. Continue assistance to Government officials, college and university officials, leaders of industry, professional organizations and other community leaders, who continue to come to National Officials Training Institute in increasing numbers for consultation and advice in the field of Public Administration.
- k. Take action at the University of Minnesota toward selecting a replacement for Dr. E. R. Draheim, the current Overall Adviser in Public Administration at the National Officials Training Institute, whose present tour of duty expires at the close of this calendar year.

Operational Facilities. Funds provided in support of the ICA/Minnesota contract have not changed in total amount since preparation of the eighth semi-annual report. These amounts, by major purposes for which allocated, are as follows:

SUMMARY OF ICA/MINNESOTA CONTRACT OPERATIONAL FACILITIES DOLLAR FUNDS ALLOCATED
FOR FYS 55, 56, 57 AND 58
FOR SEOUL NATIONAL UNIVERSITY REHABILITATION, IMPROVEMENT, EQUIPMENT AND SUPPLIES

	<u>FY 1955</u>	<u>FY 1956</u>	<u>FY 1957</u>	<u>FY 1958</u>	<u>TOTAL</u>
<u>Agriculture</u>					
Rehabilitation and Improvement	\$422,300	\$ 650,000	\$ 159,000	\$ 5,000	\$1,236,300
Equipment and Supplies	----	260,000	50,000	20,000	330,000
Sub-total	422,300	910,000	209,000	25,000	1,566,300
<u>Engineering</u>					
Rehabilitation and Improvement	65,200	100,000	676,000	---	841,200
Equipment and Supplies	----	730,000	500,000	134,000	1,364,000
Sub-total	65,200	830,000	1,176,000	134,000	2,205,200
<u>Medicine</u>					
Rehabilitation and Improvement	63,500	275,000	345,000	102,700	786,200
Equipment and Supplies	----	450,000	70,000	171,300	691,300
Sub-total	63,500	725,000	415,000	274,000	1,477,500
<hr/>					
L.A.&S. - Equipment		50,000		40,000	90,000
Vet. Medicine - Equipment		50,000		27,000	77,000
SNU General - Equipment		35,000		---	35,000
		135,000		67,000	202,000
<hr/>					
Total Rehabilitation	551,000	1,025,000	1,180,000	107,700	2,863,700
Total Equipment	----	1,575,000	620,000	392,300	2,587,300*
TOTAL	\$551,000	\$2,600,000	\$1,800,000	\$500,000	\$5,451,000

*Excludes \$55,500 provided in Contract Amendment 10 for Public Administration. Most of this will go to SNU, but some to the National Officials Training Institute.

In addition local currency in the amount of Hw 3,133,110,000 (equivalent to \$6,266,220 at the official conversion rate of 500:1) has been approved for these purposes by the Combined Republic of Korea-U. S. Economic Board.

The previous 6-month report summarized the status of physical plant rehabilitation and improvement projects undertaken to October 19, 1958 with

Cooperative Project support funds. During this report period work continued as follows on these projects:

College of Agriculture. The new main building, auditorium and heating plant are well along toward completion and the fabrication of furnishings has just started. Some security fencing has been completed.

College of Engineering. Laboratory preparation work continued and construction of the planned new dormitories started.

College of Medicine. The new School of Nursing building was completed and is in use. Both interior and exterior building improvement projects are in progress at the Hospital.

School of Public Administration. This rehabilitation and improvement project was completed during this period. The building is in use.

National Officials Training Institute. Rehabilitation work planned has been completed and construction of the new library building started. This structure should be completed and in use before summer.

During the next six months work will continue on improvement projects now under way and, to the extent that material and equipment arrivals and funding permit, new work as summarized in the eighth semi-annual report will be undertaken.

As of April 1, 1959 the invoice value of classroom and laboratory equipment, supplies and library materials purchased by Minnesota and received in Korea totalled \$1,211,617. This amount is made up of the following sub-totals:

Seoul National University	
College of Agriculture	\$209,440
College of Engineering	\$586,279
College of Medicine	\$334,301
College of Veterinary Medicine	\$ 31,478
College of Liberal Arts & Sciences	\$ 37,967
School of Public Administration	\$ 10,721
National Officials Training Institute	\$ 1,431

Much of this equipment is already in use. Some items must await provision of additional laboratory space and facilities prior to installation and use. All such needs are receiving attention.

Status Summary of Contract Operations. Minnesota advisers have left with Korean colleagues many recommendations for change during the past four and a half years. Relative to these recommendations the following comments continue to be applicable and significant:

1. By and large suggestions for change as a basis for improving instruction and research in all areas are developed through close working relationships effected between Korean and American staff members concerned. Thus written reports, in most cases, simply make a matter of record conclusions and courses of action already subjects of much discussion and close agreement.

2. Seoul National University's President and Deans concerned indicate great interest in changes proposed and, in the main, have given the impression of accepting them as desirable guides for action in the fields concerned. The same is true of the Director, Republic of Korea Office of General Affairs, and the Dean, National Officials Training Institute, with respect to recommendations relating to in-service training.

3. Minnesota staff members respect the competence of their Korean colleagues. Both Korean and American staff members recognize that the advanced study programs of individuals now participating in the cooperative project will further advance the level of faculty competence in specific technical areas concerned.

4. The physical elements (structures, facilities, equipment) needed for carrying out certain recommendations are in the process of being supplied through the operational facilities portion of the Cooperative Project and in many areas are already exerting a beneficial effect on teaching and research.

5. The basic elements which make possible the effecting of instructional and research changes agreed upon as desirable are either present now in some degree or will be supplied, according to present plans.

6. Many of the changes desired by both Koreans and their American colleagues will come about only through the dedicated efforts of Korean officials and faculty members, and Republic of Korea Government officials, over a long period of time. Many recommendations have already been placed in effect; some may be carried out at an early date with staff and facilities now available; others will require more time.

7. At this stage of the Cooperative Project it appears that the improvement in depth objective of those formulating, funding and administering the undertaking is in the process of being achieved in the original contract fields of agriculture, engineering, and medicine, and that a substantial start in this

direction has been made in the last-added contract area - public administration. It is becoming more and more evident that as a result of the Cooperative Project significant changes have occurred in the knowledge level, skills, outlook and attitude of staff members who have had study opportunities abroad under the program. Of corollary importance are considered to be the specialized area analyses, improvement recommendations, and other forms of assistance provided by Minnesota staff serving in Korea.

Changes Effected by Project. In evaluating the results of a technical assistance project of the nature here concerned the character, extent and importance of changes which have occurred in consequence of the program are factors upon which determinations must largely rest. In this regard we are concerned not only with the views of advisers but with the more intimate knowledge of individual Korean faculty members, department heads and deans. To obtain the best possible appraisal of these factors the President of Seoul National University was again asked, as he has been prior to the preparation of preceding reports, for the University's views on this matter. It was requested that material be provided for each college concerned (except Law, since the new School of Public Administration to be organized there is just in the process of development) on the basis of the following outline:

1. The nature and extent (as specifically as possible) of additional changes in teaching, research, and administration that have come about wholly or partially as a result of the Cooperative Project. (Please do not repeat items reported previously.)

NOTE: Regarding this and the following item please consider contributions to improvement which have been made by staff exchange, equipment and buildings.

2. The nature and extent of changes in teaching, research and administration which will be placed in effect during the next semester as a result of the Cooperative Project. Of particular interest regarding teaching will be added and improved laboratory offerings.
3. Physical improvements (building repair and improvement and new construction) which have been completed during this 6-month period. A brief description of each will suffice.
4. The nature of building repair and improvement, and new construction which will be continued or started during the next 6-month period, and the planned completion date for each project.

5. Major obstacles which prevent the introduction of desired changes in teaching and research. Please specify the changes concerned and why it has not been possible to make them.
6. Whether or not hwan financing is sufficient for
 - a. the effective utilization of staff members who have had advanced study opportunities abroad under the Project, and
 - b. for the full and efficient use and maintenance of equipment and facilities provided.

Where deficiencies exist, please comment upon them specifically.

7. The extent to which new library materials are in use.

The core of the Seoul National University Cooperative Project is of course staff exchange. Thus it will be understood that a question of continuing importance is the use being made by Seoul National University of project participants who have returned to Korea after their periods of study abroad. To present this information briefly and clearly it was requested that data in the following table form be submitted for each returned participant:

<u>Name</u>	<u>Approx. length of stay abroad</u>	<u>Academic Rank</u>		<u>Teaching hours per week</u>		<u>Research completed or in progress since return</u>	
		<u>depar- ture</u>	<u>Now</u>	<u>prior to departure</u>	<u>now</u>	<u>Yes</u>	<u>No</u>

Reports submitted by the Deans concerned in response to this request reflect, as did those for the preceding 6-month period, support of the general conclusions set forth above, indicate further changes in instruction and research stemming from the graduate study opportunities afforded staff members, provide considerable detail (beyond the summaries given above) concerning the status and future plans regarding physical plant rehabilitation and improvement, give more examples of how equipment and supplies provided under the project have contributed to teaching and research, and comment on some of the continuing problems which affect obtaining the fullest possible good from the training and facilities provided. Concerning the latter, the main problem continues to be financing.

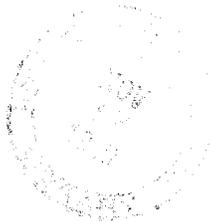
Data presented by Seoul National University concerning returned participants establish that all but one (a 1956 returnee who, after completing his obligatory period of service at the College, transferred to a responsible position in the Ministry of Agriculture and Forestry) are on the faculty of Seoul National University, and that 39 (38 per cent) of the 102 returnees serving with the Colleges of Agriculture, Veterinary Medicine, Engineering and Medicine have been promoted since their return. The return of previous teaching assistants and the assignment of full teaching loads to them has contributed markedly to more and better instruction. Research has also been encouraged and much investigative work is now in progress.

Contract Extension. The present termination date of the ICA/Minnesota contract is September 27, 1959. As stated in the immediately preceding report, Republic of Korea authorities concerned have indicated they would like to have this technical assistance project continued for an additional two years. During this 6-month period Minnesota staff members in Korea spent a great deal of time with Korean colleagues in working out plans for carrying out the 2-year continuation program outlined in the previous report. This program, has been discussed by Korean authorities concerned with OEC and Minnesota's Chief Adviser in Korea, has been transmitted by the latter to the University of Minnesota for consideration and was transmitted by OEC via Airgram to ICA/Washington on October 11, 1958. Though discussions of this proposed extension were continued during this 6-month period, as of the time this report was written no conclusive action in this regard had resulted.

Plans for the Next Six Months. Major plans for each contract area for the next six months are set forth in preceding sections of this report. In addition,

1. Planning will continue looking toward bringing the Project to an orderly and satisfactory conclusion by the present contract termination date pending definitive, reasonably early action to extend.
2. If the contract termination date is extended, staff exchanges for the lengthened period will be given appropriate further attention.
3. During this period Minnesota staff members will continue their education concerning Korea and the frame of reference pertaining to their areas of responsibility, will guide their activities as set forth under "Minnesota Staff in Korea", and will continue to strive to be of utmost assistance to Seoul National University and to the National Officials Training Institute of the Republic of Korea Office of General Affairs in helping to effect improvements in teaching, research, organization and administration.
4. Authorities concerned will continue to be assisted in working out plans and procedures involving the receipt, installation and use of equipment procured for the project. Assistance will also continue to be given relative to determining additional well-justified needs for equipment and supplies.
5. Physical plant rehabilitation and improvement needs will continue to receive appropriate attention. Particular attention will be paid to the expeditious planned use of building materials and supplies received.
6. Close liaison will continue to be maintained with those who have participated in the cooperative project and returned to Korea. The objectives of this liaison will be:
 - a. To determine how the continuing program might be improved, and
 - b. To assist them in any way feasible, through appropriate channels, to carry out effectively their part of cooperative project objectives.
7. The bearing which assistance to Seoul National University in areas such as the teaching of English and basic sciences could have on better attaining the objectives of the ICA/Minnesota contract will continue to be explored with OEC and Embassy Education personnel.

" 131 "



Tenth Semi-Annual
PROGRESS REPORT
to
INTERNATIONAL COOPERATION ADMINISTRATION
SEOUL NATIONAL UNIVERSITY OF KOREA
and
OFFICE OF GENERAL AFFAIRS, REPUBLIC OF KOREA
in behalf of
REGENTS OF THE UNIVERSITY OF MINNESOTA
covering the period
April 19, 1959 - October 19, 1959

Minneapolis 14, Minnesota
October 19, 1959

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I. OFFICE OF THE CAMPUS COORDINATOR

The First Five Years. September 28, 1959 marked the completion of five years of cooperative assistance to Seoul National University of Korea. The present report is the tenth in a series of semi-annual progress reports which are designed to provide information and data relating to a technical assistance contract in Korea, financed by the U.S. International Cooperation Administration. This contract involves the University of Minnesota with Seoul National University of Korea and with the National Officials Training Institute of the Office of General Affairs, Republic of Korea.

The present, or tenth report, as did its predecessors, calls attention to significant developments, points out major problems which have arisen, with an indication of attempts at their solution, sets forth progress that has been made toward the objectives of the program, and outlines specific plans being made for the next six months and, in a more general way, for the next two years.

Technical Assistance. Technical assistance to underdeveloped nations has, for a number of years, been one of the basic elements in U.S. foreign policy. Today the importance of such assistance is becoming more generally recognized. University contracts, designed to assist in strengthening educational institutions in underdeveloped countries, constitute significant, long-range technical assistance efforts involving the most important resources any nation possesses -- its human resources. The University of Minnesota considers itself fortunate in being able, through its sister relationship with Seoul National University of Korea and the National Officials Training Institute, to assist in a small way in contributing to the development of the Republic of Korea.

Historical Background. United Nations officials, following the Korean war, were convinced that higher education in the Republic of Korea needed

substantial assistance if it were to contribute significantly to the development of that war-ravaged country. The combination of the effects of World War II and the Korean War had resulted in damaged buildings, loss or destruction of equipment and supplies, and the loss of many faculty members. Korea had many universities and colleges, both public and private. To assist all of these institutions with the limited U. N., U. S., and Korean funds available would spread the benefit so thin that it would scarcely be profitable for any one of them. However, it was believed that assistance to Seoul National University, the preeminent higher educational institution in Korea and also the largest, would be the most profitable investment. This institution, when appropriately strengthened in staff, in equipment, and in physical plant, would then be able to supply more and better trained individuals. Those who in the future earned degrees in its Graduate School, particularly, would constitute an important resource from which other Korean educational institutions would be able to draw in the future to meet, at least in part, their faculty needs.

Upon the invitation of the U. S. Foreign Operations Administration (now the International Cooperation Administration) the University of Minnesota, in 1954, signed a contract designed to strengthen Seoul National University in its teaching, research, and public service activities in certain specified areas. Presently, not all of the twelve colleges of Seoul National University are being assisted. The original contract limited assistance to the broad fields of Agriculture, Engineering, and Medicine (including Nursing). This was later interpreted to involve Veterinary Medicine, a field closely associated with Agriculture. Still later, through a contract amendment, Public Administration was added, involving assistance in the establishment of a School of Public Administration in the College of Law and the provision of assistance to the National Officials Training Institute in the Office of General Affairs of the Republic of Korea Government.

Report Distribution. Because these detailed reports do provide both interesting and significant background, the University of Minnesota has discovered that they are of interest to a much larger audience than the International Cooperation Administration, the United States Operations Mission to Korea, Seoul National University, the Office of General Affairs of the Republic of Korea Government, administration and staff members of the University of Minnesota concerned with contract operations, and others immediately involved. As a consequence, it has been the policy to distribute copies to members of the Minnesota Congressional Delegation, to the American-Korean Foundation (both in the U. S. and Korea), to the Committee on Institutional Projects Abroad of the American Council on Education, and to interested institutions and individuals requesting copies for study.

Korean Advisory Committee. A committee appointed by the President of the University of Minnesota advises him on policy matters relating to contract operations. Members also serve as a source of advice and counsel on an informal basis to the Campus Coordinator when perplexing operational problems arise from time to time.

