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Semi-Annual
PROGRESS REPORT
to
FOREIGN OPERATIONS ADMINISTRATION
and
SEOUL NATIONAL UNIVERSITY OF KOREA

in behalf of

REGENTS OF THE UNIVERSITY OF MINNESOTA

covering the period

October 19, 1954 - April 19, 1955

Minneapolis 14, Minnesota
April 19, 1955

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I. OFFICE OF THE CAMPUS COORDINATOR

As a result of the favorable report prepared by the University of Minnesota Mission to Korea in February, 1954 and the favorable reception to the report made by the Foreign Operations Administration and the University of Minnesota, preliminary activities looking toward the strengthening of Seoul National University of Korea began under an interim contract of three months duration which provided for a full-time coordinator, together with the necessary secretarial services, travel, and other essential expenses.

Coordinator Appointed. President J. L. Morrill recommended and the Board of Regents approved the appointment of Dr. Tracy F. Tyler, Professor of Education, to serve as coordinator under the interim contract effective August 1, 1954. The coordinator utilized secretarial service in the office of the Vice President, Academic Administration, without cost to the contract, during the month of August. When the individual selected to serve as full-time secretary had been cleared and processed her employment began on September 1, 1954.

The Coordinator and Dean Harold Macy, Institute of Agriculture, spent August 5 and 6 in Washington, D. C. where they discussed certain conditions in the proposed contract with FOA staff members (including Mr. Wood, Mr. Roseman, Dr. Andrus and Dr. Williams). They also held consultations at the Pentagon and in other federal agencies. This visit was followed by conferences, discussions, correspondence, and telephonic and telegraphic communications with reference to specific provisions in the proposed contract.

Contract Negotiations. Face-to-face negotiation sessions between representatives of the University of Minnesota and FOA/Washington were held

in Minneapolis on August 19 and 20. This resulted in an essential meeting of minds.

Further conferences, discussions, and communications took place with respect to the contract provisions between the close of the negotiation sessions and September 22, 1954 when the prime contract was signed by the University of Minnesota. Later, on September 28, 1954, it was officially signed by the Foreign Operations Administration.

Chief Advisor Selected. The tentative selection of Dr. Arthur E. Schneider, Professor of Forestry, University of Minnesota, for the post of Chief Advisor in Korea, had been made well in advance of the signing of the prime contract. This had made it possible for Dr. Schneider to participate in the study and discussion of the contract and to assist in the early stages of the screening of equipment lists for Agriculture. Later, after FOA approval, his appointment was formalized and made effective as of September 5, 1954.

Prior to his departure for Korea, Dr. Schneider, accompanied by the Campus Coordinator, spent the week of October 3 to 8, 1954 in Washington, D. C. in orientation sessions and in special conferences with personnel in FOA, in other government agencies, and at various embassies. On the day of his departure for Korea (October 13, 1954) a meeting was held of the ad hoc committee which had participated in the discussions and negotiations leading up to the signing of the prime contract. At that time a profitable period was spent in an informal discussion between Dr. Schneider and members of the committee with respect to the operations in which he would engage in Korea and the tentative plans which had been envisaged. From this session also emerged numerous suggestions which have been carried out with profit since that time.

Korean Advisory Committee. President Morrill, on October 22, 1954, appointed a Korean Advisory Committee to advise him with respect to policies and to offer counsel on broad problems relating to the FOA contract which might come to his desk for decision. He named as chairman, Dr. Malcolm M. Willey, Vice President, Academic Administration. The Campus Coordinator was made secretary ex officio but without vote. The other members appointed were Dean Harold S. Diehl, Dean Harold Macy, Dean Athelstan F. Spilhaus, Mr. William T. Middlebrook, Vice President, Business Administration, Professor John C. Kidneigh, Director, School of Social Work, and Mr. Laurence R. Lunden, Comptroller. Later Dr. Gaylord W. Anderson, Director, School of Public Health, who had represented Dean Diehl as a member of the Minnesota Mission, was added to the membership of the committee at Dean Diehl's suggestion.

The first meeting of the committee was held on October 27, 1954. Subsequent meetings were held on the following dates: November 19, 1954; November 30, 1954; December 10, 1954; February 8, 1955; and March 3, 1955.

A substantial portion of the activities in the office of the Campus Coordinator following the arrival of the Chief Advisor in Korea on October 19 were concerned with securing answers to problems which arose almost immediately upon the beginning of Dr. Schneider's service. Many of these necessitated the convening of the Korean Advisory Committee for discussion and advice before official answers were decided upon. Some involved communications by letter and telephone with FOA/Washington. Others were discussed informally with appropriate members of the administrative staff of the University. Still others involved only the application of normal University administrative procedures.

Engineering Advisor. As the Engineering Advisor for service at Seoul

National University of Korea with the rank of Professor, the University of Minnesota was fortunate in securing the services of Professor William R. Weems, Director, Industrial Liaison Office, Massachusetts Institute of Technology. Professor Weems was born in Korea, spent much of his early life there, and had a knowledge of the language and customs of the Korean people which would be difficult to duplicate. He had also had sound training and broad experience in engineering fields. His appointment was effective February 1, 1955, with more than half of the first month being spent in Minneapolis acquainting himself with the operations of the Institute of Technology, rendering assistance in the screening of engineering equipment lists, and other orientation activities. During February he conferred with respect to equipment screening with officials of the Lowell Institute and Massachusetts Institute of Technology. He also conferred with various individuals in New York and Washington, including representatives of FOA. He arrived in Korea on March 1 to assume his new post.

Proposed Contract Extensions. Numerous proposals to extend the original FOA contract have been made, studied, and acted upon by the University of Minnesota. The first was in the field of Social Work, a direct result of the Mission to Korea in the summer of 1954 under the auspices of the Unitarian Service Committee by Professor John C. Kidneigh, Director, School of Social Work of the University of Minnesota.

President Kyu Nam Choi, while at FOA/Washington on November 4, 1954 urged the allocation of additional funds for a project in the preparation of teachers who could teach English as a foreign language to Koreans in Korea.

Other proposed additions included the fields of Dentistry, Public

Health, and Veterinary Medicine.

All of these proposals were studied and discussed with appropriate members of the faculty and administrative staff and by the Korean Advisory Committee before a decision was reached as to the willingness of the University, if asked officially by the Korean Government, to undertake the proposed additions to the FOA contract.

The Visit of President Choi. The University was fortunate in being able to have President Kyu Nam Choi of Seoul National University on the campus for ten days in early December, 1954. Although President Choi and two other Korean officials were in the United States under the auspices of the National Education Association, that organization courteously arranged their itinerary to include the University of Minnesota. A profitable, though heavy, schedule was arranged for the visitors, including an official luncheon given by President J. L. Morrill, a luncheon given by the Board of Regents, and numerous informal affairs given by University officials and faculty members, student and community groups. The schedule provided for inspection and observation of University teaching and research facilities and conferences with the deans and members of the faculties in the three fields covered in the contract.

President Choi attended the December 10, 1954 meeting of the Korean Advisory Committee and, as a result, was able to clarify a number of points concerning the contract provisions and explain in detail the several proposals which had been made for its extension to other fields.

Visits of the Deans. It had been anticipated that the three Korean deans in the areas covered by the contract would be the first to come to the campus. Plans had been made for their arrival shortly after January 1, 1955. Unfortunately there were many delays. Dean Chae Koo Lee of

the Medical School finally arrived on February 26 for a period of from three to six months of observation and consultation with the members of the medical faculty. Dean Baik Hyun Cho of the Agricultural College did not reach Minneapolis until April 2. Both are living at the Center for Continuation Study. The visit of Dean Yung Mo Whang of the Engineering College has now been postponed until the fall of 1955 because the delay in his processing would have brought him to Minneapolis at a time which presents problems of various sorts both in Korea and Minneapolis.

Arrival of Korean Faculty Members. Delays postponed the arrival of the first contingent of Korean faculty members who had been proposed and accepted for graduate study at the University of Minnesota. The target date had been set well in advance of the opening of the spring quarter (March 28, 1955) but the first three from the engineering faculty did not arrive until April 2, one week following the beginning of classes and the fourth, on April 6. All are staying in Centennial Hall, the University's newest men's dormitory.

None has arrived yet for study in the other two fields. Of the seven accepted for study in the Medical School, four are scheduled to leave Korea about September 15, 1955, and the other three, just as soon as they complete the necessary actions. Of the six faculty members accepted for study in Agriculture, one will come to Minnesota for the opening of the fall quarter, 1955, and the other five early in June before the opening of the Summer Session.

Mr. Yong Bin Lee, an associate professor in the College of Agriculture, Seoul National University, who has been studying animal husbandry for a year at the University of Minnesota under the auspices of the Korean Ministry of Education, was granted an additional six months of

study under our FOA contract, beginning April 1, 1955. This extension was the result of a mutual agreement between the authorities of the University of Minnesota and Seoul National University.

Orientation of Korean Faculty. The Coordinator has been greatly assisted in the orientation of the Koreans now here for study under the FOA contract, not only by the Office of the Foreign Student Adviser, but by other Koreans now resident at the University. A contingent of them has always been on hand at the airport to meet the new arrivals, beginning with the visit of President Choi last December. This same cooperation can be expected to continue throughout the entire period covered by the contract.

A special orientation session was arranged for the entire day of Saturday, April 9, 1955, in cooperation with the Office of the Foreign Student Adviser. All four Korean faculty members who had begun their studies during the spring quarter were there as were Deans Lee and Cho. The Coordinator was present and assisted in the orientation.

Problems Concerning Graduate Study. The University of Minnesota has no illusions with respect to the problems it faces in attempting to make the graduate study of Korean faculty members as profitable as possible. Although it has had years of experience as an outstanding center for the further education of students from all parts of the world, those coming from the Far East have, in general, presented more language difficulties than have those from parts of the world where English or one of the modern foreign languages is spoken. Since, for so many years, Japanese was the language prescribed for Koreans, all are fluent in that language and in Korean, but are only barely passable in their use of English. As a result, regardless of his competence in his major field,

the success of each one is dependent primarily on the rapidity with which he gains a mastery of English. A screening which would bring to the United States for study only those whose mastery of English was completely adequate for graduate study would likely bar most, if not all, Korean faculty members seeking advanced study at the University of Minnesota. Our problem, then, is to provide the maximum of opportunity for these people to become oriented to the American language and culture, hoping that, with the passage of time, each will gain as much as possible from his opportunity for study in the United States.

Visits of Other Korean Faculty Members. Quite a number of faculty members from Seoul National University are presently studying in the United States under other auspices. Those who can conveniently do so without incurring additional travel expense have been invited to spend a few days at the University of Minnesota for observations and consultations in the fields of their interest enroute to their homes in Korea. FOA has approved the payment under the contract of the usual per diem during their Minneapolis visit to cover their maintenance while here. One such visit has already been made by a faculty member in Naval Architecture who had been studying at MIT. Others plan to visit here later.

Dr. Myung Jin Park, Dean, College of Dentistry, Seoul National University, arrived in Minneapolis April 18, 1955 to spend three weeks in observations and consultations. He is here under the auspices of the American-Korean Foundation and without expense to our FOA contract.

Such visits it is hoped will serve to strengthen the sister-relationship between the two institutions and make more effective the operations under our FOA contract.

Screening of Equipment Lists. The lack of equipment and supplies at

Seoul National University has presented a difficult problem in planning operations under the contract. The early dispatch of Minnesota faculty members to Korea would hardly produce optimum results in the absence of such important teaching tools.

The screening of the equipment lists in the three fields covered in the contract have presented problems of far greater difficulty than had been anticipated when the University of Minnesota was asked by FOA to undertake this task. Furthermore, it has been difficult to determine the form in which items are to be specified to insure speedy and accurate procurement. The first two parts of the Engineering Equipment List have been turned over to FOA/Washington for procurement. Both Dean Macy and Dr. Anderson have had conferences with FOA officials in Washington with respect to the lists for their respective fields. It is hoped that a substantial portion of the procurement will begin this spring and that the flow of equipment into Seoul will begin in the fall of 1955.

Service in Korea. Later this spring, or in early summer, the University of Minnesota hopes to send to Korea advisors for Agriculture and Medicine. By the fall of 1955, it is hoped that faculty members needed to assist in certain disciplines in the three areas covered by the contract will have begun their overseas service for varying periods. It is recognized that the maximum number of such experts cannot be effectively utilized in Korea until the essential equipment has been procured and installed. But request for assistance from the Korean authorities will be filled as rapidly as qualified staff members can be secured and approved work plans permit.

General Problems. University of Minnesota officials feel that many of the difficulties which have been faced since the signing of the prime

contract can eventually be solved to the satisfaction of all concerned. Two major problems of this type might be mentioned here.

1. There needs to be a more complete acceptance by FOA and ROK government officials that educational matters involved in the performance of the contract must be left for decision solely to the University of Minnesota, if agreed to by the officials of Seoul National University. For example, the selection of personnel to serve in Korea and of Koreans to come to the United States for graduate study should be the sole responsibility of the two educational institutions, leaving FOA/Washington and OEC/Seoul responsible solely for approval as to security.

2. There has been excellent cooperation on the part of FOA/Washington, but some means needs to be found to expedite the rendering of official and final decisions on matters of policy relating to the contract when transmitted to FOA/Washington for rulings. Considerable time has been wasted by delays in securing rulings and by rulings once made and later reversed. Some of this is understandable and unavoidable, but it is to be hoped that most of these problems have now been ironed out and that, in the future, operations can move forward with greater dispatch.

II. OFFICE OF THE CHIEF ADVISOR IN KOREA

The technical assistance contract involving Seoul National University of Korea entered into between the Foreign Operations Administration and the University of Minnesota was signed by FOA on September 28, 1954. On the 19th of October Minnesota's Chief Advisor in Korea arrived in that country.

Koreans Propose Major Changes in Contract. After initial discussions with OEC and UNKRA representatives concerning contract provisions and the proposed plans of procedure, the Minister of Education was contacted by UNC Economic Coordinator C. Tyler Wood, Gen. Eastwood of UNKRA (United Nations Korea Rehabilitation Agency) and Minnesota's representative. During this initial meeting it developed that the Director of the ROK Office of Planning (this office since absorbed by the recently established Ministry of Reconstruction), the Minister of Education (who came to office after the technical assistance program had been agreed upon) and the President of Seoul National University (who was in the United States under American-Korean Foundation sponsorship at the time) were proposing a major change in the contractual undertaking. This change consisted of reducing the expenditures for staff exchange and costs incident thereto to \$750,000 for the three-year period and using the balance of the \$1,800,000 total for rehabilitation of physical plant and procurement of equipment.

Considerable discussion and delay ensued until on November 9 the Minister of Education stated that the overall plan was approved by the Republic of Korea, but that a change in the American-Korean faculty exchange ratio was being recommended. The initial ratio was about $1:1\frac{1}{2}$. The ratio which the Korean authorities asked us to approve was $1:4\frac{1}{2}$.

After consideration by all parties concerned - in the United States as well as in Korea - this latter ratio was accepted for use as a guide in working out staff exchange plans. With agreement on this proposal having been reached, the way was cleared to begin effectuation of the program. Plans looking toward this action had been in progress even during the period when there was no meeting of minds on the scope and character of the overall undertaking.

Staff Exchange Plans. Processing of the three deans for departure action was started in November, 1954. The Dean of the College of Medicine finally received his U.S. visa on February 1, 1955. When it became evident that there was no way to determine when clearance actions concerning the Deans of Agriculture and Engineering (both of whom had spent more than short periods of time in foreign countries) would be completed, the Dean of Medicine was dispatched to the University of Minnesota alone on February 24.