The committee presently consists of Dr. Malcolm M. Willey, Vice President, Academic Administration, Chairman; Mr. Laurence R. Lunden, Vice President, Business Administration; Dr. Harold Macy, Dean, Institute of Agriculture; Dr. William T. S. Thorp, Dean, College of Veterinary Medicine; Dr. A. F. Spilhaus, Dean, Institute of Technology; Dr. Robert B. Howard, Dean College of Medical Sciences; Dr. Gaylord W. Anderson, Director, School of Public Health; Professor John C. Kidneigh, Director, School of Social Work; Dr. Lloyd M. Short, Chairman, Department of Political Science and Director, Public Administration Center; and Dr. Tracy F. Tyler, Professor of Education and Campus Coordinator, Secretary.

No meetings of the committee were held during the period covered by the present report. The most recent meeting was held on January 27, 1959. President Yun was visiting the campus at that time and the meeting was convened so that committee members could discuss contract matters with him.

Medical Dean and Hospital Superintendent in U. S. A trip to the United States for three months of observations and consultations began with the arrival in Minneapolis on August 21, 1959 of Dr. Myung, Choo Wan, Dean, College of Medicine, SNU, and Dr. Kim, Dong Ik, Superintendent of the Hospital, SNU. Dean Myung is the second dean of SNU's College of Medicine to come to the U. S. under our ICA contract to observe and consult. Dr. Lee, Chae Koo, the then Dean, College of Medicine, arrived in Minneapolis on February 26, 1955. Three months were spent at the University of Minnesota, followed by approximately one month in visiting other institutions in the United States. Dean Lee returned to Korea on June 28, 1955.

Dr. Kim, Dong Ik left Minneapolis for New York on August 23, 1959 to spend a week in attendance at the meetings of the American Hospital Association, the President of which is Mr. Raymond M. Amberg, Director, University of Minnesota Hospitals. Dr. Kim took with him as his interpreter, Mr. Kim, Sang Chan, who arrived in the United States on August 19, 1959 as a participant in Hospital Administration.

Dr. Myung and Dr. Kim, together with Dr. N. L. Gault, Assistant Dean, College of Medical Sciences, University of Minnesota, spent the week of August 30 to September 5, 1959 in Chicago attending the meetings of the World Medical Congress. Dr. Han, Yong Chol served as interpreter for Dr. Myung. Dr. Han had reached the United States on August 17, 1959 as a participant in Internal Medicine.

Following their return to Minneapolis, Dr. Myung and Dr. Kim devoted their time until October 14, 1959 to observations and consultations at the University of Minnesota, and at the Mayo Foundation in Rochester. They also visited hospitals in the Twin Cities area.

Dean Myung and Dr. Kim left Minneapolis on October 14, 1959 to visit medical schools and hospitals in Atlanta, Richmond, Washington, D.C., Baltimore, Philadelphia, New York, Boston, Buffalo, Detroit and Chicago. Their schedule calls for returning to Minneapolis on November 4 to spend their final week in the Twin Cities before beginning their trip back to Korea on November 11, 1959.

Engineering Dean Visits U. S. Acting Dean Kim, Moon Sang, College of Engineering, SNU, reached Minneapolis on September 24, 1959. He plans to spend approximately three months observing classroom and laboratory methods at the University of Minnesota and elsewhere, thus familiarizing himself with the newer procedures in the training of engineers, in the prosecution of research, and in cooperation with industry. Mr. Lee, Young Joo, a Teaching Assistant in Chemical Engineering, who arrived in Minneapolis on August 27, 1959 to begin advanced studies in his chosen field, has assisted Dean Kim by serving as his interpreter.

Before his return to Korea, Dean Kim plans to spend approximately one month in visiting other engineering schools and industrial establishments in the United States so as to observe their operations and consult with members of their staffs.

SNU Academic Dean Visits Minnesota. Dr. Ryu, Paul K., Academic Dean, Seoul National University, stopped in Minneapolis on his trip back to Korea on September 6 and 7, 1959 in order to become better acquainted with staff members concerned with the ICA project. Dr. Ryu had left Korea in early April to attend conferences in Hawaii and to do editorial work at Yale on his Doctor's dissertation prior to its publication.

Dr. Richard H. Lindeman, presently in Korea as a member of the survey staff, served as Dr. Ryu's official host and handled arrangements for the visit. Dr. Ryu conferred with Vice President Malcolm M. Willey and representatives of the various segments of the cooperative project who were available during his visit. While at Minnesota, he was entertained by University staff members and also taken on a tour of the Twin Cities area.

Death of Engineering Dean. Hwang, Yung Mo, Dean, College of Engineering, Seoul National University, passed away on June 9, 1959. Funeral services and burial were on June 13, 1959. Dean Hwang had held the deanship during the entire period of the sister relationship between the two universities.

Dean Hwang, during his period in office, had made an invaluable contribution to the College of Engineering. His wide experience and understanding of engineering problems and his intense loyalty to Seoul National University have made his services difficult to replace.

Following the death of Dean Hwang Kim, Moon Sang, professor of Textile Engineering, was appointed Acting Dean.

Present Contract Extended. The contract negotiations which were referred to in the previous report continued through the entire period covered by the present report. When, in early August, 1959 it was apparent that a new three-party contract could not be drafted and signed by all parties concerned prior to the expiration of the existing contract (September 28, 1959), ICA/Washington proposed and the University of Minnesota accepted Amendment No. 17, effective August 11, 1959. This amendment continued the present contract through December 31, 1959 and allocated an additional sum of \$250,000 to finance operations during the extended three-month period.

There is every expectation that, prior to December 31, 1959, a new (possibly three-party) contract, agreeable to the Contractor, will be signed to continue operations through September 28, 1961.

Survey of Higher Education in Korea. In early discussions of the details involving the proposed extension of Minnesota's ICA contract it had finally been agreed in September, 1958 that one of the elements in the proposed extension would be the carrying on of a survey of Seoul National University.

Later, Dr. George D. Stoddard, Dean, School of Education, New York University, was employed as a consultant by ICA to spend two months in Korea (February and March, 1959) studying higher education in Korea. In his report, dated April 10, 1959, Dr. Stoddard wrote:

"If it is feasible to bring a team to Korea to make an intensive survey of Seoul National University in a setting that takes account of the whole system of higher education, as requested by SNU and endorsed by the Ministry of Education, the plan that follows could be used as a starting point."

Dr. Stoddard then enumerated the aims of the proposed survey as follows:

- "1. To evaluate the present program and organization of the University;
- "2. To outline long-range developments, making recommendations for a 'master plan';
- "3. To relate the plans for SNU to the developing system of national universities and teacher education in Korea, and to higher education in general;
- "4. To examine various options for possible OEC support with respect to buildings, equipment, apparatus, supplies and books, together with further advisory services in Korea and participants' training in the U. S."

Dr. Stoddard also suggested the specialists whom, he felt, should constitute the survey team. They were: university administration, teacher education, science and engineering, language and library science, the health professions (medicine, dentistry, nursing, pharmacy), and agriculture (including fisheries).

In order that there would be no confusion between the recommendations of the Stoddard Report and the plans for a survey being made by the University of Minnesota, inquiries were addressed to ICA/Washington, beginning June 1,

1959, as to the part the University of Minnesota was to play in the original survey or the one proposed by Dr. Stoddard. These inquiries resulted finally in a letter, dated June 29, 1959, from Mr. Edward E. Kunze of ICA/Washington indicating that a final decision on the survey-study proposal had been deferred pending the early arrival in Washington of the chief of OEC's Education Division.

Vice President Malcolm M. Willey and the Coordinator met with ICA staff members in Washington on July 8, 1959. In an all-day meeting those present discussed at some length the original proposal, Dr. Stoddard's proposal, and the possibility of attaining the objectives of the two proposals through a single contract with the University of Minnesota. It was finally agreed that, if certain specified adjustments could be made in the original plan which involved the use of Mr. William T. Middlebrook as survey director, and Dr. Richard H. Lindeman as his assistant, OEC's Education Division chief would recommend that the survey contract be awarded to the University of Minnesota.

OEC's Education Division chief, Dr. Clarence Hendershot and Mr. Matthew M. Flattery of ICA/Washington spent July 13, 1959 in Minneapolis in further discussions on the survey proposal with Mr. Middlebrook, Dr. Lindeman, Vice Presidents Willey and Lunden and the Coordinator. The all-day meeting resulted in the tentative solution of the major problems and the scheduling of a meeting in Minneapolis on July 17, 1959 at which time Dr. Stoddard and Dr. Hendershot would be present and a final agreement sought with respect to the survey and the part to be played in it by Mr. Middlebrook and Dr. Stoddard.

Attending the July 17, 1959 meeting were Dr. Hendershot, Dr. Stoddard, Mr. Middlebrook, Mr. Lunden, Dr. Lindeman, and the Coordinator. The all-day meeting resulted in complete agreement. Mr. Middlebrook and Dr. Stoddard agreed to serve as co-directors of the study and as co-authors of the

recommendations growing out of the data collected and the reports prepared by the various specialists. Mr. Middlebrook and Dr. Lindeman agreed to plan their departure so as to reach Korea approximately October 1, 1959 and begin the gathering of data. It was hoped that the five specialists would reach Korea in early January, 1960 and serve approximately three months. Dr. Stoddard would spend one month (probably March) in Korea assisting Mr. Middlebrook in writing the final report and preparing the recommendations. Plans were made for a final planning session in late August in Washington so that Mr. Middlebrook, Dr. Stoddard, Dr. Clarence Hendershot, Dr. Lindeman, Dr. Walter A. Anderson, and the Coordinator could finalize their plans with such assistance as might be provided by the appropriate staff members of ICA/Washington.

Subsequent to the July 17, 1959 meeting, a tentative operational plan for the survey was drafted by ICA/Washington. The draft used this language:

To assist Seoul National University with the development of long range plans Contractor will undertake as a special project, jointly with one or more ICA consultants and with the assistance of the University, the Ministry and USOM, an intensive survey of the University, taking into account its relationships with other national institutions of higher education. This study will evaluate the present program and organization of the University and recommend a long range plan for the University, relating the present and planned program of the University to the developing system of national universities and teacher education colleges, and examine various options for possible USOM support with respect to building construction, equipment, advisory services and participant training.

The final planning session was held in Washington on August 27, 1959. In addition to the individuals named above, ICA/Washington staff members present included Dr. Raymond T. Moyer, Director, USOM to Korea; Dr. Justin Williams, Chief, Korea Division; Dr. Edwin H. Trethaway, Education Division; Miss Alma E. Hughes, Public Administration Division; and Miss Marjorie V. Wheatley, Acting Contract Project Manager. The results of the meeting were most successful and final plans for the survey were completed and agreed upon.

The survey is now under way. Dr. Lindeman reached Korea on September 25 and Mr. Middlebrook on September 26. They are presently busy gathering data and carrying on interviews. The five specialists have been selected and presumably will proceed to Korea in early January, 1960. They are: Agriculture, Dr. Mason H. Campbell, University of Rhode Island; Engineering, Dr. Elmer C. Easton, Rutgers University; Medical Sciences, Dr. Jean A. Curran, New England Center Hospital, Boston; Social Sciences and Humanities, Dr. Chester W. Wood, University of Minnesota Duluth; Teacher Education, Dr. Walter A. Anderson, New York University. Dr. Stoddard plans to spend the month of March in Korea.

College-Level Advisers. Two college-level advisers continued to provide service during the period covered by the present report. Professor Clarence E. Lund serves Korean participants enrolled in Engineering and Dr. Clyde H. Bailey, Dean and Professor Emeritus, Institute of Agriculture, continues to serve Korean participants in Agriculture and in Veterinary Medicine.

Dr. Gaylord W. Anderson, Mayo Professor of Public Health and Director of the School of Public Health, College of Medical Sciences, continues to provide advisory services to Korean participants in Medicine at no cost to the contract.

Advisers in Agriculture. Roy O. Bridgford, associate professor emeritus of Agronomy, continues his service in Korea as overall adviser in Agriculture and, in addition, as special adviser in Agronomy. As a result of his trip to Minnesota covering the period, December 17, 1958 to January 23, 1959, Professor Bridgford has been able to advance substantially certain programs of plant propagation and breeding, particularly in the fields of Agronomy and Horticulture, as well as counseling in an even broader area.

The search for a staff member to serve as a specialist in Animal Husbandry finally ended with the selection of Arthur L. Anderson, Professor Emeritus of Animal Husbandry, Iowa State College, Ames, Iowa. Professor Anderson reached Korea on August 7, 1959 and has agreed to serve in Korea for a period of six

months. He will provide advice in Animal Husbandry and related fields, with special emphasis on swine. Mrs. Anderson accompanied her husband to Korea at her own expense and without cost to the contract.

Professors Bridgford and Anderson constitute a well-balanced team of advisers, since one specializes in the plant field and the other the animal, and both having had adequate experience in the scientific as well as the practical and technological aspects of their respective specialties.

The Chief Adviser, a professional forester, continues his availability as a consultant in his specialty in addition to the multiplicity of duties as "representative of the Contractor in Korea" and, as such, "responsible for the supervision of the performance of all duties undertaken" by the University of Minnesota and its staff serving in Korea.

Veterinary Medical Advisers. The College of Veterinary Medicine has experienced considerable difficulty in providing faculty members to render service in Korea for six months or a year, preferably the latter. It is hoped that this situation will be improved. However, no success has yet been attained in securing a member of the Minnesota faculty to spend a year serving as overall adviser to the College of Veterinary Medicine, Seoul National University.

Engineering Advisers. Dr. Paul Andersen, Professor of Civil Engineering, agreed to accept the post of overall adviser in Engineering, vacated by the illness and return to the U. S. of Professor Clarence E. Lund, for a period of six months. He had served previously in Korea for a period of some four and a half months in late 1956. Dr. Andersen had planned to leave Minneapolis on June 17, 1959 but was unable to do so because of the delay in securing the necessary country clearance. He finally was cleared and reached Korea on July 11, 1959.

A continuous search has been made for an overall adviser to replace Dr. Andersen when he completes his tour of duty in December, 1959, but without

success. A number of contacts have been made, but the individuals have not had the desired qualifications. It has proved extremely difficult to find an individual who has the qualifications and will agree to serve for a period of as long as six months, much less one year. All seem reluctant to jeopardize their professional contacts and status by an absence of such long periods. Efforts continue to fill the post.

Dr. Clarence E. Schwartz, associate professor of Chemical Engineering, University of Virginia, completed his one year of service under the contract and left Korea on August 15, 1959, returning to his post in Charlottesville. His major accomplishments consisted of re-designing the unit operations laboratory and supervising the installation of the equipment. The new laboratory was approximately 80 per cent completed at the time of Dr. Schwartz's departure.

James W. McCarty, associate professor of Textile Engineering, Georgia Institute of Technology, arrived in Korea on September 15, 1959 to serve for a period of one year as adviser in Textile Engineering. His arrival was opportune since the Department of Textile Engineering was in urgent need of an adviser to assist them in the rehabilitation of their laboratories. A large amount of laboratory equipment is on order and has already started arriving, so that Professor McCarty was able to provide valuable assistance immediately upon his arrival.

A search is underway for an adviser to the Department of Metallurgy. It is hoped that the individual selected will be able to begin his service in Korea by April 1, 1960.

The College of Engineering has requested the services of an adviser in Nuclear Engineering. However, this area requires further study and evaluation as to how this new department would be effectively integrated with other allied departments.

Medical Advisers. Four medical advisers were serving in Korea as this report was being written. They are Dr. George Schimert, Miss D. Joan Williams, Dr. Eldon B. Berglund, and Dr. N. L. Gault, Jr.

Dr. Schimert began his service of one year under the contract on July 6, 1958. Later, he agreed to serve an additional period of three months. By leaving Korea on October 7, 1959 he was able to provide a brief overlap with his successor as overall adviser, Dr. N. L. Gault.

During the period covered by the present report, plans have been formulated for additional personnel to go to Korea. Two of these have already begun their service: Dr. Eldon B. Berglund, clinical assistant professor of Pediatrics, who reached Korea on September 5, 1959, and Dr. N. L. Gault, Jr., assistant dean, College of Medical Sciences, and an associate professor in the Department of Medicine, who reached Korea on October 5, 1959.