Final clearances for the Dean of Agriculture came through in late March and he departed for Minnesota on April 1. Because of various delays and the arrival of Minnesota's College of Engineering advisor in Korea, it is planned to have the dean of that college postpone his travel to the United States until the fall of 1955.

Complete understanding exists concerning the importance of carefully selecting faculty members to participate in the technical assistant program. Plans initially prepared by the respective deans of the colleges concerned are reviewed by a special committee consisting of the Vice President of the University, the Academic Dean, the Dean of Students, the Dean of the Graduate School, and the Dean of the College of Engineering. The Deans of Agriculture and Medicine sit with the committee when

members of their staff are being considered.

Plans for SNU staff members to go to the U.S. for advanced study were first prepared in December, 1954. Processing for departure actions for the group it was hoped would be able to begin 1955 spring quarter work at Minnesota was started during the first week in January, 1955. As of April 4, four of a group of 25 were able to depart. Clearance delays were the major factor preventing the others from leaving, though some schedule changes and English language inadequacies would have kept a part of the group in Korea until a later date in any event.

Minnesota Staff Members. Prof. William R. Weems arrived in Korea on March 1 to serve as advisor, College of Engineering. Plans for other American staff members to come to Korea are still in the formative stage. The status of these plans is directly affected by (1) delays in getting the three deans involved to Minnesota for consultations, (2) the length of time required for procurement and use of materials for physical plant rehabilitation, and (3) delays in equipment procurement and the length of time required to get same to Korea, delivered to the University, installed and ready for use.

Equipment Procurement. Previously prepared lists of equipment recommended for procurement by each of the three colleges were located shortly after the arrival of Minnesota's representative in Korea. These lists were reviewed, discussed, and revised (some a number of times) and finally transmitted to Minnesota in early December for screening. For various reasons there were delays which resulted in OEC's Firm Request for \$1,150,000 worth of equipment not being signed by the responsible Korean office until March 19. This instrument is currently in the hands of FOA Washington for review, approval, and issuance of Purchase Authorizations.

Physical Plant Rehabilitation. Initial plans for needed rehabilitation of buildings and other facilities were prepared by each of the colleges subsequent to physical plant inspections and preliminary discussions by and with Minnesota's Chief Advisor in Korea and representatives of OEC and the Korea Civil Assistance Command (KCAC). After over-all approval of planned work by the acting head of SNU and Minnesota's representative, on-the-ground checks and a review of the details of materials estimates were made by KCAC Public Works personnel. This agency is also drafting the necessary Firm Request for \$350,000 worth of materials for this purpose. During this fiscal year it is planned to take care of a part of the additional needs of the College of Agriculture at Suwon under existing Firm Request No. 516 (1954, No. 136) and action to that effect is in process.

Operational Needs of Minnesota Staff

1. Secretarial. OEC having and expecting to have no more secretarial help than required for its own purposes, Minnesota (with OEC and FOA/Washington approval) began action to recruit one such person. It was decided to attempt to operate with one American secretary and Korean typists. The one American secretary is expected to arrive before July 1.

2. Transportation. There being no prospect from OEC's point of view of being able to assign needed transportation to Minnesota staff members, action was taken (with OEC and FOA/Washington approval) to procure needed vehicles. The first two of these vehicles cannot be expected to arrive in Korea before June because of many unforeseen delays.

3. Office space. OEC is currently providing needed office space at the Chosun Hotel. SNU has made available office space at each of the colleges concerned, but considerable rehabilitation work is required before

most of these offices can be occupied. Professor Weems has established an office at the College of Engineering.

KCAC engineers have already estimated office rehabilitation needs and costs and it is expected that the work concerned will be contracted for by OEC at an early date.

OEC will provide office equipment.

4. Housing. Both of Minnesota's staff members are currently housed with OEC personnel at the Chosun Hotel. An attempt is being made to locate a billet in Seoul for the Minnesota staff but so far without success. The search will continue.

SNU has made available a faculty clubhouse at Suwon for the use of Minnesota staff members working with the College of Agriculture. This house and facilities will require some maintenance and improvement prior to occupancy. KCAC engineers have already made preliminary surveys of what will be required. OEC will procure the necessary furnishings and equipment. It is expected that this billet will be ready for occupancy by the time the first American staff member for the College of Agriculture arrives.

Plans for the Period, May - October, 1955

Major matters to receive attention during this period include:

1. Getting the Dean of the College of Engineering to the U.S. for a period of observation, discussion, and inquiry into administrative and instructional procedures and methods at Minnesota and other outstanding institutions in the engineering field.

2. Seeing that Korean staff members already recommended by SNU authorities for participation in the technical assistance program and accepted by Minnesota get to the U.S. in accordance with plans agreed upon.

3. Working with Seoul National University authorities in the preparation of overall staff exchange plans for the remainder of the contract period, and assisting in carrying out the portion pertaining to this 6-month period.

4. Assisting SNU authorities in carrying out physical plant rehabilitation plans concerning which materials and supplies have been placed on procurement.

5. Assisting SNU authorities in the determination of and preparation of plans and estimates for additional required physical plant rehabilitation.

6. Following up on equipment and supply procurements initiated; assisting in the installation, use, and maintenance of equipment received; and helping to determine additional needs for equipment and supplies.

7. Assisting SNU authorities in appraising needs for water, electricity, gas, heat, etc., and helping to take such actions as appear reasonable and desirable to satisfy these needs.

8. Trying to find and place in effect a satisfactorily objective means of determining aural comprehension of English on the part of SNU staff members recommended as program participants.

9. Assisting proposed program participants, to the extent possible and feasible and directly or indirectly, to improve their English language competence.

10. Learning more about Seoul National University as a whole and the Colleges of Agriculture, Engineering, and Medicine in particular --- how organized and administered, make-up of faculty, details of curricula and courses, the character and scope of research undertaken, major problems affecting quality of teaching and research, and allied matters.

11. As American staff members arrive and after they become acquainted with Korea and SNU, the situation with respect to physical plant and equipment in their field, and the major problems and objectives facing SNU in that area; making known to Koreans concerned the aspects of teaching and research which, from American experience, might be considered as having application here -- then helping to place accepted modifications or additions into effect.

12. Extending assistance in the contract fields to other educational institutions and agencies as opportunities arise and time permits.

13. Cooperating to the fullest extent possible with other agencies and individuals concerned with education in Korea.

Current Needs of Seoul National University

Seoul National University's needs are many. Among the more evident noted during this first 6-month period are:

1. The obvious physical plant and equipment needs about which something is being done.

2. The great need for texts and reference materials in the Korean language.

3. The need for more and better knowledge, on the part of both students and staff, of some major foreign language, preferably English, which would unlock for widespread use a wealth of readily available, modern publications and other materials in all fields.

4. The need for a more adequate budget permitting:

a. The payment of adequate salaries to faculty members so that it would be economically possible for the staff to spend full time on teaching and research at Seoul National University. The present system,

whereunder only a fraction of a faculty member's total income comes from his University salary, provides no sound foundation on which to build a competent, dedicated staff.

b. The hiring of competent laboratory technicians for the installation and maintenance of laboratory equipment.

c. The provision of basic facilities conducive to efficient instruction, study, and research; these facilities to include fundamental maintenance of physical plant, adequate heat, water, light, power, etc.

d. Development of an extension program.

5. Improvement in the reliability of schedules of railroads and buses serving faculty members and students of the Colleges of Engineering and Agriculture so that class attendance may be more regular and punctual.

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I. OFFICE OF THE CAMPUS COORDINATOR

Previous Report. The initial report, covering the period, October 19, 1954 to April 19, 1955, provided a brief history of the project from its inception, followed by a Minnesota Mission to Korea in February, 1954, until just after the first Korean faculty members had arrived for study at the University of Minnesota. It noted, among other details, the negotiation and signing of the prime contract, the appointment of the Coordinator and the Chief Adviser, the organization of the Korean Advisory Committee, the visit of President Choi and of the deans of medicine and agriculture. It mentioned also the various areas for which contract extensions had been proposed. In addition, it called to attention a few of the problems encountered: English proficiency, graduate study programs, orientation, screening of equipment lists, securing faculty members for service in Korea, delays in securing approvals from FOA/Washington, and the problems of and delays in processing Koreans proposed for study in the U. S.

Korean Advisory Committee. The Korean Advisory Committee continued to give essential advice and counsel in establishing policies and reaching major decisions. Only one meeting (May 18, 1955) was held during the reporting period but the Committee was kept informed through a series of memoranda on all important matters and asked for comment before major actions were taken.

At the Committee's only meeting, in addition to discussing matters of policy, it heard an oral report from Professor Lloyd M. Short who had spent a short time in Korea, had explored the possibility of a supplementary contract covering the field of Public Administration, and had conferred with our Chief Adviser and others there. He expressed himself as being

greatly impressed with the manner in which Dr. Schneider fitted into the situation in Korea and was commendatory concerning the work of Professor William R. Weems, our Engineering Adviser. It was the consensus of the Committee, after hearing Professor Short's comments, that no additions to our contract should be made unless we were assured of individuals who could go to Korea to carry out our implied obligations.

Administrative Routines. The arrival of the initial contingent of Korean faculty members on April 4, 1955, as noted in the earlier report, and the expectation of a contingent in residence of from 40 to 50 by the opening of the fall quarter necessitated the development of procedures to expedite the operations of the office.

Forms were developed so that when the Coordinator met each Korean faculty member on his arrival at Wold-Chamberlain Airport he could be handed an envelope containing a check as an advance on his per diem, together with a statement showing dates covered, rate, etc.; a check for \$10 to reimburse him for the cost of his U. S. visa together with a memorandum of explanation; an insurance report blank; step-by-step directions as to registration procedures, fee statements, books and supplies, room and meals, etc.; and a receipt for his return trip ticket which he surrendered for deposit in the University vault.

A form for the requisitioning of books and supplies from campus bookstores, providing for the signatures of the instructor, adviser, and coordinator was also drawn up. Later, after a trial period, the Coordinator's Office was requested to accompany all book reports for each individual with a single journal voucher listing all the books and supplies approved for him. This greatly simplifies the work at the bookstores.

A per diem check, together with an explanatory form, is given to each Korean faculty member on the 15th and last days of each month. The cost of health and accident insurance (\$3.09 per Korean per month) is deducted from his first check each month and the total sum for all the Koreans supported under the contract is remitted monthly to ICA/Washington in a check made payable to the Treasurer of the United States. This check is accompanied by a form listing the name of each participant and the amount of his insurance deduction.

Additional Korean Faculty Members Arrive. The second contingent of Korean faculty members, three from the College of Medicine, arrived on May 19, 1955. Two more from medicine came on May 27. In June, contingents arrived as follows: June 5 (5), June 12 (1), June 25 (2). There was one arrival on July 24. In September, 11 arrived on the 15th, 6 on the 17th, and 8 on the 18th. This brought the total arrivals to the University of Minnesota to 43, including the 4 reported earlier. Of this total, 9 were in agriculture, 15 in engineering, and 19 in medicine.

Six other SNU faculty members received support under the program during the current reporting period: Yong Bin Lee, agriculture, University of Minnesota (April 1 to September 25, 1955); Ki Young Lee, medicine, Pasteur Institute, Paris (since June 1, 1955); Cheung Hun Kim, naval architecture, MIT (since June 7, 1955); No Su Kim and Bum Shik Woo, textile engineering, Lowell Institute (since September 6, 1955); and Eung Keuk Lim, ceramic engineering, Ohio State (since September 22, 1955).

This brings to 49 the total number of Korean faculty members supported under the program. Of this total, 10 were in agriculture, 19 in engineering, and 20 in medicine.

Minnesota Faculty to Korea. The month of September witnessed a contingent of five faculty members from the University of Minnesota emplaning for Korea to render consultative and advisory service to Seoul National University. First to leave (September 3, 1955) were Dean Emeritus Clyde H. Bailey and Professor Philip W. Manson, both of the Institute of Agriculture. Dr. Bailey is an internationally known biochemist and Professor Manson, an outstanding agricultural engineer. Both had seen service previously in assisting in the agricultural development of other foreign nations. Next to leave (September 10, 1955) was Carl Graffunder, a lecturer in architecture at the University of Minnesota and head of a prominent Twin Cities architectural firm. Dr. Sidney C. Larson, associate professor of electrical engineering, who has had extensive commercial experience in electronic engineering left on September 19, 1955. Professor Clarence E. Lund, a mechanical engineer, with wide experience as an engineering consultant, left on September 26, 1955. Professor Lund had also been charged with the responsibility for screening the engineering procurement lists. All left for three months' tours except Professor Manson who will spend four to six months in Korea.

The Coordinator's Office handled all the necessary processing of these individuals. This included the procurement of air transportation, passports, and visas; the shipment of baggage both accompanied and unaccompanied; the arrangement for medical examinations and inoculations; and the preparation of the necessary forms required for the approval of their appointments by ICA/Washington.

Deans Receive One Week's Briefing on All-University Offices, Departments, and Services. The Coordinator's Office arranged a schedule for

Deans Lee and Cho covering one week (May 9-13, 1955) of observations and conferences with major all-University offices. The following units were included: Library, Comptroller's Office, Museum of Natural History, Athletic Department, Dean of Students, University of Minnesota Press, Students' Health Service, Dean of Admissions and Records, Audio Visual Education Service, Civil Service Personnel, Graduate School, University Radio Station.

Citations to Deans. Dr. Chae Koo Lee and Baik Hyun Cho were honored by the Board of Regents at a meeting on May 20, 1955 by the formal presentation of official citations by President J. L. Morrill. The citations, alike except for the name, were engrossed as follows:

To the Seoul National University of Korea
and to
Cho, Baik Hyun
Dean of the College of Agriculture

WHEREAS, On the twenty eighth day of September, 1954, the University of Minnesota entered into a contract with the Foreign Operations Administration designed to assist in strengthening and developing the educational and research programs of the Seoul National University of Korea; and
WHEREAS, Under the contract, provision is made for extended visits by the deans of the three Colleges of Seoul National University for the purpose of observation and consultation at the University of Minnesota; and
WHEREAS, Dean Cho will soon complete the period of his visitation which, it is hoped, has proved of significant benefit to himself and to both co-operating institutions;
THEREFORE, BE IT RESOLVED, That the Regents of the University of Minnesota do hereby extend greetings and felicitations to Dean Cho and to the Seoul National University of Korea, and pledge, on behalf of the University of Minnesota, the continuance of the friendly relations and co-operation which have so far characterized this mutually beneficial undertaking.

William T. Middlebrook
Secretary

J. L. Morrill
President

Visit of Mrs. Kyu Nam Choi. The University of Minnesota was host to the wife of the President of Seoul National University from June 1 to June 4, 1955. She was met, upon her arrival at the railroad station, by

the Coordinator, other Minnesota faculty, and a large Korean contingent, and was taken to the University campus where comfortable quarters had been reserved for her in the Center for Continuation Study.

Mrs. Choi, who had been studying at the Juilliard School of Music in New York, spent a busy four days conferring with staff members in the Department of Music, meeting officials of the Y.W.C.A., seeing the two campuses, and attending other functions. On June 3 President and Mrs. J. L. Morrill gave a luncheon for her in the Campus Club, to which had been invited University officials concerned with the Korean contract, their wives, and Deans Lee and Cho.