Dr. Gault, who replaces Dr. Schimert as overall adviser in Medicine, brings to the program the administrative experience of the Dean's Office, a matter of considerable concern and importance at this stage of the contract. His clinical interests lie in the field of rheumatism where he will again make a significant contribution since no adviser had been sent previously with that special interest.

Mrs. Gault is, herself, a physician with a special interest, training, and background in the field of Physical Medicine and Rehabilitation. While no arrangements have so far been made for her to serve on the contract staff, her presence in Seoul can potentially be of substantial assistance to the Korean medical faculty in the development of this phase of clinical teaching.

Dr. Gault has agreed to serve in Korea for one year but there is a very real possibility that, following his first year, he may be willing to continue for a second year and thus provide the longest period of service of any overall adviser in Medicine who had previously served in Korea.

Pediatrics is a field in which, in the past, it had been impossible to recruit a staff member for Korean service. This position has now been filled through the services of Dr. Eldon B. Berglund, a practicing pediatrician in the Twin Cities. A man who has received excellent training and has earned American Board certification as a specialist in his chosen field, Dr. Berglund, in addition to his private practice, has maintained a close teaching connection with the College of Medical Sciences and is fully prepared to serve as an adviser in the field of Pediatric Education.

Plans have been completed for the replacement of the nursing adviser, Miss D. Joan Williams, whose one-year period of service ends in December and who finds it impossible to extend her period of service. Miss Florence J. Julian, professor and director of nursing services, University of Minnesota Hospitals, has agreed to a one-year period of service in Korea. Personnel considerations at University Hospitals make it necessary to defer the beginning of her service until April, 1960, but the gap in service between Miss Williams' departure and Miss Julian's arrival will probably prove beneficial as it will give staff members in the Korean School of Nursing a little more experience in serving on their own without the assistance of an adviser.

Public Administration Advisers. Ten American staff members are presently serving in Korea under the Public Administration segment of the contract. The five who were serving at the end of the immediately preceding report period and continue to serve are: Dr. Stuart A. MacCorkle, Dr. Erwin R. Draheim, Mr. Leigh W. Hunt, Jr., Mr. William B. Berg, and Mrs. Elsie G. Hagelee.

The five who began Korean service during the period covered by the present report are Professor William F. Larsen, who arrived in Korea on June 20, 1959; Dr. John A. Dettmann, who reached Korea on July 29, 1959; Dr. Elwyn A. Mauck, whose arrival date was August 17, 1959; Dr. Glenn D. Paige, arriving September 3, 1959; and Dr. Arthur M. Borak, with a September 9, 1959 arrival.

Professor Larsen is advising in Personnel Administration; Dr. Dettmann in Governmental Accounting; Dr. Mauck in Public Administration; Dr. Paige in Research; and Dr. Borak in Financial Administration.

Agricultural Programs. At the beginning of the present report period, nine faculty members from SNU were engaged in advanced study on the St. Paul Campus of the University of Minnesota. Three of these were from the College of Veterinary Medicine and six from the College of Agriculture at Suwon. Members of the SNU faculty in Agriculture represented the following specialties: Soils, Entomology, Horticulture, Agricultural Economics, and Agricultural Engineering. Three of the six completed Ph. D. degrees during the period covered by the present report and returned to Korea. A fourth member of the group hopes to complete a Ph. D. and leave for Korea early in the next report period. The other two will remain through the winter quarter, 1960.

In the early fall, 10 new participants in Agriculture were added to the contract. Three of these are studying elsewhere: Miss Mo, Sumi is studying Home Economics at the University of Massachusetts, Mr. Wang, In Keun is studying in the Department of Agriculture and Extension Education at the University of Wisconsin, and Mr. Choe, Byong Hee is studying protein chemistry and carrying on special laboratory investigations on silk protein preparations at Lowell Technological Institute.

The arrival of two additional (1959-60) Korean Agricultural participants has been deferred until January, 1960.

Veterinary Medical Programs. There were three participants in Veterinary Medicine studying at the University of Minnesota as the present report period began. One of these, Dr. Kim, Sang Nam, completed his studies and returned to Korea. He spent a year working in the Division of Veterinary Anatomy, in the area of Histology, and did unusually outstanding work. The other two are continuing studies leading to the Ph. D. degree in the Division of Veterinary Bacteriology. They are Dr. Cho, Byong Ryul and Dr. Jeon, Yun Seong.

There were two fall, 1959 arrivals, Dr. Jang, Du Hwan (Parasitology) and Dr. Lim, Chang Hyeong (Pathology). Their research programs remain to be worked out.

A third 1959-60 participant, Dr. Cheong, Chang Kook is expected to arrive soon to work in the Division of Surgery and Radiology.

Considerable freedom is given the Korean faculty members regarding their research problems. However, the College endeavors to relate the problem to the animal disease problems of their country, as well as their needs in the basic sciences. The close working relationship of the College of Veterinary Medicine with the Institute of Agriculture continues to afford the Korean faculty an opportunity for relationships with the animal science areas, and to further such a relationship to Korea.

Engineering Programs. During the present period, eight Korean participants in Engineering returned to Korea after completing degree work. One earned a Ph. D. degree and the other seven earned M. S. degrees. Five participants were given extensions to enable them to complete degree requirements.

Seven new participants in Engineering began studies or observations in the fall of 1959. Of the five planned for periods of study of one year or more, two were in Nuclear-Electrical Engineering, two in Chemistry, and one in Textile Engineering. The latter, Cha, Kyung Mo is studying at Lowell Technological Institute, the others at the University of Minnesota.

The other two fall, 1959 arrivals were senior staff members. One is Acting Dean Kim, Moon Sang, who will spend approximately three months in observations and consultations at Minnesota and elsewhere and the other, Professor Lee, Ryang, head, Department of Mechanical Engineering, who will devote some six months to observations, consultations, and study at Minnesota and elsewhere.

Dean Kim, Moon Sang and his faculty feel strongly that an overall adviser, whose interests extend to all Engineering departments, is highly desirable for the next two years. Certain areas require additional improvement to equal the improvement in other areas. This should not seem surprising when one considers the task of rehabilitating the College of Engineering, which, in 1954, consisted primarily of damaged and war-ravaged buildings.

The status of each department must be evaluated as to additional assistance required. Certain departments, because of lack of funds, were required to delay their requests in order to maintain continuity of equipment needs in other departments.

A continuous search has been conducted to find a qualified replacement for the present overall adviser, Dr. Paul Andersen, whose tour of duty terminates in late 1959. To be effective, the period of service should be a minimum of one year. This is the biggest obstacle to overcome in attempting to obtain the right person. The Korean administrators, because of the importance of the post, are extremely critical of the qualifications in reaching a decision on any proposed appointee.

The College of Engineering is in the process of establishing a new department of Nuclear Engineering. The department is still in the planning stage and will need considerable study by the Koreans before the plans are finalized. In this connection they expect substantial assistance from Minnesota's Institute of Technology. This subject is to be reviewed in the near future with the specialized staff members within the Institute of Technology. Review will include curricula, laboratories and equipment requirements, and the like, which are capable of implementation within the Korean situation.

Steps should be taken to assist the staff in activating research projects which are basic to the improvement of the staff, students, College, and the Korean economy.

Medical Programs. The past six months have seen a striking expansion of activity within the Medical portion of the project, due largely to the prospect of a two-year extension of the contract. During previous years SNU's College of Medicine had sent to Minnesota members of its faculty drawn from almost all, if not all, of the medical fields except medical history. A substantial number of these had been senior personnel, which was in keeping with the original thinking that a certain number of key senior staff should be brought to Minnesota in the hopes of giving them some basic understanding of the American system of education, not with the thought that they would necessarily learn much of a technical nature to be carried back with them.

There had been some misgivings, at the Minnesota end, as to what had been the value of bringing these senior staff to Minnesota, since many of them seemed to get little from their American experience, due in part to language limitations. It has been encouraging, therefore, to learn from Minnesota staff serving in Korea that several of those about whom there had been reservations had apparently absorbed more of the American idea of medical education than had been realized and were actually quite vocal and influential in instituting changes in the medical curriculum upon their return. It was thus apparent that the time given to senior staff who had come here from the fields of medicine, surgery, pediatrics, psychiatry, physiology, pharmacology, anatomy, and dermatology had paid greater dividends than had been realized and more in keeping with the hopes that were incorporated into the original planning.

In preparation for the 1959-60 academic year the SNU Medical faculty, in collaboration with Minnesota advisers in Korea, have laid out a plan for a larger number of trainees than had been previously received in a single year.

It is of interest to note from this list that, with one or two exceptions, the personnel selected are junior staff members and that a very high proportion

of them are planned for a two-year period of study. It is also interesting to note that a substantial number of these participants have been allocated to the staff of the School of Nursing and the new proposed School of Public Health, indicating a sincere interest on their part to build up these aspects of their broad program within the College of Medicine. The group also represents in general a better quality of background in English than has been the case in former years, so much so that there is a real possibility that several might, in the two years of study, complete programs leading to Master's degrees.

Supplementing the program of formal instruction has been the development of plans for short term visits of key top personnel. These include Dean Myung, Choo Wan, Dr. Kim, Dong Ik, superintendent of the SNU Hospital, two of the senior staff in Medicine, and one in Surgery. The first two are to be in this country for approximately three months and the others for six months. The plan to include the head of the Department of Pediatrics was postponed for a year, owing to our ability to send a pediatrician to Seoul for the intervening year, it being felt that their pediatrician might better come here after the visit of our pediatrician. While there are quite obvious language limitations with respect to these short term visitors, it is the expectation that they will be able to observe enough of teaching methods to give them a better concept of methods of clinical instruction and particularly the use of students as clinical clerks. One of the principal criticisms of the past curriculum in Seoul has been the lack of clinical contact between student and patient, too great reliance having been placed upon the didactic instruction from the professor. Even with limited knowledge of English, it will be possible for these clinicians to observe and understand the extent to which during our two clinical years the medical student participates in the actual medical care of the patient and thus learns through actual practice rather than relying on memorization of what has been presented in a formal lecture.

Of the group who have come to Minnesota this year, we have been able to accommodate all at Minnesota except a participant desiring to study legal medicine. Formal instruction and training in this field are available in few places in the United States. While we could have worked out a program of study jointly with the Department of Pathology and the Office of the Coroner of Minneapolis, it seemed preferable to attempt placement in one of the few places where formal instruction is provided. We have been fortunate in being able to place him with Dr. Milton Helpern, Medical Examiner of New York City and Professor of Legal Medicine in the New York University post-graduate medical school. Here Dr. Rho, Yong Myun will receive most excellent instruction, covering a broad range of medical legal problems, far better instruction and practical training than we could have provided in Minneapolis.

One of the most notable events of the past six months from the standpoint of medicine has been the satisfactory completion of the first Ph.D. program under the medical portion of the contract. Dr. Kim, Jae Nam, a teaching assistant in Anatomy, came to Minnesota as one of the first trainees and was placed under the tutelage of Dr. Arnold Lazarow and Dr. Lemen J. Wells in the Department of Anatomy. As it soon appeared that he had the potentiality of completing a doctoral program, he was enrolled in a program of study and research which might lead to the Ph.D. degree. This he earned during the past six months, receiving his degree at the June, 1959 commencement. At the same time, he was elected to membership in Sigma Xi, the honorary scientific fraternity, the first of the Korean faculty to be so recognized.

Almost coincidental with the accomplishments of Dr. Kim has been the progress of Dr. Lee, Ho Wang in the Department of Bacteriology. Dr. Lee came to Minnesota the same fall (1955) as did Dr. Kim. After a rather shaky first year, occasioned by language limitations, his full potentialities came to

light and he has been working on a Ph.D. program, since earning a Master's degree in December, 1957. His Ph.D. program is under the direction of Dr. William F. Scherer, a virologist in the Department of Bacteriology who had been in the Orient while in military service and had carried on rather extensive studies of Japanese encephalitis. Dr. Lee has been working under his direction, developing methods of virus growth which give promise of being a significant factor in the further development of effective vaccines against this disease which has caused so many deaths during the past two years in Korea. Dr. Lee's research has been finished and as this report is being written he is in the process of preparing his thesis so that he can stand his final examinations in November, following which he will return to Korea. Having successfully passed his preliminary examinations, there is every reason to anticipate his success with his final which is based on the thesis. A preliminary report on some of his studies has already been published and is a matter of record in scientific literature.

It is too early to say whether or not any of the new group will be persons of the quality to go on to a doctoral program but it is to be truly hoped that even with the termination of the contract following the present extension some method can be found for support of the one or two students who might be of the quality to complete a doctoral program if given further extension of time and support.

Public Administration Programs. The broad plan for the development of the Public Administration program in Korea under Minnesota's ICA contract was presented in the report of June 25, 1957, prepared by George A. Warp, professor of political science and associate director, Public Administration Center, University of Minnesota. The report was prepared after a three-and-one-half week survey in Korea and after visits to ICA/Washington and the campuses of five universities having similar Public Administration projects.

The plan called for the establishment of a School of Public Administration at Seoul National University to offer a graduate training program leading to a Master's degree in Public Administration, and for the development of the National Officials Training Institute in the Office of General Affairs of the ROK Government to offer special training courses for government employees.

During the first two years, 1957-59, the emphasis has been on the training in the United States of a corps of Korean instructors, the development of in-service training in the ROK Government, the establishment of two special Public Administration libraries, and the planning and establishment of a new School of Public Administration in the College of Law, Seoul National University.

Nineteen staff members of Seoul National University and eight employees of the ROK Government have spent at least one year each in study at the University of Minnesota. All of the participants work for the degree of Master of Arts in Public Administration (M.A.P.A.) and are required to take a special seminar in Public Administration and a special project course.

Each participant prepares for a particular specialty, so that no two of the academic programs are alike. The participants visit government offices in the Twin Cities area, participate actively in the University of Minnesota chapter of the American Society for Public Administration and attend the National Conference, take special seminars in teaching methods, and serve five-week internships with carefully selected government agencies. They prepare their thesis after they return to Korea on topics which are part of an overall public administration research plan. Some of the participants are selected to work for Ph.D. degrees.

Fourteen of the staff members from Seoul National University and five of the employees of the Korean Government have returned to Seoul and are participating in the programs at Seoul National University and at the National

Officials Training Institute. Four Master's degrees have already been conferred, another will be conferred in December, 1959. Two participants have completed the preliminary written and oral examinations for the Ph.D. degree, another participant expects to complete his examinations in November, 1959. Three participants will begin their second year of course-work for the doctorate.

The development of the Korean Program in Public Administration has followed the original plan which was worked out in close consultation with officials of Seoul National University and the ROK Office of General Affairs.

Participant training in Minneapolis during the next two years will be conducted on a much smaller scale than during the first two years of the program. It is hoped that several of the participants will be able to return to Minnesota for Ph.D. work. Needed equipment will continue to be procured and sent to Korea. Additional materials for the special public administration libraries will be selected and ordered. It is hoped that the staff in Korea will gradually take over the task of selection of materials. It is planned to copy selected out-of-print and miscellaneous materials for use in the special libraries. And further attention will be given to developing the relationship between the programs in Korea and the Public Administration Center at the University of Minnesota, which will continue after the termination of the Public Administration segment of the ICA - University of Minnesota contract.

Agricultural Equipment. On May 30, 1959, a supplement to the previous requests for equipment and supplies for the College of Agriculture, SNU, was transmitted to the Purchasing Department, University of Minnesota. This supplement covered expressed needs of all departments of that college, and totalled about \$19,000. Following a detailed study by Minnesota specialists and approval by the Coordinator, processes were set into motion to affect the purchase and shipment of such items as are actually available, and good progress has already been made in that direction.

Engineering Equipment. During the past six months, a total of \$30,740 has been allocated to the procurement of new equipment to complete the FY 1958 allocation as follows: 1. Electrical Engineering, \$9,731; 2. Mechanical Engineering, \$15,881; 3. Metallurgy (supplement), \$5,128.

To date a total of \$1,138,740 has been committed for purchasing. Approximately \$825,000 of the equipment has been delivered in Korea, with an additional \$283,000 placed on order and waiting to be received. Through adjustments of estimates during the fiscal years 1955, 1956, 1957, and 1958 a balance of approximately \$186,000 remains to be committed.