Former SNU Dean at Minnesota. Professor Chong Hong Park, for ten years a faculty member, now head of the Department of Philosophy, and former dean of the College of Liberal Arts and Sciences, Seoul National University, is spending the fall quarter at the University of Minnesota as an Honorary Fellow in Philosophy. Although Dr. Park is studying under a fellowship from the U. S. Department of State rather than under our ICA contract, the Coordinator met with him in the office of the dean of our Graduate School on September 28, 1955, put him in contact with the Department of Philosophy, and offered him any further assistance he might need during the time he spends in Minneapolis. Professor Park is an excellent scholar, well versed in his field, and holds membership in the exclusive Korean Academy of Arts and Sciences. He was selected from a group of five top Korean philosophers for the fellowship under which he is studying in the United States.

Special English Course. The ability to communicate effectively in the English language is an important factor in the success of Korean faculty

members. This had been recognized in the provision of intensive instruction in English offered in Seoul for Korean faculty members being processed for study in the United States and for the requirement that each pass prescribed English tests before departure from Korea would be authorized.

By the end of the spring quarter it became apparent from experience with the first contingent of Koreans that their academic progress would be greatly facilitated if, during the summer months, a special intensive course in English could be set up for them on the University of Minnesota campus. This need had been recognized by both the Koreans and their advisers.

FOA/Washington, after due consideration, authorized the establishment of such an experimental course at a cost not to exceed \$3,000 for a three months' period (July 1 to September 30, 1955). Instruction totalled 20 hours per week and included four major areas each taught by experts: (1) Reading and Listening, (2) Grammar and Composition, (3) Conversation and Grammar, and (4) Speech and Speech Comprehension.

Tests administered at the beginning, middle, and end of the course revealed remarkable improvement, in spite of the fact that most of them carried heavy study schedules in addition to the English course. This improvement was due probably to the superior intelligence of the group, the intensive-ness of the instruction, the broad coverage of the course itself, and the expertness of the instructors.

Whether intensive English courses of this nature will have to be provided for other Korean faculty members must await developments. The reactions of their major graduate advisers will be a crucial factor. Should the advisers recommend such instruction, approval of ICA/Washington would be required. Certainly it seems better to improve competency in English in cases where command of the subject falls below minimum requirements, even though study

schedules have to be correspondingly reduced, than for the Koreans to fail in their course work.

Special Physiology Course. It became evident to our College of Medical Sciences, before the first contingent of Korean medical faculty had been on the campus for very long, that Korean medical education is deficient in the application of modern chemical, physico-chemical, and physical knowledge in many aspects of physiology, perhaps excluding classical neuro-physiology. These Korean medical faculty members, it was felt, needed a course stressing modern knowledge in clinically applicable physiology, with particular attention paid to the areas of greatest deficiency: circulation, respiration, water and salt metabolism, and endocrinology. Other deficient areas which seemed sorely needed were the function of the autonomic nervous system and the physico-chemical aspects of digestive tract physiology.

ICA/Washington, upon request, agreed to authorize reimbursement for such a course at a cost of not to exceed \$8,700. The course began on October 17, 1955, was scheduled to run for five months, and planned to include 5 hours of lectures, 4 hours of laboratory, plus an additional hour or two for consultation and demonstration each week. Plans contemplated that a special staff, recruited from other institutions or from research institutes, would provide the instruction.

Reimbursement for Cost of U. S. Visas. The Chief Adviser in Korea, in a letter dated August 17, 1955, called attention to the fact that Korean faculty members coming to the United States for study had been required to pay personally the \$10 required for a United States visa. Since this amount looms large in a country where United States dollars are hard to get, it seemed that an attempt should be made to reimburse each Korean for this

visa cost. A request to ICA/Washington resulted in a ruling dated August 30, 1955 making these visa costs reimbursable under our contract. All previous participants have now had their visa costs refunded to them and all future participants will receive reimbursement upon their arrival.

Book and Supply Problems. Provision is made to reimburse the University of Minnesota for books, supplies, and equipment provided for Korean faculty members studying under our ICA contract. The administration of this provision by the Coordinator's Office has been extremely difficult. Nothing is provided, of course, unless the item has been recommended in writing by the instructor, adviser, and Coordinator.

An attempt has been made to limit items to those normally required of other students registered for the same course. However, it should be pointed out that more books, supplies, and equipment are needed for such specialized graduate study as is being undertaken by the Korean faculty members than would be the case for undergraduates, or for that matter, for the average graduate student. Also the cost of individual items, particularly books and equipment, is higher for graduates than for undergraduates. Another factor has been that instructors and advisers differ markedly in the extent to which they recommend the purchase of items for the Koreans that are usually "recommended" to students rather than "required." Furthermore, there has been the need, in many cases, to provide Koreans with books giving background for the courses in which they are registered since no Korean brought with him from Korea any professional books or supplies. A final factor has been the necessity of providing the Koreans with such instruments as slide rules for engineers and specialized equipment in medicine needed by each physician in making his hospital rounds or required in order

to carry on his research.

It will thus be apparent that expenditures per man year for books, supplies and equipment have been running far higher so far than could have been predicted. On the other hand, the Coordinator has made every effort to eliminate the purchase of de-luxe items and to limit requisitions to those items which the Koreans really need to make their graduate study of maximum effectiveness.

Health and Accident Coverage. An earlier ruling by FOA/Washington stated that Health Service fees were not reimbursable under our contract and that each participant would be required to pay the sum of \$3.09 per month for health and accident insurance. This has caused some difficulty since it means that the Koreans studying at the University of Minnesota under our contract must be handled differently than are any other students in the institution.

The importance of having the Health Service maintain close checks on health of all students as a protection to the entire University community has made it necessary to provide the Koreans with certain Health Service procedures that are covered for other students by the Health Service fee, even though no reimbursement is possible. A complete physical examination upon entrance is one of these procedures being provided without charge to contract personnel. A second difficulty has been in getting fee statements correctly billed for our contract participants. This has resulted in extra paper work in the many cases where a clerk had billed a Korean for the same fees as are applicable for other foreign students instead of the special rate (deducting for Health Service) established for him. Finally, this situation has made it necessary for the Coordinator's Office to set up a list of physicians to whom Koreans who need medical attention can be referred for treatment.

Equipment Procurement. On October 3, 1955 the Coordinator finally received from ICA/Washington a duly signed copy of Amendment No. 5, which provided the necessary funds and authority to initiate the procurement of equipment and supplies in the amount of \$1,150,000 for Seoul National University of Korea. Thus ended almost a year and a half of negotiations and delays in the essential rehabilitation of the laboratories, libraries, and classrooms for the colleges of Agriculture, Engineering, and Medicine.

Although the equipment procurement problem might logically be said to have begun when these equipment lists were shown to the Minnesota Mission while it was in Korea in February, 1954, it can be stated officially that equipment lists for agriculture, engineering, and medicine were sent to the respective Minnesota deans on May 14, 1954 by Miss Marie L. Abeille, Acting Chief, Division of Education, United Nations Korean Reconstruction Agency. At her request (and this was long before contract negotiations had even begun) two of these lists were screened and returned to Pusan, Korea, where her office was then located. The engineering and medical lists were acknowledged by Miss Abeille under date of August 20, 1954. The agriculture lists, which were completed later, were sent to FOA on September 3, 1954. Thus Minnesota believed that it had rendered a significant service to Seoul National University and discharged its screening responsibilities as far as equipment procurement was concerned.

Later, while Dean Harold Macy and the Coordinator were in Washington on August 5 and 6, 1954, they learned that UNKRA had run out of money and would be unable to procure the equipment and supplies on the lists which had been sent to Minnesota for screening. At that time (August 6, 1954) Dr. J. Russell Andrus, University Contract Coordinator for FOA, dictated

and handed the Coordinator a letter from which the following are excerpts:

". . . It is agreed that Item A 9 of Exhibit III in the draft contract shall be deleted, since Minnesota will not be expected to undertake actual procurement of supplies and equipment, except on a very limited scale. . .

"FOA expects to make money available outside the contract for the purchase of necessary equipment and supplies. Your advice will be a major factor in the determination of the amount of funds allocated for this purpose.

"It is agreed that the professional and technical advice of Minnesota, as to equipment and technical supplies, is essential to the success of the project. Therefore it is hoped that Minnesota will ask its professionally competent people to assist in the preparation of detailed lists and specifications, of goods to be purchased through regular U. S. government channels. In the event that you find gaps in the lists and desire that essential additional items be provided at an early date, we should appreciate the addition of such items to the lists which you submit to us for government procurement."

The Coordinator was informed on August 30, 1954 that FOA had agreed to make an initial allocation of \$1,500,000 for the procurement of equipment and supplies for Seoul National University. Since the requested screening by Minnesota had presumably been acceptable and the last list had been returned on September 3, 1954, it was believed that procurement would go forward immediately.

The first indication that difficulties were being encountered with respect to procurement came in a letter from the Chief Adviser in Korea dated November 29, 1954. Here are a few quotes from Dr. Schneider's letter:

"Some parts of the lists were rather hurriedly prepared to have them ready for Minnesota representatives when they visited Korea. . .

"UNKRA has no funds with which to procure equipment for and assist in the rehabilitation of these colleges. . . One thing is certain: our placing these equipment lists in UNKRA hands has resulted in no procurement.

"FOA's normal internal funding procedure requires that, to formally obligate the \$1,500,000 earmarked for equipment and physical plant

rehabilitation for the three colleges, a "Project Proposal" must be developed with the ROK Government and sent to Washington for approval. This instrument, when formalized by a Project Agreement with the ROK Government, obligates both dollars and hwan required for the project. It will be evident that lists of equipment alone fall far short of supplying data needed in preparing this presentation.

". . .it may be possible to follow the so-called "Firm Request" procedure. . .This procedure reduces processing time. . .

"After this Project Proposal or Firm Request action has been completed it becomes the covering authority for so-called "Implementation Orders," which are procurement authorization documents. These instruments require specific bills of material, specifications, cost estimates, suggested procurement agency, etc. . .

"OEC expects the advice we are by contract obligated to give Seoul National University on the selection and use of necessary books, equipment, and supplies in the fields concerned, and the coordination required of us with respect to basic operating facilities, to result in specifically defined needs bearing the Minnesota stamp of approval. No procurement will be initiated until such approval has been received.

"I'm in the process of again reviewing equipment lists for each of the three colleges, since Minnesota questions, comments, and suggestions had to be taken up with Korean personnel concerned in an attempt to resolve differences. . .OEC, since it has no procurement department, will transmit approved lists to FOA/Washington for purchase action. At FOA/Washington the lists will be screened to insure that standard items are specified wherever possible, that items are bought at the lowest price available, and that extra items which add nothing to utility are not ordered. The lists would then be sent to the General Services Agency for procurement.

". . . even under the most optimistic schedule no actual procurement can be initiated in less than three to four months. . .

"After procurement has been initiated, the experience of OEC program personnel is that delivery of the smaller, standard items should not be expected in less than six months, with other items taking up to a year or even longer to appear on the scene."

Further time elapsed during which lists went back and forth between Seoul, Minneapolis, and Washington and were gone over by faculty members of both institutions and by FOA personnel. The first completed list (Part I for Engineering) was sent to Washington on March 1, 1955. Other

lists followed. Yet not until March 17, 1955 was the essential "Firm Request" completed in Seoul. And it was not until word of its signing reached Minneapolis that the actual sum available for procurement was known or, for that matter, that procurement could be undertaken. However, this word seemed to assure the University of Minnesota that all formalities had been complied with and that procurement would go forward without delay.

Within two months the procurement situation had changed completely. On May 16, 1955 Vice President Middlebrook received a telephone call from Messrs. Roseman and Hingher of FOA/Washington stating that the delay in starting procurement was due to the fact that the Government purchasing offices were overloaded with work and that FOA had difficulty in obtaining priorities. They also stated that while Minnesota had screened the lists, it had not prepared specifications which would permit purchasing. And, finally, they agreed that Minnesota had not been asked to prepare specifications but only to screen the lists. They then urged the University to undertake the procurement so as to avoid the delays which would inevitably follow and the serious effect this would have on Seoul National University if the Government did the purchasing. Upon being informed that Minnesota had rejected this idea earlier when it had been proposed, they requested and were given an appointment to come to Minneapolis on May 24, 1955 to enter into discussions over procurement.

As a result of the meeting with FOA officials in Minneapolis on May 24, 1955, the University of Minnesota agreed to undertake procurement, provided a series of ten requirements was agreed to by FOA. Later, on June 14, 1955, the Coordinator and Mr. Lunden were invited to meet with FOA officials in Washington to complete negotiations and spell out a contract amendment

in accordance with the stipulated conditions. At the Washington meeting it developed that not all FOA staff members had yet agreed to all stipulated conditions. By the time the Minnesota representatives left to return to Minneapolis, however, agreement seemed to have been reached and, in accordance with Dr. Andrus' request, the amendment to authorize the University of Minnesota to undertake procurement was further revised in accordance with the June 14, 1955 agreement and mailed to Dr. Andrus. At this point it appeared that the procurement amendment could now be signed before FOA ended on June 30 so that 55 funds, earmarked for procurement could be utilized.

Six weeks passed with no word from Washington. Then, in a letter dated July 26, 1955, a new draft of a procurement amendment was transmitted by Dr. Andrus. In spite of previous assurances to the contrary, this draft still failed to meet the conditions stipulated on May 24 and agreed to on June 14 and was consequently rejected. After correspondence and telephone calls between Minneapolis and Washington, a satisfactory procurement amendment was mailed to the Coordinator by Dr. Andrus on August 17, 1955. This was signed on behalf of the University of Minnesota and returned to Washington on August 30, 1955.

Further delays ensued while attempts were being made to secure money from 56 funds to replace the 55 funds which had reverted on June 30, 1955, and while the necessary clearances as to the language of the contract were being secured from ICA officials. The signature of ICA's officer for contract relations, affixed to Amendment No. 5 on September 29, 1955, at long last made it possible for procurement operations to begin.

II. OFFICE OF THE CHIEF ADVISER IN KOREA

The first report dealt largely with actions which have served as a foundation for accomplishments of the six months' period just concluded. The preliminary decisions having a major bearing on cooperative actions taken during the current period involved first, agreement on basic policy and broad operational guides with reference to staff exchange plans, and second, the employment of contract support funds for equipment, classrooms and laboratories in a manner designed to yield the greatest possible contribution to the overall undertaking.

Of paramount importance concerning each phase of activity discussed are the close and friendly working relationships established with and fostered by President Kyu Nam Choi of Seoul National University and his staff, the interest in and excellent support of the undertaking on the part of UNC Economic Coordinator for Korea C. Tyler Wood and his staff, and the fine cooperation received from the Chief, United Nations Korean Reconstruction Agency, Division of Education, Dr. Chester Wood and his staff (especially Director Karl Limbacher of the Foreign Language Institute of Korea), the Office of The President of the Republic of Korea, the Republic of Korea Ministries of Education and Reconstruction, and last, the taken-for-granted but much appreciated efforts of University of Minnesota personnel in the United States.

Staff Exchange. Our Korean colleagues concur completely with the words of University of Minnesota President James L. Morrill to the effect that, "If a university is to be defined as a community of scholars, then the faculty is in truth the heart of the university. The university is great to the extent that its faculty is alert, professionally active, and devoted to the instruction of the youth entrusted to its guidance. The effectiveness of

its faculty." This belief finds substance in the staff exchange actions initiated and completed during the period.