Public Administration Equipment. Two special Public Administration libraries are being developed, one at Seoul National University and the other in the ROK Government. Miss Myrtle Eklund, librarian, Public Administration Center, University of Minnesota, devotes a portion of her time to the selection of books and periodicals for these libraries. A good library of audio-visual materials has also been procured for the NOTI library in the ROK Government.

Service in Korea. Previous reports have provided tabulations of all of the staff members who had served in Korea under our ICA contract previous to the date of the issuance of the report. The accompanying table brings these data up to date. It reveals that as of October 19, 1959, 46 staff members have served in Korea. Their total service to date adds up to 479 man-months or 39 11/12 man-years. These 46 individuals represented 36 different academic fields. Of this total, 2 individuals served 114 man-months or 9 1/2 man-years in project administration; 10 individuals served 73 man-months or 6 1/12 man-years in Agriculture; 10 individuals served 83 man-months or 6 11/12 man-years in Engineering; 10 individuals served 108 1/2 man-months or 9 1/24 man-years in Medicine; 1 individual served 3 1/2 man-months or 7/24 man-years in Veterinary Medicine; 11 individuals served 95 man-months or 7 11/12 man-years in Public Administration; and 2 individuals served 2 man-months or 1/6 man-year on the Survey of Seoul National University.

TOTAL SERVICE OF STAFF MEMBERS SENT TO KOREA
September 5, 1954 to October 19, 1959

Name	Date Service Began	Last Day Served	Man Months	Man Years	Prof. Field	Rank
<u>Project Administration</u>						
Arthur E. Schneider	9- 5-54		61 $\frac{1}{2}$		Chief Adviser	Prof.
N. Gertrude Koll	5-31-55		52 $\frac{1}{2}$		Secretarial	Adm. Secy.
TOTALS			114	9 $\frac{1}{2}$		
<u>Agriculture</u>						
Clyde H. Bailey	9- 3-55	12-17-55	3 $\frac{1}{2}$		Ag. Biochem.	Prof. & Dean Emer.
Philip W. Manson	9- 3-55	2- 2-56	5		Ag. Eng.	Prof.
Paul M. Burson	6- 1-56	12-14-56	6 $\frac{1}{2}$		Soils	Prof.
Harald Ostvold	6- 1-56	9-18-56	3 $\frac{1}{2}$		Library	Asst. Prof.
Andrew Hustrulid	8- 1-56	1- 5-57	5		Ag. Eng.	Prof.
Frank H. Kaufert	8-13-56	11-28-56	3 $\frac{1}{2}$		Forestry	Prof. & Head
Roy O. Bridgford	2-25-57		32		Overall Ag.	Assoc. Prof.
Thomas H. King	3-29-57	9-13-57	5 $\frac{1}{2}$		Pl. Path.	Prof.
Clarence E. Mickel	3-29-57	9-26-57	6		Entomology	Prof. & Head
Arthur L. Anderson	8- 1-59		2 $\frac{1}{2}$	$\frac{1}{12}$	An. Husb.	Prof.
TOTALS			73	6 $\frac{1}{12}$	9 fields	
<u>Engineering</u>						
William R. Weems	2- 1-55	7-16-56	17 $\frac{1}{2}$		Overall & Aero	Prof.
Carl Graffunder	9- 9-55	12-12-55	3		Architecture	Lecturer
Sidney C. Larson	9-16-55	12-19-55	3		El. Eng.	Assoc. Prof.
Clarence E. Lund	9-26-55	12-23-55	3		Mech. Eng.	Prof.
	4- 1-58	3-16-59	11 $\frac{1}{2}$		Overall & Mech.	Prof.
Chapin A. Harris	6- 4-56	9- 1-56	3		Text. Eng.	Prof.
William W. Staley	6-16-56	9-27-57	15 $\frac{1}{2}$		Overall & Mining	Prof.
Paul Andersen	7-31-56	12-21-56	4 $\frac{1}{2}$		Civil Eng.	Prof.
	6-17-59		4		Overall & Civil	Prof.
J. Harvey Evans	4- 1-57	7-12-57	3 $\frac{1}{2}$		Naval Arch.	Prof.
Clarence Schwartz	8- 7-58	9- 3-59	13		Chem. Eng.	Assoc. Prof.
J. W. McCarty	9-10-59		1 $\frac{1}{2}$	$\frac{11}{12}$	Textile Eng.	Assoc. Prof.
TOTALS			83	6 $\frac{11}{12}$	9 fields	
<u>Medicine</u>						
William F. Maloney	3-24-56	7-11-56	3 $\frac{1}{2}$		Overall & Med.	Asst. Prof. & Asst. Dean
Margery S. Low	1- 1-57	2-10-59	25 $\frac{1}{2}$		Nursing	Asst. Prof.
James H. Matthews	5- 2-57	12- 6-58	19		Overall & Anesth.	Asst. Prof.
Glenn R. Mitchell	5- 2-57	12-10-58	19		Hosp. Adm.	Asst. Dir. Univ. Hosp.
Edmund B. Flink	8- 1-57	2-18-58	6 $\frac{1}{2}$		Int. Med.	Prof.
George Schimert	7- 6-58		15 $\frac{1}{2}$		Overall & Surg.	Asst. Prof.
E. B. Brown, Jr.	7-25-58	2-12-59	6 $\frac{1}{2}$		Physiology	Prof.
D. Joan Williams	12-15-58		10		Nursing	Asst. Prof.
N. L. Gault, Jr.	8-30-59		1 $\frac{1}{2}$		Overall & Med.	Assoc. Prof. & Asst. Dean
Eldon Berglund	9- 2-59		1 $\frac{1}{2}$	$\frac{1}{24}$	Pediatrics	Asst. Prof.
TOTALS			108 $\frac{1}{2}$	9 $\frac{1}{24}$	7 fields	

Name	Date Service Began	Last Day Served	Man Months	Man Years	Prof. Field	Rank
<u>Veterinary Medicine</u>						
Willard L. Boyd	9- 7-57	12-24-57	3 $\frac{1}{2}$		Overall V.M.	Prof. & Dean Emer.
TOTAL			3 $\frac{1}{2}$	$\frac{7}{24}$	1 field	
<u>Public Administration</u>						
E. R. Draheim	12-19-57		22		Overall & Trng.	Prof.
Stuart A. MacCorkle	3-16-58		19		Overall & Govt.	Prof.
Leigh W. Hunt, Jr.	7 -1-58		15 $\frac{1}{2}$		Library	Asst. Prof.
William O. Farber	7-31-58	1-29-59	6		Research	Prof.
William B. Berg	10-12-58		12		Pers. Trng.	Asst. Prof.
Elsie G. Hagelee	2- 6-59		8 $\frac{1}{2}$		Secretarial	Sr. Secy.
William F. Larsen	6-17-59		4		Pers. Adm.	Prof.
John A. Dettmann	7-26-59		3		Govt. Acctg.	Prof.
Elwyn A. Mauck	8-14-59		2		Pub. Adm.	Prof.
Glenn D. Paige	8-31-59		1 $\frac{1}{2}$		Research	Asst. Prof.
Arthur M. Borak	9- 6-59		1 $\frac{1}{2}$	$\frac{11}{12}$	Fin. Adm.	Assoc. Prof.
TOTALS			95	7 $\frac{11}{12}$	8 fields	
<u>SNU Survey</u>						
Richard H. Lindeman	9-22-59		1		Inst. Res.	Ass't Prof.
William T. Middlebrook	9-23-59		$\frac{1}{2}$	$\frac{1}{6}$	Bus. Adm.	V. P. Emer.
TOTALS			2	$\frac{1}{6}$	2 fields	
GRAND TOTALS			479	39 $\frac{11}{12}$	36 fields	

Korean Faculty Participants. The accompanying table reveals that of the 146 Korean faculty members studying in the United States at the time of the previous report, 25 have completed their studies and returned to Korea. Three of these were from Agriculture, 8 from Engineering, 5 from Medicine, and 9 from Public Administration. In addition, 46 participants were added to the program. Eleven of these were from Agriculture, 7 from Engineering, and 28 from Medicine. Thus, as of the date of this report, a total of 205 participants have been supported under this ICA contract. One hundred thirty eight of these have completed their studies and returned to Korea and 67 are presently studying in the United States.

Of these 67 Korean faculty members, 62 are studying at the University of Minnesota, 1 is at the University of Wisconsin, 1 at New York University

Postgraduate Medical School, 1 at the University of Massachusetts, and 2 at Lowell Technological Institute.

The 67 Korean faculty members presently studying in the United States are divided as follows: Agriculture, 12; Veterinary Medicine, 4; Engineering, 12; Medicine, 30; Public Administration, 9. Of the Public Administration participants, 6 are from the School of Public Administration, SNU, and 3 are from the National Officials Training Institute, Office of General Affairs, ROK Government.

SEMI-ANNUAL STATISTICAL DATA BY COLLEGES
FOR KOREAN PARTICIPANTS

	<u>Total No. of Particip.</u>					<u>Still Participating</u>					
	<u>Arrivals</u>	<u>Ag.</u>	<u>Eng.</u>	<u>Med.</u>	<u>Pub.Ad.</u>	<u>Departures</u>	<u>Ag.</u>	<u>Eng.</u>	<u>Med.</u>	<u>Pub.Ad.</u>	<u>Total</u>
1st Report	7	2	4	1	0	0	2	4	1	0	7
2nd Report	44	11	19	21	0	3	9	19	20	0	48
3rd Report	7	16	20	22	0	5	13	17	20	0	50
4th Report	44	25	46	31	0	26	16	31	21	0	68
5th Report	1	25	47	31	0	6	15	29	19	0	63
6th Report	32	32	54	36	13	36	19	17	10	13	59
7th Report	0	32	54	36	13	7	13	17	9	13	52
8th Report	22	36	55	40	26	26	9	15	7	17	48
9th Report	2	36	55	41	27	4	8	13	7	18	46
10th Report	46	47	62	67	27	25	16	12	30	9	67
TOTALS	205	47	62	67	27	138	16	12	30	9	67

Participant Man-Months and Man-Years. A second table concerning participants provides data on arrivals, departures, number of participants during each quarter, and cumulative man-months and man-years by calendar quarters beginning January 1, 1955 - the first quarter during which there were Korean

faculty participants brought to the United States under the ICA contract. The last two columns show the cumulative man-months and man-years for each of the 19 quarters involved and enable the reader to estimate the magnitude of the educational program which has been provided for the Koreans. Specifically, the tabulation reveals that a total of 223 man-years of observation, consultation, and graduate study had been provided under the ICA contract for the 205 Koreans who had been supported through September 30, 1959.

QUARTERLY MAN-MONTH AND MAN-YEAR
DATA FOR KOREAN PARTICIPANTS

	Arrivals	Departures	Participating	Man Months	Cumulative Man Years
1-1-55					
to	1	0	1	1	0.1
3-31-55					
4-1-55	21	1	21	38½	3.5
6-30-55					
7-1-55	29	2	48	117	9.8
9-30-55					
10-1-55	3	3	48	260	21.7
12-31-55					
1-1-56	0	2	46	400½	33.4
3-31-56					
4-1-56	13	2	57	568½	47.4
6-30-56					
7-1-56	35	19	73	767	63.9
9-30-56					
10-1-56	0	6	67	970	80.8
12-31-56					
1-1-57	1	5	63	1,163½	97.0
3-31-57					
4-1-57	0	7	56	1,352	112.7
6-30-57					
7-1-57	32	28	60	1,509½	125.8
9-30-57					
10-1-57	0	4	56	1,686	140.5
12-31-57					

	Arrivals	Departures	Participating	Man Months	Cumulative Man Years
1-1-58					
to	0	3	53	1,853½	154.5
3-31-58					
4-1-58					
to	0	2	51	2,009½	167.5
6-30-58					
7-1-58					
to	22	25	48	2,159	179.9
9-30-58					
10-1-58					
to	1	2	47	2,299½	192.1
12-31-58					
1-1-59					
to	1	2	46	2,440	203.4
3-31-59					
4-1-59					
to	0	1	45	2,577½	214.8
6-30-59					
7-1-59					
to	46	24	67	2,676	223.0
9-30-59					
TOTALS	205	138			

Data Concerning Returned Koreans. A third table shows the man-months and man-years for the 138 Korean participants who have completed their tours in the United States and returned to Korea. The table shows for each of the colleges and ROK Government agency involved the number of individual participants, the man-months and man-years. It will be seen from the table that the 138 Korean participants who have returned to their duties in Korea have been supported under the ICA contract for a total of 1,710 man-months or 142½ man-years.

MAN-MONTHS AND MAN-YEARS
OF 138 RETURNED KOREANS

	Ag.	Vet. Med.	Eng.	Med.	Law	Public Adm. NOTI	Total
No. of Individuals	27	4	50	39	12	6	138
Man-Months	398	36½	590½	545	100½	39½	1,710
Man-Years	33 1/6	3 1/24	49 5/24	45 5/12	8 3/8	3 7/24	142½

Academic Achievement of the Koreans. The present report continues the tabulations for presenting academic achievements which were initiated with the sixth report. Members of the faculty and administration brought to the United States are again divided into groups: those who came only for observation and consultations; those who either audited all courses or registered for a program of less than 9 quarter credits; those who enrolled for a program and received marks in courses totalling 9 or more quarter credits; and those who arrived in the fall of 1959 and have only begun their studies. No attempt was made to prepare a separate distribution for each of the SNU colleges involved since it appeared that such a distribution would serve no good purpose.

There has now been a total of 205 Koreans who have been supported under Minnesota's ICA program. They might be accounted for as follows:

President and Deans of Agriculture, Engineering, and Medicine; and Superintendent of the University Hospital who came only for observation and consultation		6
Participants who either audited all courses or registered for less than 9 credits. All have returned to Korea		42
Participant who enrolled for no course work but earned a Doctor's degree solely through research at Pasteur Institute in Paris		1
Participants who registered for 9 or more credits		
Completed studies and returned to Korea	92	
Still studying in the U.S.	<u>21</u>	113
Faculty members who arrived in the fall of 1959 and have just begun their studies		<u>43</u>
Total number of Koreans receiving contract support		205

The marks earned by the 113 members of the group who had registered for 9 or more credits were secured. This resulted in the accompanying tabulation.

MARKS EARNED BY 113 KOREAN FACULTY MEMBERS REGISTERED FOR 9 OR MORE CREDITS

Grade	All 113 Koreans	92 Koreans Completing Studies	21 Koreans Still Studying in U.S.	39 Koreans Who Earned Master's Degrees	7 Koreans Who Earned Doctor's Degrees
	No. of Qtr. Cr. Hrs.	No. of Qtr. Cr. Hrs.	No. of Qtr. Cr. Hrs.	No. of Qtr. Cr. Hrs.	No. of Qtr. Cr. Hrs.
A	1,949	1,601	348	1,161	356½
B	2,219¼	1,674¼	545	1,045½	242
S*	837½	746½	91	265	82
C	677	528	149	297	67
TOTAL OF ABOVE	5,682 ³ / ₄	4,549 ³ / ₄	1,133	2,768½	756½
Audit	1,700½	1,414	286½	592½	158
Fail	26½	17½	9	4½	0
Other (D, In- complete, dropped, etc.)	613	517	96	165	18
SUB-TOTAL	2,340	1,948½	391½	762	176
GRAND TOTAL	8,022 ³ / ₄	6,498¼	1,524½	3,530½	932½
No. of individuals	113	92	21	39	7
No. of Quarters of individual registration	695	554	141	336½	102½
Average No. of quarters per individual	6.15	6.02	6.71	8.63	14.64

* Used to denote grade of "B" or above.