Korean Faculty. Dean Chae Koo Lee of the College of Medicine returned to Korea on June 28 and Dean Baik Hyun Cho of the College of Agriculture on July 25, 1955. Both deans reported interesting, productive, and pleasant stays in the United States. Though the greater part of the time of each was spent at the University of Minnesota in general observation of university and college organization and administration, and of teaching and research methods and procedures in his particular field, each was given the opportunity of visiting other institutions and agencies to broaden his observational base. On his return each dean prepared a complete report embodying the results of his observational tour.

Though it has not yet been feasible for Dean Yung Mo Hwang of the College of Engineering to visit the United States for similar purposes, it is currently planned that this travel will be undertaken early in 1956.

At the end of the first period it had been possible for only four Seoul National University staff members (in addition to the two deans) to leave for advanced study in the United States. During this period an extension of stay at the University of Minnesota as a contract program participant was granted to Associate Professor Yong Bin Lee of Animal Husbandry, College of Agriculture. He has since completed his M.S. degree and will soon rejoin the College of Agriculture faculty at Suwon.

During the second period local processing procedures were improved and the program thus expedited. At the present time a total of 48 Seoul National University faculty members are participating in the staff exchange program. Forty-seven of these are in the United States and one at the Pasteur Institute in Paris. Of the 47 in the United States, 43 are at the University of

Minnesota, two at Lowell Technological Institute, one at Massachusetts Institute of Technology, and one at Ohio State University.

The matter of proficiency in English, especially understanding and using the spoken word, has been of major concern in giving final approvals for Seoul National University staff members to proceed to the United States for participation in the technical assistance program. This concern has been shared by President Choi and top members of his staff, including the deans and affected faculty members of the colleges involved. In most cases recognition of the problem resulted in some form of corrective action--individual study, organization of oral English classes for staff members at each of the colleges concerned, or enrollment in some special school offering work of the nature needed. Too often, however, the burden of regular staff duties made it very difficult if not impossible for faculty members to spend enough time on their study of English to effect the desired improvement.

President Choi, recognizing this situation, has carried out a recommendation that Seoul National University contribute further to the success of the cooperative project by making it possible for all staff members selected for participation in the exchange program to enroll for the three-month course of the Foreign Language Institute of Korea sponsored and financed by the United Nations Reconstruction Agency and the Ministry of Education. The Director of this Institute has taken a personal interest in the problem concerned and has gone out of his way to make the Foreign Language Institute course of greatest possible value to our program participants and to those who must finally decide whether or not the necessary minimum competence in aural comprehension and speaking of English has been attained. OEC has also cooperated whole-heartedly in this undertaking and has paid the local currency tuition costs involved.

Staff members concerned, though relieved of most academic duties during their period of study at the Foreign Language Institute, continue to draw full remuneration from the University. The short experience of Seoul National University staff members with the technical assistance program has resulted in rather general acceptance of the fact that to participate fully and fruitfully an adequate understanding and use of spoken English are prime necessities. It is believed that this endeavor has a firm potential as a measure which can assist materially in coping with one of the more difficult phases of local preparatory actions.

Minnesota Staff. During the greater part of this period the University of Minnesota staff in Korea consisted of Chief Adviser Arthur E. Schneider, Adviser in Engineering William R. Weems, and Administrative Secretary Miss N. Gertrude Koll. The first two were in Korea during the entire period; Miss Koll arrived on June 13.

Though plans for American staff to come to Korea continue to be affected adversely by delays in the procurement of materials for physical plant rehabilitation, delays in equipment procurement, receipt and installation, and the lack of housing for families, four additional University of Minnesota faculty members arrived in Seoul in September and one in October to serve as advisers on the cooperative project.

All University of Minnesota staff members are engaged in learning the essentials of organization and administration of the Seoul National University component with which they are concerned and its relationship to the whole, becoming personally acquainted with the faculty, details of curricula, courses and teaching, the characteristics of research undertaken, major problems affecting teaching and research and allied matters bearing on contractual responsibilities. Particular attention is currently being paid

to physical plant and equipment needs and the bearing which plans and actions to satisfy these needs will have on schedules proposed for additional American staff members to come to Korea.

Equipment Procurement. Though \$1,150,000 of FY 1955 contract support funds had been allocated for the procurement of badly needed classroom and laboratory equipment and supplies and a Firm Request thereon submitted by OEC to FOA/Washington in March, 1955, the funds were not obligated by June 30 and hence reverted. This amount has been reinstated from FY 1956 funds and the University of Minnesota has agreed to procure the equipment and supplies concerned. However, the delays thus far encountered are bound to have an appreciable adverse effect in carrying out contractual responsibilities in all fields. The technical assistance program can proceed effectively only with substantial, timely support of this nature.

A sum of \$425,000 for additional equipment and supplies to be procured in support of the contract undertaking has been included in the FY 1956 program.

Plant Rehabilitation. On June 6, 1955 Firm Request No. 5-165 in the amount of \$551,000 was formalized and transmitted by OEC to FOA/Washington and subsequently approved by the latter. This Firm Request, which covers building materials and supplies essential to the contract support program, allocated \$63,500 for the College of Medicine, \$65,200 for the College of Engineering, and \$422,300 for the College of Agriculture.

The materials and supplies concerned will be used to rehabilitate war-damaged buildings at the Colleges of Medicine and Engineering. At the College of Agriculture allocated materials will be used primarily for new construction which will replace buildings and facilities completely destroyed and augment the outgrown classroom and library structures. New construction

will include a water supply system, an extension to the library, a third story on the main classroom building, a livestock barn, a farm equipment building, a shop building, a silo, two greenhouses, a kitchen-mess hall and dormitories. Many months, however, will elapse before these materials and supplies actually arrive in Korea and become available for use.

For additional physical plant needs a sum of \$1,025,000 has been included in the FY 1956 program.

The FY 1956 Contract Support Program. The overall justification for the FY 1956 allocation remains the same as for FY 1955 funds -- the war-ravaged condition of the colleges concerned and ICA's desire, which is the basis for the ICA/Minnesota contract, to strengthen and develop the educational and research programs of these components of Seoul National University. This technical assistance support program, considered a single project, is currently planned to consist of the following individually justified sub-projects for FY 1956 (\$1,025,000 for physical plant needs and \$425,000 for equipment and supplies):

1. College of Engineering

- a) Materials and supplies required to complete the rehabilitation of eight severely war-damaged buildings in the Mining Engineering compound and three formerly troop-occupied, poorly maintained and partially damaged main classroom and laboratory buildings located in the central area of the Engineering campus \$100,000

 - b) Additional essential laboratory equipment and supplies for machine shop, foundry, forge, welding, electrical engineering, chemical engineering; a 350 KW generator for standby use; engineering duplicating equipment such as blueprint, ozalid, etc.; dormitory equipment; and miscellaneous classroom and laboratory equipment and supplies 230,000
- Sub-total \$330,000

2. College of Medicine

- a) Materials and supplies required for additional rehabilitation of the formerly armed services-occupied, very poorly maintained and partially damaged university hospital to assist in bringing it up to acceptable standards as a teaching, research and service facility \$100,000
 - b) Materials and supplies required for the construction of a new (per tentative plans) 2-story, concrete block, 14,000 sq. ft. of floor space School of Nursing building to replace the structure completely destroyed during the war 100,000
 - c) Materials and supplies required for additional rehabilitation of the formerly troop-occupied, very poorly maintained and partially damaged main classroom and laboratory building of the College of Medicine 75,000
 - d) Additional essential laboratory and classroom equipment and supplies for the College's 23 departments, hospital and School of Nursing 50,000
- Sub-total \$325,000

3. College of Agriculture

- a) Materials and supplies required for the construction of (per tentative plan) a 3-story, reinforced concrete, 80,000 sq. ft. of floor space building to provide additional classrooms, laboratories and staff offices to augment this college's inadequate physical plant \$650,000

Construction of this building will slightly more than double the present and planned FY 1955 additions to student- and staff-use space, which is approximately 73,000 sq. ft. in five buildings and the library. Not only did the physical plant of this component of Seoul National University suffer great damage as a result of the war but, in line with carefully prepared analyses and recommendations by a group of international experts concerning agricultural education in South Korea (Ref. Par. 57, P. 190 of the UNKRA report entitled: Rehabilitation and Development of Agriculture, Forestry and Fisheries in South Korea. 1954) and the concurrence of responsible ROK authorities with the conclusions pertaining to the College of Agriculture, it is deemed necessary to expand the facilities at Suwon to permit the adequate accommodation of a student body already slightly in excess of the recommended enrollment level of 1,000. Current enrollment is in excess of three times that of pre-1945 years while the physical plant, built to accommodate 350 students, has as a result of war damage become smaller.

- b) Additional essential laboratory and classroom equipment and supplies for the college's seven departments 10,000

Sub-total \$660,000

4. College of Liberal Arts and Sciences

- a) Laboratory and classroom equipment badly needed by departments which give instruction in the basic sciences to pre-medical students 50,000

These foundation sciences are basic to College of Medicine work which follows.

Sub-total 50,000

5. College of Veterinary Medicine

- a) Laboratory and classroom equipment and supplies needed to assist in the rehabilitation of this essential agricultural component of Seoul National University for teaching and research 50,000

Though organized as a separate field at Seoul National University, veterinary medicine is a part of the Institute of Agriculture at the University of Minnesota and is considered to be included in the broad field of agriculture as set forth in the ICA/Minnesota contract

Sub-total 50,000

6. Seoul National University, General

- a) Duplicating and printing equipment required to permit the establishment on a minimum basis of the ordinary type of university facility needed for the efficient production of material such as laboratory instructions, lecture outlines, reference material, reports, examinations, pamphlets, booklets, etc. to improve teaching and research and service to students, faculty and the general public 35,000

This central facility will serve the Colleges of Medicine, Agriculture and Engineering along with other components of Seoul National University.

Sub-total 35,000

Grand Total \$1,450,000

Though the FY 1955 and FY 1956 budgetary amounts in support of the ICA/Minnesota contract represent major contributions toward attaining the objectives of this cooperative endeavor with Seoul National University, it is apparent that the satisfying of basic needs of the three colleges concerned will be far from accomplished without additional substantial allotments of funds. It is expected that consideration will be given this matter in connection with decisions on the character and scope of the aid-to-Korea program for FY 1957.

Offices. Office space made available by Seoul National University at the three colleges has been rehabilitated by OEC. Offices at the Colleges of Engineering and Medicine have been equipped and are now in use by Minnesota staff members. Temporary office space has been provided Minnesota staff members by the College of Agriculture pending completion of work on the combination billet-office building at the Suwon administrative site. The central office of the Minnesota Group is located in the College of Medicine compound within easy reach of Seoul National University's administration building.

Billets. Minnesota personnel are housed at the Chosun Hotel. Except for staff members working with the College of Agriculture, it is expected that this arrangement, satisfactory to Minnesota personnel, will continue as long as OEC occupies the Chosun.

The faculty clubhouse at Suwon, made available by Seoul National University for the use of Minnesota staff members working with the College of Agriculture, is in the process of being placed in shape for occupancy and furnished by OEC. OEC is also providing auxiliary facilities.

OEC will provide a caretaker for the Suwon billet. Other house help will be engaged and paid for by Minnesota staff members. Food supplies will in the main be procured from the American Embassy Club, membership in which

has generously been made available to Minnesota personnel who will be living at Suwon.

Transportation. The four vehicles placed on procurement during the first six-month period have arrived and are in use, adding materially to the general efficiency of the operation. These vehicles are maintained by OEC, which organization also supplies drivers.

Plans for the Next Six Months. 1. A major endeavor during this period will be for Minnesota staff members to continue to become better educated concerning Korea and the local frame of reference with respect to their particular field and related fields; to become informed as to the organization and functioning of Seoul National University with special attention to the Colleges of Agriculture, Engineering and Medicine; and to evaluate the current status of teaching and research in their areas of competence. Continuing attention will be paid to faculty, details of curricula and courses, teaching methods and procedures, the character and scope of research undertaken, the use made of research results, major problems affecting the quality of teaching and research, and allied matters.

2. Corollary to the foregoing, University of Minnesota personnel will continue to strive to be of utmost assistance to Seoul National University in helping to effect improvements in administration, teaching and research.

3. Staff exchange plans involving Seoul National University faculty members will be to a very great extent completed during this period. The portion of approved plans pertaining to this six-month period will be carried out.

4. Staff exchange plans concerning University of Minnesota staff members will receive additional attention during this period. Particular attention will be paid to correlating staffing plans with expected arrival dates of the more complicated items of equipment.

5. Seoul National University authorities will be given all assistance possible in carrying out physical plant rehabilitation plans concerning which materials and supplies have been placed on procurement, and in the preparation of plans and estimates for additional essential work of the same nature.

6. Equipment and supply procurements initiated will receive necessary follow-up attention until items are actually received. All possible assistance will be given in the installation, use and maintenance of equipment received. Assistance will also be given in determining soundly justified needs for additional equipment and supplies.

7. Ways and means for prospective program participants to improve their English proficiency to a satisfactory level will be matters of continuing concern.

8. Particularly significant areas for possible contract extension (as Public Administration) will be considered with Korean and American authorities concerned.

Current Needs of Seoul National University. Seoul National University's needs are great. Among the more obvious of the continuing needs mentioned in the report for the first six-month period are physical plant and equipment requirements about which something is being done, more texts and reference materials in the Korean language, a greater knowledge of English on the part of both faculty and students, and an improved budgetary situation. The previously mentioned need for improvement in transportation serving the College of Engineering and Agriculture has received attention during the past six months, and some progress has been made.

The years from the founding of Seoul National University in 1946 until the start of the Korean war in 1950 were difficult from the point of view of university administration. It was found easier to form a university on paper

than to effect the desired central control and relationship between its parts, which consist primarily of formerly "independent" colleges. The war's disruption was a further brake on progress in this respect. After the war a monumental task confronted the university administration and other Republic of Korea agencies concerned with Seoul National University. First it was necessary to arrange for the return of armed-services-occupied buildings. Then rehabilitation work had to be started and the physical plant brought to a minimum level permitting use. During the same period the faculty had to be materially augmented and strengthened, administrative machinery reorganized, minimum classroom and laboratory facilities provided and instruction begun. The task, of great magnitude and fraught with difficulty, was attacked by President Choi and his lieutenants with purpose and vigor. The result has been some remarkable progress in a relatively short period of time.

Seoul National University's twelve colleges, however, remain quite separate and distinct entities. With the exception of the College of Medicine's required two-year pre-medical course, which is taken in the College of Liberal Arts and Sciences, each college handles all of its own instruction in all fields - where applicable, basic sciences, languages, mathematics, etc. Because of the distance of some colleges from the main campus and poor transportation facilities it may not be feasible to change this general pattern to any extent for some time to come, even for the components of the university which are located in Seoul.

However, the possibility of effecting a substantial strengthening of basic departments through common use and at the same time taking a firm step toward unifying the university into a true national institution of higher learning has received much attention from President Choi and his staff. Action along this line has been encouraged. Since the scattered location of colleges

even within the city of Seoul militates against this strengthening and unifying action, an important early step should be to investigate the possibility of drawing the far-flung segments of the university into a much more consolidated area. President Choi has initiated action to look into this possibility. It will be realized that progress toward this objective cannot be rapid.

Seoul National University, General. Article III, Paragraph C, of the ICA/University of Minnesota contract involving Seoul National University gives evidence of the importance attached to the University developing, to the extent possible with its available resources, its own personnel, facilities, programs and activities to permit the early and effective accomplishment of the objectives of the cooperative undertaking. It is therefore of much more than incidental interest to note the character and extent of progress made by Seoul National University in all areas since the end of the war in Korea.