The following significant conclusions may be drawn from the preceding table:

1. The average number of graduate credits earned per quarter:
 - a. All 113 Koreans 8.18
 - b. 92 Koreans completing studies 8.21
 - c. 21 Koreans still studying 8.04
 - d. 39 Koreans who earned Master's degrees 8.23
 - e. 7 Koreans who earned Ph. D. degrees 7.38

2. The average number of credits per quarter taken on an audit basis:
 - a. All 113 Koreans 2.45
 - b. 92 Koreans completing studies 2.55
 - c. 21 Koreans still studying 2.32
 - d. 39 Koreans who earned Master's degrees 1.76
 - e. 7 Koreans who earned Ph. D. degrees 1.54

3. The average number of credits per quarter resulting in failure:
 - a. All 113 Koreans 0.038
 - b. 92 Koreans completing studies 0.032
 - c. 21 Koreans still studying 0.064
 - d. 39 Koreans who earned Master's degrees 0.013
 - e. 7 Koreans who earned Ph. D. degrees 0.000

4. The average number of credits per quarter resulting in grades of D, Incomplete, Dropped, etc.:
 - a. All 113 Koreans 0.882
 - b. 92 Koreans completing studies 0.933
 - c. 21 Koreans still studying 0.681
 - d. 39 Koreans who earned Master's degrees 0.490
 - e. 7 Koreans who earned Ph. D. degrees 0.176

A further table provides comparisons on a percentage basis between the four categories of grades acceptable for credit in the Graduate School.

GRADE DISTRIBUTION PERCENTAGE

Grade	All 113 Koreans	92 Koreans Completing Studies	21 Koreans Still Studying	39 Koreans Who Earned Master's Degrees	7 Koreans Who Earned Ph. D. Degrees
A	34.30	35.19	30.72	41.94	48.31
B	39.05	36.80	48.10	37.76	31.99
S	14.74	16.41	8.03	9.57	10.84
C	<u>11.91</u>	<u>11.60</u>	<u>13.15</u>	<u>10.73</u>	<u>8.86</u>
TOTALS	100.00	100.00	100.00	100.00	100.00

Attention should be drawn again to the fact that the percentages of "A" grades are similar to those found in the immediately preceding report. Again, the highest percentage (48.31) was recorded by those who earned Ph. D. degrees; the next highest (41.94) by those who earned Master's degrees. However, this time the third highest (35.19) was earned by the 92 Koreans who had completed their studies; and the lowest (30.72) by the 21 Koreans still studying in the U.S.

The present report is the fifth in which the grade-distribution percentages were presented. How little variation has taken place in the percentages of "A" grades is revealed by comparing the percentage of "A" grades for all 113 Koreans in the present report (34.30) with those of the sixth through ninth reports which were respectively 34.3, 33.5, 34.4, and 33.15.

The unusual achievement indicated by the preceding data cannot be stressed too often. Although all of our studies have revealed the high level of competence of the average Korean participant who has been privileged to study under the program, it still seems remarkable that, on the average, each has maintained such a high level of academic achievement in a new and unfamiliar environment and compelled, as he is, to receive instruction in a completely different language from that to which he has been accustomed from birth.

Ph. D. Degrees Conferred. During the period covered by the present report, four more Korean participants completed the requirements for the Ph. D. degree and the degrees were formally conferred. This brings to seven the total number of Korean participants who have earned this, the highest academic degree granted by any university. Following are the names, dates degrees were conferred, college, academic rank and field of specialization for each of the seven recipients:

SEVEN KOREAN FACULTY MEMBERS EARNING PH. D. DEGREES
December, 1958 through August, 1959

Name	Date Degree Awarded	SNU College	SNU Academic Rank	Field of Specialization
CHO, Chai Moo	7-59	Agriculture	Teach. Asst.	Soils
CHOI, Jong Wan	12-58	Engineering	Teach. Asst.	Civil Engineering
HAHN, Tae Hee	8-59	Engineering	Instructor	Chemical Engineering
KIM, Jae Nam	6-59	Medicine	Teach. Asst.	Anatomy
LEE, Socker	12-58	Engineering	Teach. Asst.	Mechanical Engineering
FYO, Hyun Koo	3-59	Agriculture	Instructor	Horticulture
RYU, Han Yeol	8-59	Agriculture	Teach. Asst.	Agricultural Engineering

Master's Degrees Conferred. The accompanying table provides an alphabetical listing of the 39 Korean participants who have earned Master's degrees since contract operations began. Also indicated are the date of the award of each degree, the college, the academic rank, and the field of specialization.

The table reveals that Master's degrees have been received by Korean participants from 26 different departments. Distribution among the colleges and schools is as follows: Agriculture 16; Engineering 14; Medicine 4; Public Administration 5. The breakdown by ranks of the participants is as follows: Teaching Assistant 22; Instructor 7; Assistant Professor 4; Associate Professor 3; Lecturer 3.

To this list of 39 individuals should be added the name of Dr. Lee, Ki Young who, in January, 1956 received the degree, Doctorat de l'Universite de Paris and that of Dr. Kim, Chu Wan who, in September, 1957 passed his examination before the American Board of Diagnostic Roentgenology. This brings to 48 the number of advanced degrees earned by Korean participants, counting certification by the American Board in Roentgenology as equivalent to a graduate degree.

THIRTY-NINE KOREAN FACULTY MEMBERS EARNING MASTER'S DEGREES
December, 1955 through August, 1959

Name	Date Degree Awarded	SNU College	SNU Academic Rank	Field of Specialization
BARK, Dong Suh	8-59	Law	Teach. Asst.	Public Administration
CHO, Chai Moo	6-57	Agriculture	Teach. Asst.	Soils
CHO, Kun Chan	6-57	Engineering	Lecturer	Electrical Engineering
CHOI, Jong Wan	3-57	Engineering	Teach. Asst.	Civil Engineering
CHUNG, Hoo Sup	12-57	Agriculture	Teach. Asst.	Plant Pathology
CHUNG, Myung Sik	3-59	Engineering	Teach. Asst.	Civil Engineering
HAHN, Mansop	7-57	Engineering	Teach. Asst.	Aeronautical Engineering
HAHN, Tae Hee	6-57	Engineering	Instructor	Chemical Engineering
IM, Hyong Bin	8-58	Agriculture	Instructor	Plant Pathology
JOHN, Yong Won	6-59	Engineering	Teach. Asst.	Mining Engineering
KANG, Woong Ki	6-57	Engineering	Teach. Asst.	Chemical Engineering
KIM, Hae Dong	8-59	Law	Teach. Asst.	Public Administration
KIM, In Kwon	12-56	Agriculture	Assoc. Prof.	Agronomy and Plant Genetics
KIM, Woon Tai	8-59	Law	Instructor	Public Administration
LEE, Chul Choo	6-57	Agriculture	Teach. Asst.	Agricultural Engineering
LEE, Chung Han	6-57	Engineering	Asst. Prof.	Electrical Engineering
LEE, Ho Wang	12-57	Medicine	Teach. Asst.	Bacteriology
LEE, Socker	12-56	Engineering	Teach. Asst.	Mechanical Engineering
LEE, Su Rae	8-58	Agriculture	Teach. Asst.	Agricultural Biochemistry
LEE, Tai Hyun	6-56	Agriculture	Asst. Prof.	Horticulture
LEE, Yong Bin	12-55	Agriculture	Assoc. Prof.	Animal Husbandry
LIM, Jung Kyoo	3-58	Medicine	Teach. Asst.	Pharmacology
OHH, Bong Kug	12-57	Agriculture	Teach. Asst.	Poultry Husbandry
PAIK, Woon Hah	8-56	Agriculture	Assoc. Prof.	Entomology
PARK, Hong Nai	12-58	Agriculture	Lecturer	Agricultural Economics
PARK, Sung Woo	12-58	Agriculture	Asst. Prof.	Agricultural Engineering
PARK, Won Hee	8-57	Engineering	Teach. Asst.	Chemical Engineering
PARK, Zin Hwan	7-57	Agriculture	Teach. Asst.	Agricultural Economics
RHEE, Jin Woo	6-59	Engineering	Teach. Asst.	Textile Chemistry
RHEE, Sang Don	12-57	Medicine	Teach. Asst.	Physiology
RYU, Han Yeol	3-57	Agriculture	Teach. Asst.	Agricultural Engineering
SIM, Bo Sung	12-57	Medicine	Instructor	Surgery
SUH, Chai Chin	7-57	Engineering	Teach. Asst.	Mechanical Engineering
SUH, Won Woo	8-59	Law	Instructor	Public Administration
WIE, Sang Kyoo	6-58	Engineering	Lecturer	Aeronautical Engineering
WOO, Jae Lin	6-58	Engineering	Instructor	Textile Technology
YIM, Kyong Bin	8-58	Agriculture	Instructor	Forestry
YU, Hoon	3-59	Law	Teach. Asst.	Public Administration
YUK, Chong Yung	8-58	Agriculture	Asst. Prof.	Dairy Husbandry

Equipment Procurement. Slowly but surely, in spite of innumerable difficulties, books, periodicals, equipment, and supplies procured through funds provided by the U. S. International Cooperation Administration are reaching

their final destination in the colleges of Agriculture, Veterinary Medicine, Engineering, and Medicine (including Nursing), in the School of Public Administration in Seoul National University and in the National Officials Training Institute in the Office of General Affairs of the Government of the Republic of Korea.

Actual expenditures through August 31, 1959 in all present contract areas totalled \$1,776,710. Outstanding obligations totalled \$460,450.94 for the same period. Of this obligated sum, \$97,330.27 constitutes moneys set aside but not yet spent to cover costs of transportation, packing, insurance, and charges for the forwarding agents. The balance, \$363,120.67, represents actual orders placed but not yet delivered. Thus books, periodicals, equipment, and supplies valued at \$2,139,830.67 (including transportation, export packing, insurance and charges of the forwarding agents in the case of books, periodicals, equipment, and supplies already in or enroute to Korea) had been ordered and were either on their way or actually had reached their destination in Korea.

Reports from the Chief Adviser in Korea indicated that the unofficial unadjusted invoice value of books, periodicals, equipment, and supplies received in Korea through September 30, 1959, totalled \$1,470,114.28. These totals, it must be kept in mind, do not include the cost of such items as export packing, transportation, insurance, the preparation of required documents, or other services provided by the forwarding agents. These additional items add an estimated 20 to 25 per cent to the actual cost of the books, periodicals, equipment, and supplies.

Present total of sums transmitted to the University of Minnesota for the procurement of books, periodicals, equipment (including one automobile for Public Administration), and supplies is \$2,642,800, of which \$55,500 is for Public Administration and the balance, \$2,587,300, is for the other colleges involved in the project.

Public Administration Head Visits Minnesota. Dr. Carroll Shaw spent August 16-18, 1959 in Minneapolis discussing the Public Administration segment of our ICA contract with Dr. Lloyd M. Short, Professor George A. Warp, and other Minnesota staff members concerned. Dr. Shaw was enroute to Korea to begin his new duties as Chief of the Public Administration Division of USOM - Korea. During his visit Dr. Shaw was privileged to meet the group of Public Administration participants who were on campus at that time.

OEC Division Chief Visits Minnesota. Reese G. Stradley, Chief, OEC Division of Technical Training, and formerly in charge of higher education in OEC's Division of Education, reached Minneapolis on June 30, 1959, enroute to Washington for consultations with ICA, followed by home leave and transfer to a new post. In his earlier post with OEC, Mr. Stradley was one of the first Americans in Korea to have had a hand in shaping Minnesota's operations in Korea and he has been closely affiliated with the Minnesota project ever since. His assistance contributed greatly to the project and was greatly appreciated by all concerned, Koreans and Americans alike.

Mr. Stradley spent an entire week in Minneapolis, visiting staff members who had served in Korea and a former member of his staff in Korea who was attending the University of Minnesota. He was an official luncheon guest of the University on July 1 and was entertained during his stay in the Twin Cities by his many friends. He left the Twin Cities for Washington on July 6, 1959.

Peabody Participants Visit Minnesota. Six participants under the ICA contract with George Peabody College, Nashville, Tennessee, involving the Ministry of Education, Republic of Korea, visited the University of Minnesota on September 17, 1959. The party included the following: Lee, Su Nam, Chief, Normal School Section, Ministry of Education; Choi, Pong Chik, Principal, Incheon Normal School; Guh, B. S., Principal, Dae Jon Normal School; Kang, Jae Ho, Dean, Pusan Teachers College, and Principal, Pusan Normal School; Lee, Chang Up, Dean,

Kwangju Teachers College; and Kim, Young Shik, George Peabody College Staff Team, who served as interpreter.

The group spent a week in Minneapolis following a program planned by Mr. A. I. Heggerston, Director of Research and Statistics, Minneapolis Board of Education, who had served a tour of duty in Korea under the Peabody contract. While on the Minnesota campus, the Korean participants visited the Coordinator's office and discussed the Korean Project. Later they met with the Fall, 1959 participants from Seoul National University.

SNU Forestry Head Visits Minnesota. Dr. Hyun, S. K., Director, Department of Forestry, College of Agriculture, Seoul National University, Suwon, Korea, who had visited Canada and was in the U. S. under other than contract auspices, visited the University of Minnesota October 3-6, 1959 to discuss forestry problems with Dr. Frank H. Kaufert, Director, School of Forestry, University of Minnesota, and his staff.

While in the Twin Cities, Dr. Hyun discussed with University of Minnesota officials, at a luncheon meeting on October 5, 1959, his proposal that procurement of certain specialized equipment for a tree improvement program in Korea be undertaken by the University of Minnesota. The funds for this equipment would be part of a grant of some \$7,000 which had been provided by the Rockefeller Foundation.

ICA Auditor Checks Accounts. Mr. Howard E. Thunberg, Contract Audit Branch, ICA/Washington spent May 19 to 28, 1959 in Minneapolis reviewing the fiscal accounts of the Korean contract, with the exception of those involved in procurement. In a conference prior to his departure, Mr. Thunberg stated that he found the direct charges to be proper. He also reported that the overhead rates were proper and indicated that he would recommend an early amendment to the contract to adjust the overhead rates through June 30, 1958

in accordance with the findings of the most recent audit by the Department of the Navy and based upon the ASPR formula.

The Office of Contract Relations, ICA/Washington was reminded on September 22, 1959 of this agreement and provided with the essential data for establishing new overhead rates as noted above. No action had been taken by ICA/Washington as this report was being prepared.

Gifts to Seoul National University. The following gifts, among others, have been made to Seoul National University, on behalf of the University of Minnesota, during the period covered by the present report:

Staff members of the Department of Bacteriology, University of Minnesota, donated 45 Bacteriology books and 55 laboratory manuals to the College of Medicine, SNU.

Dr. Lee, Ho Wang, SNU Bacteriology participant, donated two cartons of valuable chemicals, unobtainable in Korea, to the College of Medicine, SNU.

Dr. Lee, Myung Bok, SNU Surgery participant, donated 1,540 microscopic slides to the College of Medicine, SNU.

Dr. William C. Lee, University of Minnesota Hospitals, donated 57 items consisting of periodicals, catalogs, and the like, to the College of Medicine, SNU.

Dr. Fred A. Lyon, Medical Fellow; Mary E. Pollack, Teaching Assistant, Bacteriology; and Bradford Friedrich, all of the University of Minnesota, contributed four professional books to the College of Medicine, SNU.

Dr. Louis J. Krovetz, Medical Fellow, University of Minnesota, donated two books on Parasitology and the 1958 file of the New York Journal of Medicine to the College of Medicine, SNU.

Dr. Ernest B. Brown, Jr., Professor of Physiology, University of Minnesota, donated to the College of Medicine, SNU, Volume 5 of Methods of Medical Research and a glass filter for the Klett colorimeter. These were to be used by Dr. Kim, Hong Sock in connection with his research on renal function.

Dr. Earl A. Schultz, Instructor in Anesthesiology, University of Minnesota, donated files of Journal of Clinical Investigation (1954, 1955, 1956) and Anesthesia (1953) to the College of Medicine, SNU.

1959 graduates of the School of Nursing, University of Minnesota, through the assistance of a member of the class, Miss Jo Elliott, donated fifteen large cartons of uniforms to the School of Nursing, SNU.

II. OFFICE OF THE CHIEF ADVISER IN KOREA

General Comments. This tenth semi-annual report marks the end of five years of operations in Korea under the ICA-University of Minnesota contract involving Seoul National University in the broad areas of Agriculture, Engineering, and Medicine, and somewhat more than two years of technical assistance in Public Administration at Seoul National University and at the Republic of Korea's National Officials Training Institute. At the end of this five-year period of service in the original contract areas a searching review of the program as undertaken, together with an analysis of results thus far, are essential for purposes of evaluation and future planning. The desirability of a similar inquiry into the shorter-term activities in Public Administration is likewise indicated.

The central purpose of this technical cooperation endeavor has been to assist in better preparing Korean faculty members for teaching and research and to be instrumental in obtaining for the institutions involved the physical plant, libraries and equipment making possible the effective carrying out of these functions. The former has been undertaken through staff exchange; the latter through the combined planning and accomplishment efforts of Seoul National University and National Officials Training Institute personnel and their American advisers, the support of Korean officials responsible for these institutions, and the interest, understanding and substantial financial assistance of the ICA and the United States Operations Mission - Korea.

Staff exchange involves present and potential Korean faculty members being selected for study and observation opportunities abroad in the field of their major academic interest or responsibility, and American Advisers coming to Korea to assist their colleagues at the institutions served.

Korean Participants. In numbers, emphasis has been on Korean staff members being afforded study and observation opportunities abroad. From the inception of the program the careful selection of participants has been a matter of prime concern to both Korean and American authorities involved. As Part I. of this report sets forth, the academic records of participants indicate that graduate studies undertaken are seriously pursued; many advanced degrees have been earned.

The participant program for this five-year period is summarized as follows:

DISTRIBUTION OF KOREAN PARTICIPANTS

	<u>Number of Participants</u>		Now Study- ing in U.S.	<u>Distribution by Approximate Length of Stay</u>				
	Ret'd to Korea	Total		6 mo. or less	1 yrs.	2 yrs.	3 yrs.	4 yrs.
<u>Participants</u>								
<u>Office or College of SNU</u>								
President	1	1		1				
Agriculture	30	27	3	6 a	12	8	1	3
Vet. Med.	6	4	2	1 b	4		1	-
Engineering	55	50	5	10 c	24	13	5	3
Medicine	40	38	2	3 d	25	8	2	2
Law (P.A.)	19	13	6	-	15	4	-	-
<u>Off. of Genl. Affairs ROK</u>								
NOTI	8	5	3	-	8	-	-	-
TOTALS	No. 159	138	21	21	88	33	9	8
	Percent 100	87	13	13	55	22	5	5

- a Includes Dean, 3 Dept. Heads, and 2 other senior professors.
- b Former Dean (Present Dean has been at Minnesota for 1 year).
- c Includes 6 Dept. Heads and 3 other senior professors.
- d Former Dean and 2 Dept. Heads.

To be noted particularly regarding this summary is that, of the total of 159 participants, 138 (87%) are back in Korea. Eight ~~were~~ are expected to return by the end of this year; 12 will continue their studies in the United States under authorized extensions of their graduate training programs.

Of great significance to this technical assistance program is that all except two of the returned participants are now on the staff of their sponsoring institution. One of the two not now on the rolls of their sponsoring institution transferred, at the request of the Korean Government, from the College of Agriculture to a Bureau Chief position in the Ministry of Agriculture and Forestry after completing his required post-participation period of service at the College. The other transferred in October, 1959, from the College of Engineering to Korea's Atomic Energy Commission as a result of a similar request.

Continuation of the participant program beyond September, 1959 was authorized pending formal documentation for the Republic of Korea's requested full two-year extension. Under this authorization the above mentioned 12 extensions of graduate study periods of participants were granted and, thus far during FY 1960, 46 new participants were sent to the United States for study at an observation of institutions of higher learning. By December 30, 1959, it is expected to send an additional 7 participants making the FY 1960 total 53 as of that date. The breakdown of this total by areas is Agriculture 10, Veterinary Medicine 4, Engineering 7 and Medicine 32. The grand total of participants to December 30, 1959 - assuming that the 7 additional nominees leave as scheduled - will be 212, this figure broken down as follows: President 1, Agriculture 40, Veterinary Medicine 10, Engineering 62, Medicine 72, School of Public Administration 19 and National Officials Training Institute 8.

One factor of interest and importance in gauging the academic preparation of Seoul National University's present staff is the amount, character and recency of foreign study undertaken. For regular ("Table of Organization") and special (Non-T.O.) full-time faculty members (excluding the few handling cultural subjects) plus any others who have been Cooperative Project participants and are now teaching or who will teach on return from present graduate studies abroad, analysis of relevant data indicates that for the Colleges of Agriculture, Veterinary Medicine, Engineering and Medicine 71% have had graduate study and/or educational observation tours abroad (with few exceptions to the United States) since 1946. These data further indicate that the bulk of such foreign study is recent - since 1955 - and most (80%) made possible through this technical assistance project. This faculty graduate study information for these four colleges separately is as follows:

Agriculture	:	42 (78%) of 54; 34 (81%) under this project.
Veterinary Medicine:		9 (53%) of 17; 9 (100%) under this project.
Engineering	:	71 (64%) of 110; 59 (83%) under this project.
Medicine	:	82 (77%) of 107; 62 (76%) under this project.
TOTAL	:	204 (71%) of 288; 164 (80%) under this project.

The entire full-time staff at the new School of Public Administration at Seoul National University has had graduate level training at Minnesota. Minnesota trained participants have greatly strengthened the staff at the National Officials Training Institute.

The breadth and depth of this graduate training abroad is without question serving its purpose - the improvement of teaching, research and administration at Seoul National University and in-service training at the National Officials Training Institute. A continuing objective is to encourage and make possible at these institutions the most effective use of this faculty improvement investment.

Minnesota Staff to Korea. The total number of Minnesota staff members who have served or are now serving in Korea under this project is 45 (2 of whom have served twice), excluding 6 administrative personnel who have been here for inspection tours or in connection with the planning of new projects. (See Part I of this report for further details.)

As of October 19, 1959, the Minnesota staff in Korea consisted of 21 individuals, including 2 secretaries. With wives (14) and children (32) the total Minnesota complement becomes 67.

Minnesota staff members, working from the foundations long since laid, continue to assist their Korean colleagues in all ways possible to improve their teaching, research and administration. This assistance involves curricula, courses, research, methods and techniques, attention to physical plant and equipment, and attention to organization, personnel, finance, administration, and professional and governmental relationships.

Summaries and Future Plans.

Agriculture. (Professor Roy O. Bridgford, Adviser). Thus far under the Cooperative Project Minnesota's Institute of Agriculture has supplied eleven advisers for service in Korea, one each in the fields of Agricultural Chemistry, Agricultural Engineering, Soils, Physics, Forestry, Plant Pathology, Entomology, Library Science, Veterinary Medicine, Agronomy, and Animal Husbandry.

During the past six months the student-staff field teaching and research projects planned during the preceding period were carried out. Through these projects students learned about the laying out of field test blocks, soil preparation, planting, replications, the observation and recording of agronomic characteristics, harvesting, data analysis and the drawing of conclusions, and the preparation of project reports. The specific research results of projects undertaken have been reported separately; the result of these projects from the point of view of improving student instruction and stimulating faculty

interest in making meaningful contributions to knowledge in agriculture is most encouraging. Major attention will continue to be given this type of student-faculty teaching and research activity in the future.

In addition to this major endeavor the overall adviser continued to lecture periodically, to meet with the Dean, Department Heads, and individual staff members on miscellaneous matters involving teaching, research and administration, assisted with the processing of eight additional participants from the College, and assisted with the indoctrination of the recently-arrived Adviser in Animal Husbandry. The latter is in the process of becoming informed regarding the livestock situation in Korea, details of the Livestock Department at the College, relationships with the Institute of Agriculture of the Ministry of Agriculture and Forestry, and allied matters. Detailed work on curriculum, courses, research, and physical needs will follow.

Use of the new classroom-laboratory-staff office building began with the start of the second semester on September 1, 1959. The new auditorium was also first used in September. Problems of site drainage, roof leaks, lack of sidewalks, and day-to-day maintenance continue with all new structures. Work on the central heating plant started during the period. During the past 6 months more laboratory equipment was received by the College and placed in use.

Through cooperation of College authorities with the USOM and Institute of Agriculture short-courses in Plant Pathology and in Entomology have been planned for Institute of Agriculture personnel for the winter vacation period.

During the next six months, further attention will be given the above-mentioned problems, to continuing and improving the described field project type of instructional research, to analyzing specifically the improvement needs in Livestock teaching and research at the College, to being of

continuing assistance to the Dean and his staff in any way possible, and to strengthening cooperative relationships established with other agencies.

Engineering. (Dr. Paul Andersen, Adviser). Nine advisers (two of whom have served twice) have been supplied by Minnesota for Cooperative Project service at the College of Engineering. Through these advisers specialized area attention has been given to Architecture, Electrical Engineering, Mechanical Engineering, Mining Engineering, Textile Engineering, Civil Engineering, Naval Architecture, and Chemical Engineering.

On August 16, 1959 Dr. C. E. Schwartz, Adviser in Chemical Engineering, completed his period of service at the College. Following the design of building facilities, including utility piping, wiring, etc., and the selection, specification, and initiation of procurement of required equipment for the Unit Operations Laboratory, major attention was paid by Dr. Schwartz to the preparation of this major Chemical Engineering laboratory for its intended instructional and research use. The major part of this project was completed by the time of Dr. Schwartz' departure; further work - mainly piping and wiring - has continued under the plans and instructions he left. With the return to Korea in August, 1959, of one 4-year participant in this field, and with the near-future return of two more Chemical Engineering participants, to be followed by a fourth in the spring of 1960, this department will be well prepared to fill its increasingly important role in Korean higher education in engineering.

In addition to his work on developing the Unit Operations laboratory Dr. Schwartz left valuable suggestions for the revision and upgrading of the Chemical Engineering curriculum, recommended library improvements, assisted in determining the college's increasing water supply needs, and suggested ways of protecting and making fullest possible use of Chemical Engineering equipment.

Newly arrived (September 15, 1959) Textile Engineering Adviser Professor James W. McCarty is currently in the process of becoming acquainted with his colleagues in this field at the College, with the present curriculum, with present and proposed laboratory facilities, and with the textile industry in Korea. His major activities during the next six months will consist of a continuation of these background studies and establishment of essential inter- and intra-agency working relationships, analysis of training needs in textile engineering and the role the College of Engineering should fill in meeting these total needs; determination of what changes, if any, would be desirable in the present curriculum to provide the best higher education training in textile engineering indicated as needed by the country; determination of the nature of laboratory offerings optimum under the textile engineering curriculum decided upon and the kind and amount of equipment, supplies and facilities needed therefor; and assisting in initiating action to implement approved recommendations accepted by Korean colleagues.

In addition to working with the Minnesota specialists on his staff, the overall adviser in engineering paid continuing major attention to the effective utilization and protection of equipment received, to additional equipment and physical plant needs, to library improvement, and to improvements in use of staff - particularly those trained abroad under this program.

During this period the overall adviser assisted in the preparation of plans for improving the College's water supply; obtaining a list of materials, supplies and equipment for this development and transmitting same to USOM for PIO/C preparation and procurement action; assisted in the preparation of plans for the installation of standby generators; gave an indoctrination lecture to engineering participants who left in August; gave a special lecture on research in hydraulics to Civil Engineering students and staff; conferred with College and KMAG authorities on post-graduate training of Korean army officers at the

College of Engineering; later discussed with KMAG representatives the College's entrance requirements for graduates of Korean Military, Naval and Air Force Academies; assisted in the preparation of a College of Engineering Bulletin; and is currently working on a report concerning needed improvement in sanitary facilities for the 18 buildings comprising the No. 5 Compound, on another report relative to telephone facilities at the College and new dormitories, on a determination of equipment needed for a steam turbine laboratory, on further physical plant rehabilitation needs. In addition, the overall adviser has been of assistance to the Dean and his staff on a multitude of matters in the course of day to day administration.

During this 6-month period restoration of all major structures in the No. 5 Compound was completed and principal security devices installed. There was considerable progress in dormitory construction during the period. Additional equipment was received and placed in use.

Culminating a long period of planning, the Dean of the College of Engineering left for Minnesota in September on a 3-month period of observation and study of teaching, research, and administration in engineering. Most of his U. S. visit will be spent at the University of Minnesota, though opportunity will be afforded him to visit other institutions and agencies.

During the next six months the uncompleted portions of the projects above commented upon will receive major attention; Dr. Andersen will concentrate on these matters during the remaining two months of his present tour.

Medicine. (Dr. George Schimert, Adviser). Minnesota has supplied ten advisers for the medical field under the contract to date. Specialized areas represented include Internal Medicine, Anesthesiology, Nursing, Hospital Administration, Physiology, Surgery, and Pediatrics.

Since the inception of the contract in September, 1954, forty members of the Seoul National University staff have been participants at the University

of Minnesota. The opportunity for these participants to pursue graduate studies, to review recent medical progress and to see modern medical educational methods in operation has had a decisive influence on Seoul National University's College of Medicine. It also greatly enhanced the advisory effectiveness of the Minnesota staff serving in Korea.

Realizing the great value of the exchange of staff, another group of forty participants were selected under the proposed extension of the contract. In addition to participants in the basic science and clinical fields, staff of the newly created School of Public Health, Department of Nursing, Hospital Nursing service and Hospital Administration were included. Thirty-four of these left in August and September, 1959, and the rest will follow in January and July, 1960.

Dr. Eldon B. Berglund, Adviser in Pediatrics, arrived on September 5, 1959, for a one-year stay. Dr. N. L. Gault arrived a month later to assume the post of overall adviser in Medicine, replacing Dr. George Schimert who completed his period of service in Korea on October 7, 1959.

At the beginning of this program, emphasis was appropriately placed on physical plant rehabilitation assistance to the College of Medicine, hospital administration, the financial system, nursing education, equipment needs, and the development of a School of Public Health. Since that time, individual departments such as Internal Medicine and Surgery have been studied. Presently the Department of Pediatrics is being assisted by Dr. Eldon Berglund. Support has been given to newly established schools (Public Health; Nursing), new departments and those areas where staff members have returned from abroad or where new diagnostical, teaching and research equipment has arrived.

The most important accomplishments and developments in Medicine at Seoul National University during the past five years may be summarized as follows:

Completed and current staff exchanges, as above commented upon; through re-organization all heads (with the exception of one) of the basic science and clinical departments have spent one or more years at the University of Minnesota or other medical centers abroad; almost all participants have been promoted, are taking an increasing share of teaching, and in addition are contributing their knowledge to the overall rehabilitation of the college; five new departments or divisions have been established, and the men heading these services are Minnesota trained specialists; the present heads of departments have been encouraged to take firm control of administration and teaching in their areas of responsibility; the medical curriculum has been revised to emphasize the value of observation and actual participation in diagnosis and patient care; research activities in all departments have been encouraged; interne and resident training programs have been established; hospital administration has been improved and many services centralized; future management, a revised financial system and rehabilitation projects have been discussed and initiated; nursing education and hospital nursing service have been studied and progress made towards desired improvement; much physical plant rehabilitation and improvement work has been completed; much new equipment has been received and placed in use.

Regarding equipment, initially top priority was given to that required for teaching laboratories and items necessary for improved diagnostic work and patient care. As a result, the character and quality of instruction which is carried on in the teaching laboratories has greatly improved, and hospital facilities for diagnosis and treatment are in functioning order and gradually improving.

This report period saw further progress in each of the above areas. The Adviser paid particular attention to the College's instructional methods, practices and procedures during the past six months, with emphasis on bedside teaching, the mainstay of Western medical education. Many thoracic surgical

patients were used in demonstrating for both staff and students Western concepts of the employment of this teaching device and its great value in instruction. Demonstration teaching was also done in the outpatient department, the emphasis here also being on sound observation and the possible conclusions and diagnoses.

The Adviser also concentrated during this period on the establishment of an active chest surgical service. Reasonable success in this endeavor is considered to have been achieved. Patients for surgery are now selected through combined medical, surgical and radiology conferences whereat are discussed subjects such as pathologic anatomy, diagnostic problems, x-ray interpretation, medical and surgical treatment, cardiorespiratory changes, post-operative complications, economic status, cultural mores, and administrative problems. These conferences have turned out to be quite popular, help to bridge departmental boundaries, and emphasize that the patient is a human being and not just an x-ray picture.

As a result of these conferences close to one hundred patients were operated upon and there is a long waiting list. About thirty of these procedures were demonstrational operations in connection with which surgical techniques were discussed step by step and pitfalls elucidated. After about six months of this Korean counterparts have proceeded on their own with very satisfactory results.