Through the able leadership of President Choi and his staff and the support of such organizations and agencies as the Korea Civil Assistance Command and the United Nations Korean Reconstruction Agency, especially, building materials, equipment and books valued at about \$360,000 were received and used to assist in the rehabilitation of the entire university. Of this total amount approximately two-fifths represents the value of building materials, two-fifths equipment and one-fifth books. It will be appreciated that very substantial hwan contributions had to come from the University's budget to make possible the use of building materials, the installation and use of equipment and the incorporation of books into the various libraries.

The three colleges directly concerned under the ICA/Minnesota contract participated in the above rehabilitation approximately as follows:

<u>College</u>	<u>Building Materials</u>	<u>Equip- ment</u>	<u>Books</u>	<u>Total</u>	<u>% of grand total for SNU</u>
	(Value in dollars*)				
Agriculture	\$71,000	\$ 4,200	\$ 8,200	\$ 83,400	23%
Engineering	5,200	16,600	15,800	37,600	10%
Medicine	<u>7,600</u>	<u>10,200</u>	<u>7,000</u>	<u>24,800</u>	<u>7%</u>
Total	\$83,800	\$31,000	\$31,000	\$145,800	40%
Per cent of item total for SNU	60%	23%	23%	40%	

*Average market value hwan-dollar conversion rate estimated to be 500 to 1.

From the end of the war to September 20, 1955 forty Seoul National University faculty members returned from studies abroad. The distribution of these faculty members by colleges is as follows:

Number of Returned Staff Members

<u>College</u>	<u>From U.S.A.</u>	<u>From Europe</u>	<u>Total</u>
Agriculture	4	1	5
Engineering	9	3	12
Medicine	2	3	5
Liberal Arts and Sciences	5	2	7
Law	3	0	3
Education	3	0	3
Commerce	3	0	3
Dentistry	<u>2</u>	<u>0</u>	<u>2</u>
Total	31	9	40

At the present time there are 86 Seoul National University faculty members studying abroad. Of this number 48 (56%) are participating in the ICA/Minnesota program. The distribution of these faculty members by colleges is as follows:

Number of Staff Members Studying Abroad

<u>College</u>	<u>In the U.S.A.</u>	<u>In Europe</u>	<u>Total</u>
Agriculture	10	0	10
Engineering	22	1	23
Medicine	26	4	30
Liberal Arts and Sciences	10	1	11
Law	4	0	4
Education	1	2	3
Pharmacy	3	0	3
Music	1	0	1
Dentistry	<u>1</u>	<u>0</u>	<u>1</u>
Total	78	8	86

From the war's end to September 20, 1955, 177 publications were written in or translated into Korean by Seoul National University faculty members.

The source of these publications by colleges is as follows:

<u>College</u>	<u>Number of New Works Written by Faculty Members</u>	<u>Number of Works Translated Into Korean by Faculty Members</u>	<u>Total</u>
Agriculture	9	1	10
Engineering	3	4	7
Medicine	1	0	1
Liberal Arts and Sciences	59	15	74
Fine Arts	0	3	3
Law	22	9	31
Education	22	12	34

<u>College</u>	<u>Number of New Works Written by Faculty Members</u>	<u>Number of Works Translated Into Korean by Faculty Members</u>	<u>Total</u>
Commerce	6	2	8
Veterinary Medicine	0	1	1
Pharmacy	2	0	2
Music	5	0	5
Dentistry	<u>0</u>	<u>1</u>	<u>1</u>
Total	129	48	177

The above, together with slow but sure improvements in the badly war-damaged physical plant and the increased tempo of academic activity in general, give Seoul National University a definite air of progress. The institution, through able leadership and the substantial assistance of agencies interested in its well-being and further development as Korea's pre-eminent national institution of higher learning, is hard at work shaking off the havoc and disruption of war and building soundly for the future.

Third 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, 1955 - April 19, 1956

Minneapolis 14, Minnesota
April 19, 1956

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I. OFFICE OF THE CAMPUS COORDINATOR

Earlier Reports. The present report covers the period, October 19, 1955 to April 19, 1956. Two previous reports, each covering six months have been issued. Together they provide a clear picture of the first year's operations and highlight the problems that have been encountered. Among other things, they cover the visits of the President and two of the Deans to the United States and provide details relating to the beginning of that part of the program which involves bringing Korean faculty members to the United States for graduate study. They also provide information on the sending of University of Minnesota faculty members to Korea for consultative and advisory service. In the latest of the two previous reports mention is made of the initiation of the first procurement operation which involves a total expenditure of \$1,150,000.

Korean Advisory Committee. The Korean Advisory Committee continued to be available for advice and counsel on policy matters relating to the contract. Five meetings were held during the period covered by the present report as follows: October 25, 1955; December 20, 1955; January 23, 1956; January 30, 1956; and March 20, 1956. Although contract additions proposed by Seoul National University continued to be discussed, at this writing no supplementary contracts of this nature had been agreed to by all parties concerned. Two of the meetings were called to hear reports from Korea. The first, held on January 23, 1956, heard reports from the five faculty members who served in Korea during the fall quarter: Dr. Clyde H. Bailey, Professor Philip W. Manson, Mr. Carl Graffunder, Professor Clarence E. Lund, and Dr.

Sidney C. Larson. The other, March 20, 1956, heard a report on his observations from Dean A. F. Spilhaus who had spent a week in Korea inspecting progress made under the contract, with special attention to the College of Engineering.

Several major policy matters were decided by the Committee during the period:

1. Visits by Korean faculty members to insitutions and industrial establishments would, in general, be limited to Minnesota and, primarily, to the Twin Cities. Such visits would be undertaken under proper supervision of staff members.
2. The attendance of Korean faculty members at professional meetings would be approved only in special cases.
3. Any renewal of the present contract should be conditioned upon the securing of greater flexibility of action.
4. It should be possible, when the implementation of special programs so required, to employ a college level adviser for each of the three colleges and the necessary secretarial service.

Among the minor policy matters approved by the Committee were the following: (1) Another program in English for the Koreans who arrived for the opening of the fall quarter was authorized; (2) It was recommended that proposed lists of books, supplies, and equipment to be purchased under the contract for Korean faculty members be carefully scrutinized; (3) It was decided to approve only after most careful scrutiny any proposal for study in the United States by Korean faculty members

approaching retirement age; (4) The Committee requested that it be provided with the most accurate information available concerning the most effective techniques for improving the English of the Korean faculty members studying at the University of Minnesota under the contract so as to improve the English program, should it be repeated for future arrivals.

Service in Korea. The five faculty members of the University of Minnesota who went to Korea in September returned during the period covered by this report. Four returned home in time for Christmas. The other got back in mid-January. Indications are that their services were greatly appreciated. Some have indicated their willingness to return to Korea later if they are needed again. Two were advising the College of Agriculture and three the College of Engineering. Their counsel was sought on curricula, teaching techniques, equipment, teaching aids, laboratory procedures, and the like. Especially valuable information was secured by Professor Philip W. Manson after his departure from Korea through visits to other asiatic countries having similar conditions and problems.

Dr. William F. Maloney, assistant professor and assistant dean of the College of Medical Sciences, left the Twin Cities for Korea on March 24, 1956. He is serving as adviser in medicine and plans to spend three months in Korea. As the first of our medical representatives his arrival was gratifying to the College of Medicine. Already many favorable reports have been received concerning the assistance he is rendering.

Processing is going forward on faculty members who plan to go to Korea during the summer. Mr. Harald Ostvold, agricultural librarian and assistant professor, plans to leave June 1. He will serve from three to six months as needed, and will be available for assistance to the libraries of all three colleges. Professor Paul Burson of our Department of Soils will leave in early June for approximately six months. Professor W. W. Staley of the Department of Mines, University of Idaho, expects to leave for Korea about the middle of June for 15 months' service. Dr. Paul Andersen, professor of structural engineering, plans to depart for Korea on August 1 for a period of approximately five months. Dr. Andrew Hustrulid, professor of agricultural engineering, is scheduled to leave on August 15 for five months' service. Dr. Frank Kaufert, director of our School of Forestry, plans to leave on August 1 to serve in Korea for from three to five months. Later, when the bulk of the laboratory equipment for engineering has reached Korea, it is planned to send a faculty member and a mechanic to direct the installation of the equipment and to train the Koreans to operate and maintain it.

The Coordinator's Office takes care of all details involved in processing faculty members proposed for service in Korea, including conversations about the assignment with individuals on campus and correspondence along the same lines with those from other institutions. Other services rendered include the arranging of transportation, the shipment of baggage, the banking of salary checks, and no small part of their orientation prior to departure.

Additional Korean Faculty Members Arrive. Seven Korean faculty members have come to the University of Minnesota for study since the previous report. Three arrived in December, 1955, and four in April, 1956. Of the seven, one was in medicine, one in engineering, and five in agriculture. During this same period there were three who completed their studies at the University of Minnesota and returned to Korea, two from engineering and one from agriculture. Thus there are now 47 Korean faculty members at the University of Minnesota, 13 in agriculture, 14 in engineering, and 20 in medicine.

Five additional SNU faculty members, studying at other institutions, received support under the program during the current period: Lee, Ki Young, medicine, Pasteur Institute, Paris (through December 31, 1955), Kim, Cheung Hun, naval architecture, MIT (through November 22, 1955); Kim, No Su and Woo, Bum Shik, textile engineering, Lowell Institute; and Lim, Eung Keuk, ceramic engineering, Ohio State.

The 47 Koreans studying at the University of Minnesota and the three at other institutions, brings to 50 the number being supported under the contract as this report is being written. Of this total 13 are in agriculture, 17 in engineering, and 20 in medicine.

Citations to Faculty Members. The preceding report noted that official citations had been given to Deans Lee, Chae Koo and Cho, Baik Hyun following their tours of observation and consultation. A formal citation has also been authorized for presentation to all Korean faculty members who complete their period of study at the University of Minnesota without meeting the requirements for a degree. During

the period covered by this report, three Korean faculty members completed their periods of study and returned to their posts at Seoul National University. They were Lee, Chai Sung, assistant professor of chemical engineering; Kim, Ho Sik, professor and head, Department of Agricultural Chemistry; and Rhee, Sung Won, assistant professor of electrical engineering. The text of the citations, alike except for the name, length and field of study, and signature of the dean, reads as follows:

The President, Deans, and Faculty of the
University of Minnesota
Extend Their Congratulations to
Kim, Ho Sik

A member of the Faculty of the
Seoul National University of Korea
Who Has completed Advanced Studies
Covering a Period of Six Months
As a Special Student Majoring in
Agricultural Biochemistry
Under a Contract Between the
Regents of the University of Minnesota
and the

International Cooperation Administration
Given at Minneapolis, Minnesota, This Eighteenth Day of December,
in the Year of Our Lord, the One Thousand Nine Hundred and Fifty-
fifth, and of the University of Minnesota, the One Hundred Fourth

W. T. Middlebrook
Secretary
H. Macy
Dean, Institute of Agriculture

J. L. Morrill
President
Theodore C. Blegen
Dean, Graduate School

Academic Progress of the Koreans. It is most gratifying to look at the transcript of the grades made since their arrival here by the Korean faculty members brought here under our ICA contract. Some of them audited courses during their first quarter of study. This procedure had been suggested to them before their departure from Korea. This suggestion, in a number of cases, was repeated by their advisers upon

their registration at the University of Minnesota. However, only 9 of 44 Korean faculty members devoted their first quarter of residence to auditing courses. Fourteen took some courses for credit and audited the rest. Twenty-one took all of their courses for credit. During the second quarter in residence, 24 took all courses for credit, 13 took part for credit and audited the rest, and only 4 audited all their courses. One further point might be of interest. Of a total of 268 course marks recorded for these Korean faculty members, 81 were A's, 74 were B's, 95 were S's. In other words, more than 93 per cent were B or above. The remaining 18 marks consisted of 12 C's, 5 D's, and 1 F.

The language problem which, in varying degrees, is faced by all the Korean faculty members studying at the University of Minnesota makes it literally amazing to discover that 7 of them accumulated straight A records during the winter quarter, 1956. No one, after looking over their grade records, could doubt but that the majority of them are putting forth their best efforts to prepare themselves for more effective service in Korea. Since this is one of the major purposes of the contract, it can be reported that progress is most satisfactory.

\$1,500 in UNESCO Coupons Presented to SNU. A Valentine's Day gift of \$1,500 in UNESCO coupons was made to Seoul National University by the Minnesota UNESCO Committee. The coupons will be used to provide needed supplies and equipment. The presentation was made at a tea held in Coffman Memorial Union at the University of Minnesota on February 14, 1956. Present at the tea were the 44 Korean faculty members

studying at the University under the ICA contract, members of UNESCO, students from high schools and colleges, and members of the University community.

The formal presentation of the coupons was made by Dr. Bernhard M. Christensen, President of Augsburg College. They were received by Dr. Chin, Byong Ho, head of the Department of Surgery, SNU College of Medicine. Following the tea, the coupons were sent to Korea and another presentation was made on February 24 to President Choi, Kyu Nam of Seoul National University by our Chief Adviser, Dr. Arthur E. Schneider.

Equipment Procurement. The procurement of equipment and supplies (including books and periodicals) for the three colleges of Seoul National University has been going forward as rapidly as possible during the entire period of the present report. Many problems have arisen since the contract amendment was signed. A forwarding agent had to be selected. The paper work requirements had to be determined. Each item had to be given a commodity code number. Equipment lists providing inadequate descriptions and specifications for individual items had to be returned and rewritten by representatives of the various departments. Requisitions had to be prepared and lists of items sent to bidders. Bids were then awarded and purchase orders issued. Changes in prices often involved revisions of departmental lists so as to keep within the funds provided. All of these steps have required the entire period since the amendment was signed. Already shipments have begun and it is hoped that, before many more weeks have passed, the bulk of the equipment will have arrived in Korea. Some items, of course, which

had to be custom built after purchase orders had been issued, may not reach Korea for many months. However, prospects are good that a substantial amount of equipment will be ready for use in Korea by the fall of 1956.

The equipment now being purchased will not completely meet the needs of the three colleges concerned, but it will constitute a substantial beginning. However, processing is nearly completely on the documents necessary to make available for the purchase of equipment by the University of Minnesota the sum of \$425,000 from FY '56 funds. In addition processing has begun to earmark additional money from FY '57 funds for further needed equipment.

Vocational Education. A telephone conversation with Dr. J. Russell Andrus on February 27, 1956 proposed that there be added to the present contract an amendment under which a nation-wide program in vocational education for Korea would be undertaken. The staff proposed would consist of ten long-term men for fiscal '57. Cost estimates involve some \$225,000 in addition to a similar amount in Korean currency. Dr. Milo Peterson, head of the Department of Agricultural Education, University of Minnesota, and John A. Rolloff, a Minnesota graduate student, met for a discussion of the proposal with Dr. Chester Wood and Carl T. Witherell in Japan on March 22-23, 1956, where Dr. Peterson was spending his sabbatical leave. Later, in early April, Dr. Peterson and Mr. Rolloff were sent to Korea by ICA to familiarize themselves more fully with the situation. No final decision on the proposal had been reached as this report was being written.

College Level Advisers. The most serious problem which has been faced since the previous report was issued was the refusal of ICA/Washington to approve our request to employ a college level adviser in each of the three fields under the contract should any future program arranged for the Korean faculty members necessitate such service. The question arose in October, 1955, when our Engineering Adviser in Korea prepared a tentative plan involving six-months observation tours for eight senior engineering faculty members, mostly department heads, who constitute the core of the present engineering faculty at Seoul National University.

This plan, which proposed observation and consultation at the University of Minnesota and elsewhere, rather than registration for courses, was designed to provide a more sympathetic atmosphere for the younger faculty members when they resumed their faculty posts after graduate study in the United States. It was obvious that its implementation would require the services of a senior faculty member in engineering.

The proposal was further amplified and refined in later communications from Korea. It was then approved by Dean A. F. Spilhaus and his associates, by the Coordinator, and by the Korean Advisory Committee. The Committee directed the Coordinator to request authority from ICA/Washington for the employment of a College Level Adviser, together with the services of a secretary, at not to exceed half time for each of the three fields under the contract. Although in all probability such services would not be required in either agriculture

or medicine and, in the case of engineering, would only be used for such special programs as the one involving the eight senior engineering faculty members, the application was made so as to apply equally to all three colleges.

The request for approval, dated January 19, 1956, outlined the problem in great detail and set forth the reasons why such service was being requested and its importance to the successful operation of the contract.

The reply from Dr. J. Russell Andrus, dated February 1, 1956, was not focused on the real issues involved. Instead, the request was denied with the assertion that "the handling of participants at Minnesota is already being paid for at rates far in excess of any of our other 77 university contracts." The request for approval was renewed in a letter to Dr. Andrus, dated February 7, 1956. In this letter it was pointed out that the University of Minnesota had no desire to recover in indirect costs more than the actual expenses involved in carrying out its responsibilities under the contract. It was also stressed that no one had anticipated, at the time the contract was negotiated, that the Korean faculty members would need more individual services than were provided for other foreign graduate students. Finally, attention was called to the fact that the work of the proposed College Level Adviser would consist in caring for Korean faculty members, not as students, but as observers of administrative, laboratory, and teaching techniques and procedures.

Two weeks later (February 21, 1956) when no further reply had

been forthcoming from Dr. Andrus, the matter was brought to the attention of the late Dr. William F. Russell, then Deputy Director for Technical Services. His reply, dated March 6, 1956, used the same argument about overhead rates as did Dr. Andrus in denying the request.

Another letter, setting forth the problem in great detail, was addressed to Dr. Russell on March 9, 1956. This letter closed with a request for an opportunity to discuss the matter in Washington with him, Mr. Hollister, and their associates. His reply, dated March 23, 1956, stated that the ICA/Washington staff had restudied the problem and still failed to agree to its approval. He stated also that he did not believe it practicable to ask Mr. Hollister for an interview because of his busy schedule and the time which would be required for prior briefing on the subject. But he did suggest that we present our problem to the appropriate officials of the American Council on Education, which has an office serving universities holding ICA contracts.

A follow-up letter, which crossed Dr. Russell's aforementioned communication in the mails, was addressed to him on March 23, 1956. This communication set forth the study which administrative officials of the University of Minnesota had given to the problem of College Level Advisers, before requesting approval, and quoted at length from a statement presenting his views on the matter by Dean A. F. Spilhaus, following his recent inspection trip to Korea. Also the request was renewed for a conference in Washington so that the views of the University of Minnesota on the proposal could be adequately presented. The letter closed with this statement:

"I find it hard to add anything to what I have written previously or to what Dr. Spilhaus has said. The University of Minnesota wishes to do a creditable job and no one would deny that it has the resources in administration and staff to plan and carry out its responsibilities. How can it do so, however, unless it is given the freedom to so operate as to achieve optimum results?"

This letter reached Washington the same day that Dr. Russell died. Later, on April 2, 1956, Dr. Joseph M. Stokes, who was filling Dr. Russell's post, telephoned the Coordinator and repeated the same arguments for not granting the request. He also pointed out that the final decision on questions of this nature rested with the Office of the Deputy Director for Technical Services and did not need to be discussed with Mr. Hollister. He did agree, if we requested, to carry our proposal to Mr. Hollister for decision.

In a letter dated April 5, 1956, Dr. Stokes reported that he had discussed our request with Mr. Hollister and that the latter had seen no necessity for making a personal review since authority rested by his delegation with the Deputy Director for Technical Services. But Dr. Stokes did point out that ICA was not opposed to reasonable discussions and suggested that further pursuit of the matter be addressed to Mr. Edward Kunze, Head of the Contract Office.

In line with the above suggestion, a letter was addressed to Dr. Stokes, with a copy to Mr. Kunze, in which five major points were made and amplified. 1. This proposal will not increase overhead; 2. The "contingencies" item in our budget was intended to cover just such unanticipated costs; 3. Similar services performed in Korea cost far more than in the United States; 4. Other special programs cannot be undertaken if the present request is not granted; and 5.

Overhead reimburses for indirect costs, not for actual operations. The letter closed with a renewal of our request for an opportunity to clarify our position with ICA staff members in Washington and the additional suggestion that our Comptroller accompany the Coordinator to the meeting. At this writing there has been no further word from Washington. The University of Minnesota is greatly concerned about this because of its effect on future plans involving the faculty members of Seoul National University. Unless ICA reverses its ruling, the University of Minnesota will be unable to plan any special programs, regardless of the need for them.

Health and Accident Coverage. The immediately preceding report indicated our dissatisfaction with the arrangement insisted on by ICA under which Health Service fees were not collected either from the Korean faculty members or from ICA funds provided under the contract. Instead, each Korean is required to pay \$3.09 per month for health and accident insurance carried by ICA with a commercial insurance company.

During the present period the very crisis has arisen about which ICA was warned even before the first Korean arrived. Several bills for medical and/or hospital service provided for Korean faculty members were refused payment by the insurance company. The contention was that the condition for which treatment was provided had been in existence before the faculty member left Korea and, under the insurance contract, there was no liability on the part of the insurance company. One of these bills was a rather substantial one - \$431.20.

ICA/Washington was asked at that time to approve payment under

the contract of this bill and all others for hospital and medical care which the insurance company refused to pay. The initial request received the following reply:

"Following our usual practice, the participant should be requested to pay for his medical expenses, even if it is necessary for him to appeal to his home university or government. It is our understanding that he was given a physical examination before being accepted for training and that he came over with the knowledge that medical expenses would be covered for only those illnesses incurred in the United States. As you are aware, we have to guard against persons who might wish to come to the United States primarily in order to obtain free medical treatment."

ICA was requested to reconsider in a communication, dated March 8, 1956 which pointed out, among other things

"It seems to me to be completely unrealistic, at this late date, to suggest that Professor Yum or any other Korean pay a bill for medical services as large as his was. It is our feeling that to ask him to appeal to his home university which is so inadequately financed as to make it impossible as it is to pay adequate faculty salaries would create bad feelings toward the United States government rather than the good will we all attempt to get.

"Early in our contract we had many discussions concerning the matter of providing the usual services of the University Health Service for these Korean faculty members but, against our protests, FOA insisted that there be no health service fee charged for the Korean faculty members but that they be covered under the blanket insurance policy with the American International Underwriters. We pointed out at that time the likelihood that a situation such as the one facing Professor Yum would certainly arise. Had our plan been accepted we would not now be contesting your ruling."

As this was being written, the following communication, dated April 19, 1956, was received from the Office of Contract Relations, ICA/Washington:

"Dr. Stokes has referred your letter of April 2, 1956 concerning your claim for medical expenses of Mr. Yum and Mr. Lee, to this office for reply.

"A review of this claim has been in process in accordance with your request dated March 8, and I feel sure that we can expect a final decision in a very short period of time."

What is the best solution for this dispute over payments for health and accident insurance? Does it not seem logical that the Korean faculty members should have the same health service privileges as do other foreign students? If ICA/Washington is unable to permit reimbursement for our Health Service charges, such charges could be deducted from the per diem paid each Korean faculty member as is the cost of the present limited insurance, and the insurance they are now carrying could be cancelled. This would cost the Koreans slightly more than they now pay (\$51 per year as compared with \$37.08). However each Korean would be covered up to \$1,250 for any one hospitalization instead of \$750 under the present contract with the insurance company. And each Korean faculty member would receive the following:

1. The required entrance physical examination
2. Periodic health examination
3. All dispensary calls
4. All specialists consultations
5. Hospitalization including medical care and surgery
6. All laboratory services, x-ray services, physical therapy, and drugs

It is hoped that, even at this late date, ICA/Washington will allow the University of Minnesota to substitute the services of its Health Service for the present commercial insurance coverage. Is there any good reason for denying this request when the benefits of the proposed arrangement are carefully weighed?

Responsibility Necessitates Freedom. It is doubtful whether any plan could be evolved which would make easy the activities

contemplated in the Korean contract. However, from the educational point of view, a far more effective job could be done by the Contractor if he had greater freedom of action. The University of Minnesota has the sole responsibility for the operations and her reputation rests upon the results secured.

Most of the controversies between the University of Minnesota and ICA/Washington and the inevitable delays which resulted, might have been avoided. How much better it would have been had the Contractor been permitted, within the broad objectives of the contract and the total funds provided, to have the final responsibility for all decisions involving the educational program without the necessity of securing approval from ICA/Washington. It appears that much of the "fine print" which is written into university contracts and limits the Contractor's freedom in educational matters has greater applicability to contracts with business or industry than to a responsible university.

Would it be unreasonable to suggest, even at this late date, that ICA/Washington eliminate its present close controls, especially in the case of educational decisions, and limit its efforts to the selection of reputable institutions to render the desired educational services and to the approval of a suitable contract covering the proposed operations? Where sufficient care has been given to the selection of the institution, should the university be hampered by Washington decisions concerning matters of an educational nature which the Contractor is in a much better position to decide than are ICA staff members?

II. OFFICE OF THE CHIEF ADVISER IN KOREA

During the past six months contract activities moved forward through a continuation of the Seoul National University-University of Minnesota staff exchange program, progress in determining needs for and actions looking toward supplying materials required for rehabilitating the University's physical plant, further work on the preparation and coordination of plans for the construction of required new structures and facilities at each of the three colleges concerned, preparation of additional equipment and supply lists and transmittal thereof to Minnesota for screening and procurement, the availability in Korea of Minnesota's Deans of the Institute of Technology and Institute of Agriculture for program consultations, and a critical review of the entire project to date for the purpose of evaluation and future planning.

In the course of all of these activities, cooperative relationships commented upon in the most recent report continued on the same high plane. Particular acknowledgement is again made to President Choi, Kyu Nam of Seoul National University and his colleagues and to UNC Economic Coordinator for Korea C. Tyler Wood and members of his staff.

Delays Impede Progress. Though excellent cooperative relationships have been enjoyed, this is not to be construed as satisfaction with the time-requirements of some cooperating agencies in the area of program participant approvals and clearances and in the performance of certain essential contract support services. Processing delays

attributable to Republic of Korea agencies (primarily the Ministry of Reconstruction and Office of the President) have in too many cases left the impression that the staff exchange portion of the cooperative project is viewed as relatively unimportant and that the pressing demands of scheduled advanced study beginning dates for participants are matters of minor consideration. For participating Seoul National University staff members, however, delays concerned have meant needless hardship and disappointment; for Seoul National University, a readjustment of staffing plans. Concerning the University of Minnesota it has meant that agreed upon Korean staff exchange schedules cannot be relied upon and that too often carefully prepared preliminary plans and arrangements simply go for nought. Relative to the Office of the Chief Adviser in Korea these delays mean a great waste of time in follow-up actions, the need for requesting especially expeditious action on the part of other agencies (such as the United States Embassy), and no possibility of arranging travel reservations at an appropriate advance-of-departure date.

American channel delays in Korea fall primarily within the sphere of responsibility of OEC's Division of Public Works. This component has been unable to accomplish within a reasonable period of time its review and assistance actions concerning contract support physical plant rehabilitation and new construction, and approval or preparation of bills of material for procurement purposes. The result is too-slow accomplishment of physical plant improvements with which re-equipping and technical assistance phases of the overall project must be coordinated.

U. S. Study for SNU Faculty. During the current period five program participants - one in Agriculture, three in Engineering and one in Medicine - completed their periods of advanced study abroad and other activities pertinent to the project and returned to Korea and Seoul National University. In the course of this six-month period seven more Seoul National University staff members left for the United States under the program - five in Agriculture, one in Medicine, and one in Engineering.

At the present time a total of 50 Seoul National University faculty members are participating in the staff exchange program, all in the United States. Of this total 13 are in Agriculture, 17 in Engineering, and 20 in Medicine. Forty-seven of the 50 are at the University of Minnesota, two at Lowell Technological Institute, and one at The Ohio State University.

The Foreign Language Institute of Korea (see immediately preceding report) continues to be relied upon to assist program participants in attaining the necessary minimum competence in aural comprehension of and oral facility with the English language. The full, unstinting cooperation of the Director and staff of, and others concerned with, the Foreign Language Institute continues.

Minnesota Staff. Chief Adviser Arthur E. Schneider and Administrative Secretary Miss N. Gertrude Koll served on the cooperative project in Korea during the entire period. Engineering Adviser William R. Weems completed his tour of duty in Korea during the period, leaving for the United States and the University of Minnesota on April 16 after having completed 13-1/2 months of overseas project service.

Five additional University of Minnesota staff members continued their assistance on the project in Korea during a part of this period - Dean Emeritus Clyde H. Bailey and Professor Philip W. Manson in Agriculture, and Professors Clarence E. Lund and Sidney C. Larson and Mr. Carl Graffunder in Engineering - and Dr. William F. Maloney, assistant professor and assistant dean, began an assignment as Adviser in Medicine in late March.

Plans for Minnesota staff members to come to Korea continue to be adversely affected by the general lack of laboratory and classroom equipment and delays in physical plant rehabilitation. The previously reported lack of housing for families and absence of authorization to bring dependents to Korea continue to be major obstacles in the recruitment of long-term staff members for the project.

Equipment Procurement. Additional lists of needed laboratory and classroom equipment and supplies for each of the three colleges, for the College of Veterinary Medicine (as part of the broad field of Agriculture), for the pre-medical course of the College of Liberal Arts and Sciences and for a University printing facility were developed by Seoul National University authorities and Minnesota advisers during the period and sent to the University of Minnesota for screening and procurement.

Physical Plant Rehabilitation and Improvement. After further review and check of plans during this period OEC's Public Works Division completed the release of FR No. 5-165, covering building materials and supplies to be used as a basis for procurement by the Republic of Korea

Office of Supply. (Details of this Firm Request are given in the immediately preceding report.)

Further progress on rehabilitation and new construction plans (as outlined in the immediately preceding report), including specifications and bills of material, was accomplished during the period. A continuing source of delay in getting from Korean-prepared plans and bills of material to those approved or prepared by OEC is the pressure of a great variety of construction projects on this organization's Public Works Division. It is understood that OEC has plans underway for the alleviation of this situation. However, until this action is effected, the slowness of accomplishment in the contract support phases of physical plant rehabilitation and improvement will continue to delay progress in assisting to bring about improvements in teaching and research at the three colleges concerned.

Offices. Adequate OEC rehabilitated and furnished offices at the Colleges of Medicine and Engineering continue to be occupied by the Minnesota staff.

Billets. Minnesota staff members continue to be satisfactorily housed at the Chosun Hotel. The Suwon billet, commented upon in previous reports, still requires some work to place it in shape for occupancy. It is anticipated that this work will be completed in advance of the arrival of additional agricultural staff members.