Particular attention has been paid by the Adviser to post-operative care. The results of round-the-clock observation were most gratifying; post-operative complications dropped markedly.

Among the most favored presentations by the Adviser were the seminars on heart surgery. These seminars were often followed by practical demonstrations such as cardiac catheterization, the interpretation of diagnostic material, and the experimental and clinical use of a pump-oxygenator.

Of great potential importance to medical education and practice is that a new law for the procurement of anatomical and pathological specimens was drafted and submitted to government officials concerned during the period. This law was prepared by Seoul National University and supported by all other medical colleges in the country. The law permits a college to obtain cadavers under a number of circumstances for purposes of study and research. The law also specifies under whose jurisdiction and under what circumstances the government, hospital or the physician may insist on the performance of an autopsy.

Also of great potential importance to Medicine at Seoul National University is that, in order to improve the financial situation of the Hospital, a special law has been drafted to permit the Hospital to keep from 20 per cent to 50 per cent of the income which is earned therein through the private practice of staff members. A Presidential Order, setting forth rules and regulations governing physicians' private practice at hospitals attached to national universities, is awaiting signature.

In the Nursing portion of the technical assistance program in Medicine, Adviser D. Joan Williams has devoted most of her time and effort to the Nursing Service Department of the Seoul National University Hospital. In-service training programs were planned and conducted, and the use of the Kardex system to identify patient care and improve nursing service and nursing records was instituted throughout the hospital. Both of these major endeavors have resulted in some degree of desired change; both will require a great deal of additional attention.

As more supplies and equipment have become available more procedures have been possible. As the need arose, these procedures have been discussed, demonstrated and taught to the nursing staff. Similar attention has been given by the Nursing Adviser to the establishment of departmental supplies inventories and checking procedures.

The Nursing Adviser has spent much time with the Hospital's Director of Nurses on policies and administrative problems and with supervisors and head nurses in their areas of responsibility. Improvement is noted in all of these areas.

In the Department of Nursing, the Adviser has reviewed with the Director the curriculum planned for the collegiate students. Since concurrent teaching of the clinical subjects with the appropriate clinical experience of the students is accepted as a basic principle of sound nursing education, some revision of the proposed curriculum was necessary. Also, in preparation for the collegiate students, nursing faculty members have been revising the course outlines to a collegiate level. This is still in preliminary stages, but the faculty recognized this need and is working towards a sound program.

In addition, all teaching aids have been reviewed. The Medichrome slides have been catalogued and teaching guides prepared and translated.

Three additional nursing participants left for the University of Minnesota in August, 1959.

Plans for the new nurses' dormitory have been completed and approved, and construction is expected to begin late this year.

All advisers in Medicine, with their Korean colleagues, participated in a number of professional meetings during the period. Papers were presented at some of these meetings.

Plans for the next six months in Medicine at Seoul National University include further attention being given in all areas by the overall adviser to carrying out recommendations already made and accepted and to using effectively program participants and facilities; working with Korean colleagues in further improving general and specialized medical education; paying further requisite attention to the physical plant and its equipment and facilities, including the medical library; and widening the field of effective collaboration with other institutions and professional groups.

In the field of Pediatrics, efforts of the Adviser will be guided by the following objectives: Improvement of Central Laboratory services so that essential determinations can be done routinely and preferably on a micro chemistry basis; attempt to get parenteral fluids put up in the pharmacy in the form in which they will be given to the patient; organization of the Pediatric Department on a subspecialty basis, i.e., with members of the pediatric staff assuming an interest and responsibility for certain of the subspecialties included in the field; organization of the clerkship schedules so that the junior medical clerks would spend a longer period of time on in-patient pediatrics, e.g., six weeks, and the senior clerks a comparable period of time in out-patient pediatrics establishment of subspecialty clinics in out-patient pediatrics; establishment of well baby clinics both in Seoul National University Hospital and in the residential sections of the city, to be staffed by pediatric residents; arrange to have all children referred to the pediatric department for initial evaluation, the pediatrician than to refer to other departments or to request consultation as indicated; arrange for newborn infants and for children in the infectious disease ward to be the responsibility of the pediatric department; and encourage the performance of autopsies on patients who die here. (Although the performance of autopsies seems to run contrary to the cultural make-up of Korea, this need not be an insuperable obstacle. A start toward changing this attitude must be made sometime if Korean medicine is to become first class. Those institutions and countries which have the highest rate of autopsy performance are invariably those which are the leaders in medicine.)

In Nursing, plans for the next six months include continued effort to be instrumental in improving patient care through the holding of ward classes for nurses, better control of visitors, full use of improved facilities and better cooperation between departments; in improving ward administration through patient-centered care, more supervisory skill, and a better understanding

of the role of nurses by the medical staff; further work with Korean colleagues on the preparation of policy and procedure books and the following of these guides; a study of reports and forms with a view toward simplification; and a study of supervisor reporting on all shifts.

In Nursing Education assistance will continue to be given in the development of course outlines for the collegiate program; to the conduct of classes in teaching methods for faculty and assisting them in planning and conducting classes using these methods; to work on evaluation methods for students' clinical experience; to the establishment of regular meetings of all faculty, including the medical staff, to discuss curriculum plans, educational methods, etc.; and to the development of educational materials to be used by students.

Public Administration, Seoul National University. (Dr. Stuart A. MacCorkle, Adviser). It is during this reporting period that perhaps the most significant milestone in the history of the project has occurred, namely the opening of the School and the initiation of classroom instruction. The first semester is history, the second has only begun. The future looks bright for, with the beginning of the second semester, we have with us a goodly number of the newly American trained Korean staff and the full quota of American advisers.

Activities Prior to April 1, 1959.

On April 1, 1959 the School of Public Administration of Seoul National University opened its doors to 103 very carefully selected graduate students. The School is the first and only one of its kind in Korea. Its existence is a tribute to the good planning and the hard work of many Koreans and Americans.

To Professor George A. Warp of the University of Minnesota goes the credit for having drawn the blueprints and charting the course which the School has taken. After visiting Seoul in June of 1957, he proposed a program in public administration which resulted in the amendment of the International Cooperation Administration/Minnesota contract so as to make it possible for the University of Minnesota to assist Seoul National University in the establishment of a School of Public Administration.

Among the first actions to be taken in carrying out the Warp program was the selection of eleven Korean participants (professors and instructors)

to be sent to Minnesota for graduate training in public administration. They arrived in Minneapolis early in August of 1957. It was this group which was to become a part of the staff of the School of Public Administration. Seven of this number returned to Seoul after one year in Minneapolis and became full- or part-time staff members at the School. Four remained for a second year of graduate work at Minnesota.

In late July of 1958 another group of eight Korean participants was sent from Seoul National University to Minnesota for graduate training. Of this number three returned in August of this year and the remaining five will continue graduate work for another year. It is worthy of note that six of the eleven participants first sent to Minnesota have received or will receive their M. A. degrees by the end of the fall quarter in 1959. Four of this original group have practically completed all requirements for their doctorates with the exception of the dissertation. To present our record is good in this respect.

In addition to sending Korean professors and instructors to Minnesota for training in public administration, it was agreed that Minnesota would send American staff to Korea for the purpose of serving as advisers to the Korean staff and to function as counterparts to their Korean colleagues. The first of these to arrive in Korea was the writer who reached Seoul on March 28, 1958. Between that date and April 1, 1959 a total of four American staff was dispatched to Seoul National University.

Within a period of practically one year President Syngman Rhee signed a decree which legalized the School of Public Administration at Seoul National University; Dean Tai Whan Shin, who also serves as Dean of the College of Law at SNU, was appointed to head the new School; a curriculum was worked out and adopted; degree and entrance requirements were established; a staff was appointed; the building which houses the new School was remodeled; furniture designed; equipment and supplies obtained; and the School set into operation. The building housing the School is modern. In it are to be found office space for the American and Korean staff and class and seminar rooms in addition to space for a special reference and research Library which is being provided by Minnesota.

Major Activities April 1, 1959 to September 30, 1959.

Of the 103 students admitted to the School, 35 attended morning classes and 68 evening. Each group carried a full load of twelve hours of classroom work per week. The type of instruction given and the material covered was the same for both day and evening classes.

Admission to the School was very selective. It was based upon the results of the applicant's written and oral examinations in addition to a consideration of his scholarship, personality, health, age, and related factors. These examinations include English and three of the following: Law, political science, economics, sociology, psychology, history (Korean and Western), natural science, and mathematics. It will be of interest to the reader to note that a total of 1,050 applications for admission to the School of Public Administration were distributed and that 463 of these were returned. Of this number 386 were from day school applicants and 77 from evening.

Three hundred seventy-four day applicants took the written examination with forty-three passing. The evening group, being composed of government officials with the grade of three or above, were not required to take the written examination. Selection in their case was made on the basis of record by the minister or the head of the governmental agency in which the applicant was employed. With the exception of the Marine Corps and the Army, no agency recommended more than three candidates and of the thirty-eight making nominations, approximately one-half recommended only one.

Both the day and evening groups were required to take the oral examination where each candidate was interviewed by a committee of three or five members on his ability to understand and speak English in addition to his competence in the subject matter areas in which he chose to be examined. Of the forty-three day applicants taking the oral examination, thirty-five passed; while sixty-eight of the seventy-seven evening applicants were successful.

Twenty of the thirty-five day students listed law as their major subject of undergraduate study. The remainder majored in one of the social sciences with one exception whose undergraduate major was physics. The latter made the highest grade of the group on the entrance examination. The sixty-eight evening students came from thirty-eight different ministries and governmental agencies, both civilian and military. Forty-one per cent of these gave law as their undergraduate major with political science and economics following in the order named. The average age of the day students is twenty-four plus and that of the evening approximately 33.5. The student body of the School is composed entirely of males. As a matter of fact, no female made application for admission.

A number of courses are required for those seeking the M. A. in public administration at Seoul National University. Those offered during the first semester were: Introduction to Public Administration, Government of Korea, Research Methods, and Accounting. In addition the student is required to take one elective each semester. During the first semester he was offered a choice of one from seven courses which ranged from the study of international public administration to Korean local government.

A limited American staff gave assistance to their Korean counterparts helping with the course outlines and content of same throughout the period. In addition some help was offered with the aim of improving classroom teaching techniques.

During the first semester bi-monthly staff meetings were initiated which were attended by both the Korean and the American members. Mid-semester examinations were given and this was an innovation in most quarters at Seoul National. At the suggestion of the students a committee representing the student body and of their choosing met weekly at which time various topics ranging from student activities and curricula to current events were discussed. Mr. Hunt generally attended these and represented the American staff.

Early in this semester a revision of the library regulations and instructions was prepared and faculty members were asked to submit reading lists to the Librarian in order that the students might be better served. During the period approximately eleven hundred books and several thousand

Library of Congress cards were received. Included were about one hundred Korean and Japanese publications. To present nearly sixteen hundred books have been classified and cataloged. As of this writing the Library has received 2665 books and pamphlets from the United States. Of this number 302 have been forwarded to the National Officials Training Institute.

In June a parent-teachers association was organized for the new School.

The results of the first semester examinations are encouraging.

Publications and Speeches.

On June 1, 1959 the first research study of the new School appeared. The volume was prepared by Professor Sang Jyo Lee under the title A Regional Review of Public Administration Institutes (South East, Middle and Near East, Asia, and Middle and South America). In May Professor Hae Dong Kim's translation of the first half of the volume Methods in Social Research by William J. Goode and Paul K. Hatt, McGraw-Hill, 1952, New York, appeared. The June issue of The Justice carried an article by Dr. Stuart A. MacCorkle, "Public Administration Old and New" and the Philippine Journal of Public Administration accepted an article entitled "Public Administration at Seoul National University" for publication in the fall issue by the same author.

In September a bulletin describing the graduate program, giving a listing of courses and a description of those offered during the first semester, 1959-60, was published. It appears in both Korean and in English.

On May 26 Dr. MacCorkle appeared on the program of the Intercollegiate English Speaking Society and on August 5 he spoke at the general staff meeting of the United States Operations Mission to Korea treating the activities in public administration at Seoul National. On August 4 Professor William F. Larsen spoke to the South Seoul Rotary Club on the similarities and contrasts between the problems of public administration in Turkey and Korea.

Second Semester.

On September 7 classes began for the second semester at the School of Public Administration. As of this date there are thirty-one day students and sixty-two evening students registered...

Miscellaneous.

The following miscellaneous comments considered of particular importance or relevance at this time have been extracted from Dr. MacCorkle's report:

Seoul National University continues to give our team good cooperation. Dean Shin and his staff have assisted in every way possible within the limits of their means to make the project a success. There continues to be sympathetic understanding and a healthy working relationship between the Korean and the American staff members.

The staff has been active in making contact with various SNU administrative officials and professors of the other schools and colleges within the University, with those working in the social sciences at other universities located in Seoul, and in addition is constantly becoming better acquainted with Korean government officials and their activities.

With the arrival in Korea of the full complement of University of Minnesota technical advisers, most of the needed areas in public administration are covered. However, there will be a future demand for a technician in each of the following fields: planning, governmental regulation of business and industry, and statistics.

With the return of additional Minnesota trained Koreans, the faculty of the School has been greatly strengthened. Good progress is being made in the development of a capable Korean teaching staff. Recent Korean staff changes have improved Library operations; however this area is still one of concern. The problem is not so much one of numbers but rather a lack of competency in over-all library administration and supervision.

Equipment:

Needed items of classroom, laboratory and library equipment have been determined and procurement action will be initiated.

Plans for the Next Six Months.

1. The first and most important task is the advising and assisting of the Korean staff in the teaching of their courses. All of these are new to Korea.
2. Auxiliary to the above activities is that of the continued development of the Library. The American advisers will assist in the acquisition of additional books and materials needed in the courses for which they share with the Koreans the responsibility for the development of library and teaching materials.
3. The collection of Korean and other Far East materials should be expanded and effort continued to have the Public Administration Library designated as a depository for Korean government documents.
4. With the arrival of an American adviser in research, it is hoped that a planned research, publication, and translation program can be developed.
5. The various aspects of the School's policy should be constantly under study and surveillance. Thus it is believed that the quality of our operations will be gradually improved.
6. Efforts should be continued to increase outside private financial assistance to the School, especially for the purpose of providing scholarships, fellowships, and funds for research and publication. It is hoped that some American foundation might become interested in our project.
7. Interest in the improvement of the teaching and practice of public administration in Korea must be stimulated. Our program to present has given attention to the training and research. In addition more effort should be directed toward increasing publication and services. Also steps should be taken in the months immediately ahead to provide for the holding of conferences, public lectures, Korean-American faculty seminars, and the re-activation of a society in public administration.

8. The question of the establishment of an undergraduate college of public administration has been mentioned. The need for such a program should be thoroughly studied before any action is taken.
9. Finally, within the next few months the need for expanding physical facilities for the School should be considered and appropriate action taken.

Public Administration, National Officials Training Institute. Dr. E. R.

Draheim, Adviser, includes the following, chronologically, in his summary of major activity under this part of the ICA-Minnesota Contract for the period prior to the last 6-month report:

1. Eight participants (2 in 1957 and 6 in 1958) were sent to Minnesota for a year or more of graduate study in Public Administration. The two sent in 1957 returned in August of 1958 and received important in-service training assignments from the Korean Government.
2. The overall adviser arrived on January 3, 1958; his assistant on November 12 of the same year. Soon after his arrival the adviser made a careful survey, study and analysis of all courses previously conducted at the National Officials Training Institute, including who attended, course content and methods of instruction used. Based on this study and analysis, specific policy recommendations were made to the ROK Government covering steps necessary to improve their In-Service Training Program. Important is the fact that the Director, Dean and Adviser at the National Officials Training Institute worked as a team in developing these policy recommendations which included who should be trained and by whom, what course content should be considered, where the training should take place (The National Officials Training Institute as well as in the Ministries and Staff Offices), when and in what sequence the training should be scheduled and how to proceed to improve instructional methods. With definite policy recommendations established on steps necessary to improve the in-service training program of the ROK Government, the Director, Dean and Adviser at the National Officials Training Institute, continuing to work as a team, proceeded to contact and consult with all Ministers, Vice-Ministers, Staff Office Directors and other key ROK Government officials to develop an understanding and get acceptance of these recommendations. This understanding paid good dividends when the recommended program came before the State Council (Cabinet) for approval.
3. During the early stages of this project under the University of Minnesota Contract, major effort was directed toward developing an understanding and acceptance by key ROK Government Officials of the importance of organizing, developing, initiating and carrying out of an executive development program at the National Officials Training Institute for Bureau Directors, the top career employees in the ROK Government. When the State Council finally approved this proposal during November, 1958, the action phase of this entire project got off to an exceptionally fine start, with solid top level Government support. This has been a major factor contributing materially to the success of the total in-service training program as it has developed to date under this project.

4. Minnesota early took steps to select and send to Korea books, pamphlets and periodicals for the new Public Administration Library established at the National Officials Training Institute. Early action was also initiated toward purchasing and sending to Korea necessary audio-visual aids equipment, materials and supplies essential to improving instructional methods at the National Officials Training Institute. Staff members of the National Officials Training Institute were trained in how to set up, operate and take proper care of this equipment and materials and supplies therefor.
5. All essential steps were taken to plan for, request and secure counterpart funds to repair and improve the National Officials Training Institute buildings and facilities, including the construction of a small new modern library.
6. From October 1, 1958 to April 1, 1959, seven Executive Development Seminars, Middle Management Training Seminars and other courses were completed or initiated at the National Officials Training Institute for 186 ROK Government Officials, ranging from Bureau Directors (top career employees) to pre-service employees. Of major significance in this connection is the fact that from the very beginning the Adviser has maintained the policy that all seminars and courses given at the National Officials Training Institute be conducted by Koreans in the Korean language after they have been properly trained by Minnesota Advisers at the National Officials Training Institute in the development of appropriate course content and materials coupled with modern methods of instruction.

Major activities summarized by the National Officials Training Institute Adviser for the period April - October, 1959 include the planning and conducting of the following seminars and courses, some of which are still in session, for 415 officials drawn from all ministries and staff offices of the Korean Government and for 80 executives of the Korean Productivity Center: four Executive Development Seminars for 91 Bureau Directors (Grade-2), the top career employees in the ROK Government; three Middle Management Training Seminars for 72 Section Chiefs (Grade 3-A), who report to Bureau Directors; three Management Training Courses for 109 (Grades 3-A and 3-B) civilian employees, Ministry of National Defense; three Dynamics of Learning Seminars for 27 Korean seminar leaders and instructors for the National Officials Training Institute and elsewhere in the ROK Government, 22 being trained in groups and 5 National Officials Training Institute seminar leaders carefully trained on an individual basis; the first Management Training Seminar for the Ministry of Transportation for 16 (Grade 3-A and 3-B) employees, including

the training officer of that Ministry and three other leaders; the first Management and Technical Training Seminar for Bureau of Statistics, Ministry of Home Affairs for 26 (Grades 3-A and 3-B) administrative officers of the Bureau of Statistics; the first English Correspondence Seminar for 30 ROK Government officials responsible for receiving and answering English Correspondence in their respective ministries and staff offices. Met at National Officials Training Institute (5 days a week) from 6:00 P.M. to 7:30 P.M. from June 29, 1959 through August 19, 1959; an Office and Records Management Improvement Course for 44 (Grade-4) agriculture extension office managers from all over the Republic of Korea; and, held outside of the National Officials Training Institute, Personnel Administration, Office Management and Work Simplification Course for 80 executives connected with the Korean Productivity Center.

The Director, Dean, staff and advisers at the National Officials Training Institute, working as a team, assisted all seminar leaders and instructors in all of these sessions with developing appropriate course content and using modern and up to date methods of instruction. The key to the success of this program to date has been the selection and approval of well-qualified Korean seminar leaders and instructors, all of whom have adapted readily to new and unfamiliar course content and completely new methods of instruction. Careful consideration has been given by all concerned to the detailed evaluations made by each group, as they graduated, as a basis for improving both content and methods of succeeding seminars and courses.

Of great importance in the development of the in-service training program in the ROK Government during the past 6 months has been the preparation, translation, publication and use made of Korean text and reference materials. The seminar discussion leaders, instructors and the director, Dean, staff and advisers at the National Officials Training Institute all assisted with the planning, organization, development, translation, editing

and printing of the following extremely valuable publications and reference materials being used in the seminars and other courses at the National Officials Training Institute:

	<u>English Title</u>	<u>No. of pages</u>
(1)	"Administrative Management"	252
(2)	"Administrative Management" (Revised Edition)	141
(3)	"Organization and Planning"	530
(4)	"Organization"	136
(5)	"Human Relations in Management"	206
(6)	"How the Foreign Aid Program Operates"	572
(7)	"Management Skills"	202
(8)	"Work Simplification"	236
(9)	"Work Simplification" (Revised Edition)	141
(10)	"Introduction to the Study of Public Administration" by Leonard D. White (Korean Translation by the Korean Association for Public Administration)	702

In addition to the above, hundreds of Flip Charts, Vu-Graph slides, Black-Board Strips, explanations of movies, Case Study fliers and daily work-sheets were developed, translated and printed for use in conducting the Seminars and Courses at the National Officials Training Institute. Systematic files have been established and are being kept for all of these materials so that they will be readily available for future revision and use.

During this period remodeling and new construction at the National Officials Training Institute were completed and these facilities are in use; additional library materials from both contract and Korean sources were received and placed in use; and additional audio-visual equipment, also from both Contract and Korean sources, was received for use in instruction.

Three additional Minnesota-trained participants returned during this period and are making substantial contributions to in-service training in the Korean Government; three more have received short extensions of stay to permit them to further study and observe practical in-service training programs being conducted in both government and industry in the United States. It is planned that two additional participants, including the Dean, from the National

Officials Training Institute will begin graduate study and observational programs in the United States in early 1960.

The 1960 ROK Government Budget Policy released on August 6, 1959, for the first time in the history of the Republic spells out the purposes and need for in-service training to improvement management within the Government. In line with this policy the Dean and advisers at the National Officials Training Institute developed and sent forward to the Director for approval by the State Council an overall plan to implement the stepped up tempo of in-service training in the ROK Government. This plan calls for the appointment of training officers in all ministries and staff offices at an early date. It also calls for implementation of "Phase-II" of the National Officials Training Institute operations, which is a shift of emphasis toward developing training officers as soon as they are appointed and assisting them with getting training programs established to meet specific needs in their respective ministries and staff offices.

Current needs under this portion of the ICA/Minnesota contract involving Public Administration include aggressive follow-through action regarding the productive program already in effect; the development of practical Korean case studies for instructional use; the planning and production of additional Korean teaching materials, audio-visual and others; the addition of Korean narration to all English-language films and film strips in use at the National Officials Training Institute (this has started but much remains to be done); acquisition of additional library materials of particular value in in-service training; and procurement of some additional audio-visual equipment and supplies. Budget will of course be needed for these purposes.

Plans for the next six months include assisting to implement the plan briefly commented upon above; continuation of endeavors to utilize returned participants fully and effectively; assistance to the two additional proposed

participants in completing their pre-departure processing; continuation of action to assist in developing Korean staff for National Officials Training Institute use; assisting to keep the Korean staff advised of acquisitions of teaching aids and reference materials; assisting to encourage expanded use of the National Officials Training Institute's library; and most important continuing to assist in the planning and presentation of effective in-service training courses.

Operational Facilities. The provision of an adequate physical plant, suitably equipped and with adequate libraries, makes possible or enhances improved or more efficient instruction and research and conserves faculty time. Much support of this nature has been provided, as indicated by the following table:

SUMMARY OF ICA/MINNESOTA CONTRACT OPERATIONAL FACILITIES DOLLAR FUNDS ALLOCATED
FOR FYS 55, 56, 57, 58 & 59
FOR SEOUL NATIONAL UNIVERSITY AND NATIONAL OFFICIALS TRAINING INSTITUTE REHABILITA-
TION, IMPROVEMENT, EQUIPMENT AND SUPPLIES

	<u>FY 1955</u>	<u>FY 1956</u>	<u>FY 1957</u>	<u>FY 1958</u>	<u>FY 1959</u>	<u>Total</u>
<u>Agriculture</u>						
Rehabilitation & Improvement Equip. & Supplies	\$422,300	\$650,000	\$159,000	\$ 5,000	---	\$1,236,300
	---	<u>260,000</u>	<u>50,000</u>	<u>20,000</u>	<u>\$12,000</u>	<u>342,000</u>
Sub-total	422,300	910,000	209,000	25,000	12,000	1,578,300
<u>Engineering</u>						
Rehabilitation & Improvement Equip. & Supplies	65,200	100,000	676,000	---	52,000	893,200
	---	<u>730,000</u>	<u>500,000</u>	<u>134,000</u>	<u>18,000</u>	<u>1,382,000</u>
Sub-total	65,200	830,000	1,176,000	134,000	70,000	2,275,200
<u>Medicine</u>						
Rehabilitation & Improvement Equip. & Supplies	63,500	275,000	345,000	102,700	---	786,200
	---	<u>450,000</u>	<u>70,000</u>	<u>171,300</u>	<u>50,000</u>	<u>741,300</u>
Sub-total	63,500	725,000	415,000	274,000	50,000	1,527,500
<hr/>						
L.A. & S. - Equipment		50,000		40,000	---	90,000
Vet. Med. - Equipment		50,000		27,000	12,000	89,000
SNU General - Equipment		<u>35,000</u>		---	<u>8,000</u>	<u>43,000</u>
		135,000		<u>67,000</u>	<u>20,000</u>	222,000
Public Administration - SNU					36,000	36,000
Public Administration - NOTI					12,000	12,000
<hr/>						
Total Rehabilitation	551,000	1,025,000	1,180,000	107,700	52,000	2,915,700
Total Equipment	---	<u>1,575,000</u>	<u>620,000</u>	<u>392,300</u>	<u>148,000</u>	<u>2,735,300*</u>
TOTAL	551,000	2,600,000	1,800,000	500,000	200,000	5,651,000

*Excludes \$55,500 provided in Contract Amendment 10 for Public Administration. Most of this will go to SNU, but some to the National Officials Training Institute.

In addition local currency in the amount of Hw 3,311,795,950 (\$6,623,592 at 500:1) has been approved for these purposes by the Combined Republic of Korea-U. S. Economic Board. Of this amount the Board has approved for release Hw

2,667,607,450 (\$5,335,215), and Hw 389,446,700 has been proposed for release in CY (ROK FY) 1960. These figures include Hw 20,227,850 for the National Officials Training Institute.

The ninth 6-month report summarized the status of physical plant rehabilitation and improvement projects undertaken to April 19, 1959 with Cooperative Project support funds. During this report period work continued as follows on these projects:

College of Agriculture. The new main building and auditorium were completed and are in use; work on the heating plant and drainage facilities is in progress.

College of Engineering. Laboratory preparation work and construction of the new dormitory complex continued.

College of Medicine. Both interior and exterior building improvement projects continued at the hospital and at the Basic Sciences building.

National Officials Training Institute. Construction of a small new library building was completed during the period.

During the next six months work will continue on improvement projects now under way and, to the extent that material and equipment arrivals and funding permit, new work as summarized in the eighth semi-annual report and in water supply improvement plans for the College of Engineering will be undertaken.

As of October 1, 1959 the invoice value of classroom and laboratory equipment, supplies and library materials purchased by Minnesota and received in Korea totalled \$1,470,114. This amount is made up of the following sub-totals:

Seoul National University	
College of Agriculture	\$236,644
College of Engineering	\$712,659
College of Medicine	\$417,620
College of Veterinary Medicine	\$ 41,545
College of Liberal Arts and Sciences	\$ 37,967
School of Public Administration	\$ 14,379
National Officials Training Institute	\$ 5,951
General	\$ 3,349

Most of this equipment is already in use. Some items must await provision of additional laboratory space and facilities prior to installation and use. All such needs are receiving attention.

Status Summary of Contract Operations. Minnesota advisers have left with Korean colleagues many recommendations for change during the past five years. Relative to these recommendations the following comments continue to be applicable and significant:

1. By and large suggestions for change as a basis for improving instruction and research in all areas are developed through close working relationships effected between Korean and American staff members concerned. Thus written reports, in most cases, simply make a matter of record conclusions and courses of action already subjects of much discussion and close agreement.

2. Seoul National University's President and Deans concerned indicate great interest in changes proposed and, in the main, have given the impression of accepting them as desirable guides for action. The same is true of the Director, Republic of Korea Office of General Affairs, and the Dean, National Officials Training Institute, with respect to recommendations relating to in-service training.

3. Minnesota staff members respect the competence of their Korean colleagues. Both Korean and American staff members recognize that the advanced study programs of individuals now participating in the Cooperative Project will further advance the level of faculty competence in specific technical areas concerned.

4. The physical elements (structures, facilities, libraries, equipment) needed for carrying out certain recommendations are in the process of being supplied through the operational facilities portion of the Cooperative Project and in many areas are already exerting a beneficial effect on teaching and research.

5. The basic elements which make possible the effecting of instructional and research changes agreed upon as desirable are either present now in some degree or will be supplied, according to present plans.

6. Many of the changes desired by both Koreans and their American colleagues will come about only through the dedicated efforts of Seoul National University officials and faculty members, and Korean Government Officials, over a long period of time. Many recommendations have already been placed in effect; some may be carried out at an early date with staff and facilities now available; others will require more time.

7. At this stage of the Cooperative Project it appears that the improvement in depth objective of those formulating, funding and administering the undertaking is in the process of being achieved in the original contract fields of agriculture, engineering, and medicine, and that a substantial start in this direction has been made in the last-added contract area - public administration. It is becoming more and more evident that as a result of the Cooperative

Project significant changes have occurred in the knowledge level, skills, outlook and attitude of staff members who have had study opportunities abroad under the program. Of corollary importance are considered to be the specialized area analyses, improvement recommendations, and other forms of assistance provided by Minnesota staff serving in Korea.

Changes Effected by Project. In evaluating the results of a technical assistance project of this nature the character, extent and importance of changes which have occurred in consequence of the program are factors upon which determinations must largely rest. In this regard we are concerned not only with the views of advisers but with the more intimate knowledge of individual Korean faculty members, department heads and deans. To obtain the best possible appraisal of these factors the President of Seoul National University was again asked, as he has been prior to the preparation of preceding reports, for the University's views on this matter. It was requested that material be provided for each college concerned (except Law, since the new School of Public Administration organized there is just in the process of development) on the basis of the following outline:

1. The nature and extent of changes, if any, in the previously reported teaching and research functions of returned participants.
2. What additional changes in teaching (with particular reference to laboratory offerings), research and administration have come about as a result of the Cooperative Project?
3. What changes in teaching, research and administration will be effected during the next semester as a result of the Cooperative Project? Please comment specifically on proposed changes in laboratory offerings.
4. What major obstacles, if any, continue to prevent the introduction of desired changes in teaching, research and administration? Please specify the changes concerned and why it has not been possible to make them.
5. What building and facilities repair and improvement and new construction were undertaken during the past 6 months and what is the status of such projects?
6. What building and facilities repair and improvement and new construction is planned to start during the next 6-month period and what are the expected completion dates?

7. Is there any Cooperative Project equipment on hand which is not in use? If so, please state what and why.
8. If there are hwan financing problems affecting the accomplishment of Cooperative Project objectives please identify them and indicate what solutions are proposed.
9. Are all Cooperative Project procured library materials catalogued and available for both student and staff use? If not, please indicate unsolved problems involved and what solutions are planned.

Reports submitted by the Deans concerned in response to this request reflect, as did those for the preceding 6-month period, support of the general conclusions set forth above, indicate further changes in instruction and research stemming from the graduate study opportunities afforded staff members, provide considerable detail (beyond the summaries given above) concerning the status and future plans regarding physical plant rehabilitation and improvement, give more examples of how equipment and supplies provided under the project have contributed to teaching and research, and comment on some of the continuing problems which affect obtaining the fullest possible good from the training and facilities provided. Concerning the latter, the main problem continues to be financing.

Plans for the Next Six Months. Except for the overall survey of Seoul National University, plans for each contract area for the next six months are set forth in preceding sections. The plan for the survey of Seoul National University, including all national higher educational institutions in Korea, is outlined briefly in Part I of this report.