Transportation. The four vehicles mentioned in the immediately preceding report continue to provide adequate transportation.

Project Status Analysis. The entire project - technical assistance

and contract support features - was critically reviewed by concerned Koreans and Americans in Korea during this period. Participating in this on-the-ground inquiry, in addition to Seoul National University and other concerned Korean authorities and the long-term Minnesota staff in Korea, were Minnesota's Deans of the Institute of Technology and Institute of Agriculture as well as the Chief of OEC's Division of Education, members of his staff and other individuals of the OEC organization. It is expected that Korean and American (in-Korea) recommendations concerning this matter will be formulated in the near future.

Plans for the Next Six Months. The eight major procedural guides set forth in the immediately preceding report will form the major basis for plans and actions during the next six months. In addition:

1. An attempt will be made to work out with Seoul National University authorities and others concerned a plan - technical assistance and contract support - for the College of Veterinary Medicine (as a part of the broad field of Agriculture) which will adequately consider Korea's needs for veterinarians, the character and quality of instruction required, physical facilities available and needed and where, from all points of view, the College might best be located. To the extent possible during this period, plans agreed upon will be carried out.
2. Further specific action will be taken to develop with Republic of Korea authorities procedures aimed at obtaining much more expeditious processing of program participants through Korean channels.
3. Continuing action will be taken with OEC to expedite actions required of its Public Works Division on contract support physical plant rehabilitation and new construction items.

In Conclusion. Under the able leadership of President Choi, Kyu Nam and his associates and with the cooperation and assistance of other Korean agencies concerned the following important items of progress

and improvement were achieved during this six-month period:

1. The education of freshman students enrolled in the colleges located in the central part of Seoul was made a responsibility of the College of Liberal Arts and Sciences. The Colleges of Agriculture, Education, Engineering, and Commerce continue to handle the education of freshman students enrolled there.
2. The Scholarship Committee of the University will, through funds contributed by the American-Korean Foundation, the Parents' Association of Seoul National University, and others, assist some 250 needy and outstanding students with grants averaging 20,000 hwan each during this school year.
3. A building constructed and left by the U. S. Fifth Air Force on the campus of the College of Medicine was repaired, furnished, and placed in use as a faculty clubhouse. A 7-man faculty committee headed by Dean Kim, Sung Chin of the College of Medicine is responsible for management of the club.
4. Steps have been taken to provide reading and study space to accommodate an additional 200 students at the University's central library.
5. As a substantial step in improving the salary situation of staff members, the Seoul National University Parents' Association has, beginning with the first semester of this school year, doubled its contribution to professorial pay. This results in very appreciable salary increases and should prove a significant means of keeping and better utilizing the services of present staff members and attracting and retaining others of high quality.

Fourth 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
April 19, 1956 - October 19, 1956

Minneapolis 14, Minnesota
October 19, 1956

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I. OFFICE OF THE CAMPUS COORDINATOR

Historical Background. The sister relationship between the University of Minnesota and Seoul National University of Korea actually began on the basis of an interim contract August 1, 1954 when the Coordinator assumed his duties. Officially, operations began when the prime contract was signed by FOA in Washington, D. C. on September 28, 1954. Operations in Korea began on October 19, 1954 when the Chief Adviser arrived to begin an uninterrupted service that now totals two full years.

This report is the fourth in the series of semi-annual progress reports required by the contract (Article II E). Together with the three previous reports, it provides a brief but clear picture of operations under the contract, both in the United States and in Korea. It also calls attention to problems solved and unsolved and plans for the future.

Korean Advisory Committee. Only one meeting (October 10, 1956) of the Korean Advisory Committee was held during the period covered by the present report. However, the Committee continued its services of advice and counsel on an individual and informal basis on policy matters relating to the contract.

One member of the Committee, Professor John C. Kidneigh, director, School of Social Work, at the Committee's suggestion, served as chairman of an all-University Committee charged with advisory responsibility for planning and staffing the special English program planned for new Korean faculty members scheduled for early August, 1956 arrival.

Three contract additions, proposed by ICA/Washington, were studied by individual Committee members and University of Minnesota staff members

concerned. The fields involved were: Public Administration, Business Administration, and Vocational Education.

Although no contract amendment to add any of these fields has been signed at this writing, the University of Minnesota has indicated its willingness to negotiate a contract amendment to add the field of Public Administration to the contract for 1956-59. ICA/Washington was informed, however, that the University of Minnesota would not be able to undertake the proposed program in Business Administration.

The Vocational Education proposal, discussed in the immediately preceding report, received further attention. Officials of ICA/Washington conferred with Dr. William J. Micheels, chairman, Department of Trade and Industrial Education, and Dr. Walter W. Cook, dean, College of Education. However, the resulting proposals submitted on behalf of the University of Minnesota were not accepted by ICA/Washington because of the inability of the University of Minnesota to guarantee the securing of staff members for long-time appointments for service in Korea. Consequently, the proposed program in Vocational Education was not considered further.

The October 10, 1956 meeting of the Committee devoted some time to a report on the visit of the two vice presidents to Korea in early August. Other matters discussed included the proposed amendment to extend the present contract for two years and to add to it a three-year program in public administration. Both proposals were approved by the Committee.

Presidency Changes. Dr. Choi, Kyu Nam, who had been President of Seoul National University from the time negotiations began which led to the present contract with ICA, was appointed June 8, 1956 to the post of Minister of Education for the Republic of Korea following the re-election of President Syngman Rhee. President Choi had visited at

the University of Minnesota in December, 1954, and this visit was the beginning of most friendly and understanding relationships that have been maintained during the entire two years of operations under the contract. In late June, 1956, Dr. Yun, Il Sun, former Vice President of Seoul National University, was appointed to fill the vacancy in the presidency. Dr. Yun had served as Acting President at previous times during the absence of President Choi. The announcement of his appointment has been most favorably received both by faculty and administration in the two sister universities.

Vice Presidents Review Progress in Korea. With the second year of operations under the contract drawing to a close, and because the Korean authorities had already requested a two-year extension, it seemed an appropriate time for representatives of the central administration of the University to visit Korea. Accordingly Dr. Malcolm M. Willey, vice president, academic administration, and Mr. William T. Middlebrook, vice president, business administration, spent August 6-10, 1956 in Korea, which gave them opportunity to discuss many phases of contract operation with various individuals who have close contact with the cooperative project. It likewise gave opportunity for them to observe at first hand the physical facilities of Seoul National University.

One or more conferences were held with Mr. William E. Warne, recently appointed U. N. C. Economic Coordinator to replace Mr. C. Tyler Wood; Mr. Whitman, his deputy, and other members of his staff; Dr. Choi, Kyu Nam, Minister of Education for Korea, and until recently President of Seoul National University; Dr. Yun, Il Sun, the new President of Seoul National University, and members of his staff; and Dr. Arthur E. Schneider, Chief Advisor in Korea, University of Minnesota, and members of the Minnesota staff in Korea.

Equally important was the opportunity given the vice presidents to meet on a less formal basis with colleagues on the staff of Seoul National University, and to gain new insights into the educational program of the University. All of this provided a rich background in terms of which Dr. Willey and Mr. Middlebrook can better present the cooperative project to President Morrill, the Board of Regents, and to the public of the state of Minnesota.

The vice presidents, in subsequent reports to President Morrill, have indicated how deeply impressed they were with the developments that have taken place under the contract. They join in the recommendation that the contract be extended, by amendment, for a two year period.

Vice Presidents Deliver Citations. When Vice Presidents Malcolm M. Willey and William T. Middlebrook left for Korea in early August, 1956, they carried with them citations from the University of Minnesota expressing the deep sense of satisfaction that was felt for the progress that had been made in the cooperative project and expressing appreciation for the part played in its success by Dr. Choi, Kyu Nam, Minister of Education; and Dr. Yun, Il Sun, President, Seoul National University. Dr. Choi's citation, which was presented at a ceremony in his office on August 9, 1956, reads as follows:

The University of Minnesota
Having Received Notification of the Appointment of
Doctor Kyu Nam Choi

as

Minister of Education of the Republic of Korea
extends to him hearty congratulations and good wishes
as he assumes the responsibilities of this high office
and again expresses to him profound appreciation
for the role he played as President of Seoul National University in the
development of the co-operative educational project in which
the University of Minnesota and Seoul National University
are friendly and understanding partners

Malcolm M. Willey
Vice President
Academic Administration

W. T. Middlebrook
Vice President
Business Administration

J. L. Morrill
President

Minneapolis, Minnesota, U.S.A., July 13, 1956

Dr. Yun's citation, which was presented at a similar ceremony in
his office on August 10, 1956 reads:

The University of Minnesota
Learning with Profound Pleasure That
Doctor Il Sun Yun
Has Been Elevated to the Eminent Post of
President of Seoul National University of Korea
and because of the close affiliation of these two great institutions,
occasioned by a co-operative program of far-reaching educational significance,
extends to him and to
the distinguished University of which he now becomes the leader
sincere congratulations and every good wish,
with the expectation that in the years ahead the ties of common purpose and
friendship between Seoul National University and the University of Minnesota,
their administrative staffs and their faculties,
will bind them ever closer together

Malcolm M. Willey
Vice President
Academic Administration

W. T. Middlebrook
Vice President
Business Administration

J. L. Morrill
President

Minneapolis, Minnesota, U.S.A., July 13, 1956

Agricultural Advisers. Four faculty members from the Institute of Agriculture began service in Korea during the period covered by this report. Paul M. Burson, professor of soils, and Harald Ostvold, librarian in the St. Paul Campus Library and assistant professor, arrived in Korea on June 11, 1956. Dr. Andrew Hustrulid, professor of agricultural engineering, arrived on August 9, 1956, and Dr. Frank Kaufert, professor and director, School of Forestry, arrived on August 20, 1956.

Professor Ostvold rendered valuable assistance not only to the library of the College of Agriculture at Suwon, but to the central library and to the libraries of the Colleges of Engineering and Medicine, Seoul National University, as well. He left Seoul on September 7, 1956, having completed his assignment. Professor Burson plans to serve in Korea for approximately 5 months, Dr. Hustrulid, for $4\frac{1}{2}$ months, and Dr. Kaufert for 3 months.

Processing has begun on Roy O. Bridgford, associate professor emeritus of agronomy, who, it is planned, will spend at least a year in Korea, if the contract is extended. His appointment will bring to seven the total number of agricultural faculty members who have served or are now serving in Korea. Negotiations have begun looking toward having Dr. C. E. Mickel, head, Department of Entomology, join the Minnesota staff in Korea sometime during 1956-57.

Consideration is being given also to sending to Korea before the contract terminates a representative from Plant Pathology, from Agricultural Economics, and, perhaps, a food technologist.

The Institute of Agriculture has also provided the services of the Chief Advisor in Korea from the faculty of the School of Forestry.

Of considerable importance to the project during the current period, was the presence in Korea on another mission for ICA of Dr. Harold Macy, Dean, Institute of Agriculture. During this period of three months, Dean Macy was able to confer with President Choi, Kyu Nam, now Minister of Education; Dr. Yun, Il Sun, the new President; Dean Cho, Baik Hyun, College of Agriculture; and with other university and government officials, both Korean and U. S. He also had the frequent opportunity to discuss matters relating to the Korean contract with the Chief Advisor in Korea, Dr. Arthur E. Schneider.

These staff members from the Institute of Agriculture who have returned to their posts have assisted greatly in the activities related to the ICA contract. Their advice on procurement matters has been invaluable to the various agricultural departments and to the Purchasing Department; they have served as unofficial advisers to many of the Korean faculty members studying on the St. Paul Campus; and their advice and counsel have been an important service to the Dean in his planning and administering the agricultural portion of the project.

Engineering Advisers. William R. Weems, professor of engineering, left Korea on April 16, 1956 after service there as engineering adviser since March 1, 1955, a period of thirteen and one-half months. His service under the contract had begun on February 1, 1955 with a period of orientation at the University of Minnesota. It ended officially, including earned vacation leave, on July 17, 1956. Professor Weems rendered, following his return to the United States, important assistance to the Korean faculty in engineering who were studying at the University of Minnesota and other institutions.

Three faculty members in engineering went to Korea during the period covered by this report. Dr. Chapin A. Harris, professor and director, Graduate School, Lowell Technological Institute, spent the period, June 15 to August 27, 1956 in Korea as adviser in textile engineering. William W. Staley, professor of mining, University of Idaho, reached Korea on June 25, 1956 and will spend approximately 15 months there as an adviser in mining. Dr. Paul Andersen, professor of civil engineering, arrived in Korea on August 6, 1956. He will serve in Korea for approximately four months.

The three faculty members beginning service in Korea during the past summer bring to seven the total number of engineering advisers who have served in Korea under our contract.

Plans for the future include the securing of competent faculty members in chemical engineering, naval architecture, and aeronautical engineering to serve in Korea under the contract. It is hoped that each can be appointed for a minimum of one semester and that arrivals in Korea can be timed to coincide with the beginning of the semester.

Medical Adviser. Dr. William F. Maloney, assistant professor and assistant dean, College of Medical Sciences, returned to the University of Minnesota after spending the period from March 30 to June 30, 1956 in Korea as adviser in medicine to Seoul National University. Dr. Maloney was the first staff member in medicine to serve in Korea under the contract.

The report Dr. Maloney prepared covering his observations of medical education in Korea, and more particularly, the situation in the College of Medicine, Seoul National University, has provided substantial assistance to Dean Harold S. Diehl and his colleagues on the

staff of the College of Medical Sciences in prosecuting more effectively the medical aspects of the Korean contract.

The pressing need is for additional medical faculty members for service in Korea. It is hoped this will be met soon by the recruiting efforts of Dr. Maloney and the knowledge he has gained concerning the needs for service in the various departments of the College of Medicine, Seoul National University.

Participating Korean Faculty Members Total 102. The accompanying table reveals that, since the previous report, forty-four Korean faculty members have come to the United States for study under our ICA contract. Two of these arrived on April 28, 1956--both in the field of agriculture. Seven engineering faculty members arrived in May: 4 on May 3, 2 on May 4, and 1 on May 7. Thirty-one came during August, 1956. Of these, 2 were in agriculture, 3 in veterinary medicine (including the dean), 16 in engineering, 8 in medicine, and 2 in nursing. Four became participants in September--3 in engineering and 1 in agriculture. Seven of the 44 returned to Korea prior to the close of the reporting period.

Of the 37 new program participants remaining, 34 are studying at the University of Minnesota, 2 at Massachusetts Institute of Technology, and 1 at Yale.

There are in addition 31 Korean faculty members who arrived prior to the period covered by this report and who are still studying in the United States under the contract. Of this total, 8 are in agriculture, 12 in engineering, and 11 in medicine. Twenty-eight of these are studying at the University of Minnesota, 1 at Case Institute in Cleveland, 1 at Lowell Technological Institute, and 1 at the University of West Virginia.

Since the contract began, 34 Korean faculty members have completed their studies and returned to their posts in Korea. Eight of these had returned prior to the period covered by the present report. Two of these 8 were the deans of agriculture and medicine, 2 were faculty members in agriculture, 3 were in engineering, and 1 in medicine. The 26 faculty members who returned during the present period were divided as follows: 6 in agriculture, 12 in engineering, and 8 in medicine. Of the 34 who have returned to date, 30 studied at the University of Minnesota, 1 at Lowell Technological Institute, 1 at Massachusetts Institute of Technology, 1 at Ohio State, and 1 at the Pasteur Institute in Paris.

As this report is being written, Korean faculty members participating in the project (including 3 deans but not including the visit, under other auspices, of President Choi, Kyu Nam) have reached a total of 102, distributed as follows: agriculture 25 (including 3 in veterinary medicine), engineering 46, and medicine 31 (including 2 in nursing). Ninety-two of the 102 studied at the University of Minnesota, 3 at the Massachusetts Institute of Technology, 2 at Lowell Technological Institute, and 1 each at Ohio State, Yale, and Pasteur Institute in Paris. One studied 1 year at Minnesota and will spend 1 year at West Virginia and another studied 1 year at Minnesota and will spend 1 year at Case Institute in Cleveland.

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

	Arrivals	Total No. of Particip.			Departures	Still Participating			Total
		Agric.	Eng.	Med.		Agric.	Eng.	Med.	
1st Report	7	2	4	1	0	2	4	1	7
2nd Report	44	11	19	21	3	9	19	20	48
3rd Report	7	16	20	22	5	13	17	20	50
4th Report	44	25	46	31	26	16	31	21	68
TOTALS	102	25	46	31	34	16	31	21	68

Academic Achievement of the Koreans. The immediately preceding report provided some evidence of the progress the Korean faculty members had made in their studies at the University of Minnesota. However, most of them had been studying for too short a period to draw valid conclusions. We now have more complete data and can report that the Korean faculty members are generally making excellent records.

It is gratifying to report that, since the Korean contract began, four Korean faculty members have earned advanced degrees through the Graduate School of the University of Minnesota, as follows: Lee, Yong Bin, associate professor, M.S. (animal husbandry); Lee, Tai Hyun, assistant professor, M.S. (horticulture); Paik, Woon Hah, associate professor, M.S. (entomology); and Kim, In Kwon, associate professor, M.S. (agronomy and plant genetics).

In the expectation that the ICA contract will be extended for an additional two years, several Korean faculty members have already begun programs leading to the Ph.D. degree. In all cases, their achievements since their arrival at the University of Minnesota make it evident that they have the ability and determination to complete such a program successfully.

The achievement of the 60 Korean faculty members who have registered for courses at the University of Minnesota is best shown by referring to the accompanying table. The grades received by these faculty members, the initial contingent of whom arrived in April, 1955, include all quarters from their arrival through both terms of the 1956 Summer Session. The table shows that the courses graded "A," "B" and "S" would be a credit even to U. S. students, with whom no handicap in language exists. That the Koreans have achieved so well is proof of their ability and motivation.

Upon their arrival, all of the Korean faculty members have more or less difficulty in communication in English. As was pointed out in the immediately preceding report, some of them audit courses until they feel more confident of their ability. Accordingly it seemed best to provide two separate comparisons. The first includes the composite records of all 60 Korean faculty members. The second includes only the 45 who had completed 3 or more quarters of work. This procedure also eliminates from the second tabulation the special group of senior faculty members in engineering, plans for whom involved auditing courses but taking none for credit.

The table reveals that the average Korean faculty member who had studied for 3 or more quarters earned 7.0 graduate credits per quarter. For those in agriculture, the figure was 7.1 per quarter; for engineering, 6.7 per quarter; and for medicine 7.0 per quarter.

Full-time English Language Program. Although all Korean faculty members whom it is proposed to send to the United States study English for some time prior to their departure and are required to pass qualifying tests before they are permitted to leave Korea, almost all of them actually need more ability to communicate in English than they possess on arrival. This fact, based on experience, led to the establishment in the summer of 1955 and again during the academic year, 1955-56, of special English courses carried concurrently with the academic courses for two separate groups of Korean faculty members. The outcome of both courses was greater facility in English.

The Korean Advisory Committee concluded that even greater achievement might be realized if the group scheduled to begin study in the fall of 1956 (estimated to total approximately 40) could be brought to the

Twin Cities on August 1. This would make it possible for each Korean to devote his entire time until the week preceding the opening of the fall quarter (October 1, 1956) to intensive orientation in the English language.

A number of departments at the University of Minnesota have useful knowledge basic to the teaching of English as a foreign language. These include such fields as English, speech, linguistics, anthropology, psychology, and the several foreign languages. Representatives of these departments held several meetings designed to provide the best possible answers to the "what" and "how" of teaching English as a foreign language to Koreans with maximum effectiveness.

These meetings resulted in the appointment by the Coordinator of an all-University Committee to be available for advice and counsel in planning and staffing the special English language course. Designated as chairman was Professor John C. Kidneigh, director, School of Social Work. Other members were: Dr. Ernest H. Henrikson, professor and director, Speech Clinic; Dr. William A. McDonald, professor and acting chairman, Department of Classics; Dr. Robert F. Spencer, professor and acting chairman, Department of Anthropology; Dr. James J. Jenkins, associate professor of psychology; and Dr. Martin Steinmann, Jr., associate professor of English.

The Coordinator appointed Dr. Harold B. Allen, associate professor of English, and director of the communication program, to head the special English program for the Koreans. Dr. Allen spent the year, 1954-55, in Egypt as linguistic consultant to the English secretariat of the Ministry of Education. Upon Dr. Allen's recommendation, the following were appointed to serve as his staff: Millard Miller, former United Nations staff member in Korea; Richard Narvaez, assistant professor of

English, University of Puerto Rico; Ruth Roberts, reading specialist, Student Counseling Bureau; Dr. George T. Shea, instructor, Department of Slavic and Oriental Languages; and Mrs. Marion Watson, one-time staff member, Speech and Hearing Clinic.

Finally plans for the special course were based upon the premise that although instruction in the English language would be the primary objective, nevertheless the program should be so planned as to include a general orientation to American culture, thus reducing the inhibitions that might otherwise block the learning of English.

Processing delays made it impossible to schedule the arrival of the Korean faculty members in the United States in time to begin the special English language course on August 1. However, most of those scheduled for this instruction arrived in time to begin it on August 13. The course ran through September 24, a period of approximately 6 weeks. Thirty Koreans participated, and 24 were on hand prior to August 13.

Not all of the outcomes of the types of instruction offered in English language orientation are capable of precise measurement. However, in the beginning, each Korean was given such tests as were deemed of value in determining his level of ability in the various aspects of English communication and also to make possible the forming of homogeneous groups. Similar testing at the end of the instructional period provided measures of improvement, both individually and for the entire group.

In summarizing the results of the English course, Dr. Allen wrote:

"Most of the Koreans came to this country with less English proficiency than is usually possessed by the newly-arrived foreign student. Actually, upon arrival only one member of the Korean group could have been adjudged competent enough in English to undertake graduate work at the University without serious disadvantage. At the end of the course, short though it was, the staff feels that the test results and the class showing would

indicate that all members of Section 3 (highest initial proficiency) had attained or surpassed that level of competence. They feel also that generally the members of Section 2 (moderate proficiency) had attained that level but that all members of Section 2 should continue their work in English during the fall quarter in order to improve past the bare minimum level of competence. Members of Section 1 (low proficiency), they feel, have shown commendable improvement but they were so poor in English at the outset that the five and one-half week course was too short for them to reach the minimum level of proficiency. All members of Section 1 should take as much English as possible during the fall quarter. Even so, the two or three lowest in this section are likely to suffer from language disabilities which will materially handicap them during the winter and spring quarters. But the high motivation which the members of Section 1 now feel is an imponderable factor that may produce results better than at the present time can reasonably be anticipated.

"It should be observed, in connection with graduate work of the Koreans, that two or three members of Section 3 and all the rest will experience some difficulty, greater of course in Section 1, when they are in a test situation with native American students. They will need more time to comprehend and to answer test questions. Likewise they will have some difficulty in getting all that they should get from a lecture and can profitably supplement a lecture experience by reading background material.

"The staff's experience with this particular five and one-half week course has been, each individual has said, so successful that they would strongly support an intensive program in preference to any other. By 'intensive program' is meant one which is unified, competently staffed, and non-competitive with other courses for the students' time. 'Competently staffed' means having an instructional staff trained in linguistics (phonetics, phonemics, morphemics, and syntax), in composition, and in methods of teaching English as a foreign language according to the methods of modern linguistic science."

Equipment Procurement. Procurement of equipment and supplies proceeded as rapidly as possible under the special allocation of \$1,150,000 from FY '56 funds made for this purpose by ICA under contract amendment number 5, dated September 6, 1955. An additional \$425,000 was finally officially allocated for the procurement of equipment and supplies under amendment number 9, dated July 9, 1956. Procurement operations on this second allocation have already begun. Screening of lists of items which Korean authorities had prepared for purchase from funds

to be made available from this second allocation, has been underway since the spring of 1956. It was then that the necessary documents were signed in Korea by Korean and U. S. officials; these then needed only official action from ICA/Washington.

The first shipment of equipment and supplies reached Korea on July 7, 1956. Cargo proceeds from San Francisco to Inchon via the ships of the Pacific Far East Lines. The initial shipment, although scheduled to leave San Francisco on the Indian Bear on June 9, did not actually leave until June 13. The second shipment, on the Pacific Bear, was delayed in departure from June 23 to June 30. It reached Inchon on July 26. Three additional shipments of cargo have been made during the period covered by this report. Departures from San Francisco were on July 17, July 31, and September 12.

Plans call for a shipment on each trip of the Pacific Far East Lines, which carries cargo between San Francisco and Inchon, until all of the equipment and supplies to reach the port of embarkation have been sent to Korea.

All shipments of equipment and supplies purchased under funds provided by ICA are insured and, in addition, are placed in locked containers at the port of embarkation and are not opened until they reach Seoul National University.

Special Program for Engineering Department Heads. During the period covered by the present report, a special program was given for eight senior faculty members (largely department heads) of the College of Engineering, Seoul National University. These faculty members consisted of Dr. Kim, Dong Il, professor of industrial chemistry and former dean; Nah, Ik Young, academic dean and head of chemistry instruction; Park, Kyung Chan, professor of mathematics; Park, Sang Cho,

professor and head, Department of Civil Engineering; Woo, Hyung Ju, associate professor and head, Department of Electrical Engineering (Power); Hong, Choon Ki, associate professor and former head, Department of Mining Engineering; Kim, Hi Chul, associate professor and head, Department of Mechanical Engineering; and Yum, Yung Ha, associate professor of mechanical engineering, who was given the responsibility of coordinating for Seoul National University engineering equipment lists proposed for procurement.

Planning of the program for these faculty members began in September, 1955. The purposes and broad outlines of the plan were transmitted in a letter from Professor William R. Weems, dated October 11, 1955. Briefly, it was felt essential that key senior engineering faculty members have a period of U. S. experience of approximately six months to provide a sympathetic understanding that would aid the younger men who receive more extensive training, and to facilitate the interpretation and acceptance of new ideas by the College as a whole. Implementing this objective involved extensive observations at the University of Minnesota and visits to other campuses and to industrial establishments.

The group arrived in early May, 1956, with the exception of Professor Yum, who came on April 4, 1956. They spent the months of May and June auditing classes and observing course, research, and laboratory work. Special programs were also arranged so that all-University and all-College operations at the University of Minnesota in the fields of their individual responsibility could be observed and understood. A program covering approximately three weeks also was arranged for visits to the principal colleges and schools of the University, and to educational and industrial establishments in the Twin Cities area.

The period from June 25 through July 6 was devoted to a 2,000-mile tour of industrial establishments in northern Minnesota, including visits to Duluth, Silver Bay, Cloquet, Hibbing, International Falls, Bemidji, Grand Rapids, and Brainerd. The group travelled by station wagon and was accompanied by Clarence E. Lund, professor of mechanical engineering, who planned and conducted the tour.

Later, individual trips, covering from 6 weeks to 2 months, were arranged for these senior engineering faculty members to various carefully-selected institutions and industrial establishments in other parts of the United States.

Although the original program was planned to cover approximately six months, Dean Hwang, Yung Mo, of the College of Engineering, Seoul National University, requested that all members of the group, with the exception of Kim, Hi Chul, return to Seoul by mid-October. Professor Kim will continue for an additional period of study of approximately 6 months. Some departed early so that, at their own expense, they could return to Seoul via Europe. For members of the senior group, final brief field trips were arranged to educational institutions and industrial establishments which were so located as to make such visits possible in connection with the return journeys.

College Level Advisers. The need for authority to employ college level advisers and the many earlier and fruitless discussions on the subject between the Coordinator and ICA/Washington were detailed in the third Semi-Annual Progress Report. When that report was being prepared, the problem had become serious because of the impending arrival in early May of the department heads from the College of Engineering.

Fortunately, the detailed communication sent to Dr. Joseph M. Stokes on April 11, 1956, and outlined briefly in the previous report, finally convinced ICA/Washington of the merit of our contention. Our case was also strengthened by findings of a representative of the Controllers Office of ICA. He had spent some time at the University of Minnesota auditing the accounts and found that reimbursement for overhead had been moderate. Also, the point had been again made in the communication that the salaries of the coordinators and secretaries would be charged to the training program and not to Home Staff. A letter from Mr. Edward E. Kunze, director, Office of Contract Relations, ICA/Washington, gave approval for the employment of an adviser and a secretary, not to exceed half time, during the period of training for the senior Korean engineering faculty members. These costs would be charged to the training program and would not be subject to the overhead rate for the Home Staff.

It should be pointed out that this decision covered only the senior engineering participants brought to the United States for a period of six months. There was informal agreement that approval of ICA/Washington would be required if similar programs were contemplated in agriculture and/or medicine.

Per Diem on Field Trips. The problem of an adequate per diem allowance for Korean faculty members travelling in the United States on approved field trips became acute during the period covered by the present report. Our ICA contract overlooked this matter and, consequently, contained no provision for increased per diem during such trips, in spite of the fact that subsistence costs obviously would far exceed those needed during residence at the University of Minnesota.

Previously, only a few Korean faculty members had taken trips of this nature and only a few days had been involved in each case. Each Korean, therefore, had been obliged to supplement his regular per diem while in travel status with savings from per diem funds received previously.

The special program planned for the engineering department heads involved extensive travel which could not possibly be accomplished on the \$7 per diem to which these senior faculty members were entitled under the contract. Furthermore, during their short residence at the University of Minnesota, it would be impossible to save sufficient sums from per diem funds to cover the higher costs for room and meals at hotels while in travel status.

The issue was discussed both by telephone and letter with ICA/ Washington, during the conference held in Washington on June 15, and by letter and telephone subsequently.

The issue was finally resolved officially in late August with the receipt of an approved copy of Amendment Number 9, which, among other things, added the following language at the end of the last sentence of Exhibit III-A-11:

"provided that, in lieu thereof, all Korean personnel while on field trips in the United States shall be paid not to exceed \$12 per diem."

Health and Accident Coverage. The various problems which had arisen in the past concerning health and accident coverage for the Koreans were discussed in the second and third Semi-Annual Progress Reports. For example, it was pointed out that, unlike other students at the University, Korean faculty members did not pay the regular Health

Service fee for foreign students but had monthly deductions of \$3.09 made from their per diem checks to pay for blanket insurance taken out by ICA with a commercial insurance company.

The policy provided that no payments would be made for the treatment of conditions existing prior to the participant's arrival in the United States. This resulted in bills for medical and hospital service which the insurance company declined to pay. After considerable correspondence, ICA/Washington agreed to permit reimbursement for any medical and/or hospital bills that the insurance company refused to pay.

Later, the insurance company revised its policy, effective July 1, 1956, so as to provide medical and hospital coverage, regardless of whether or not the condition had existed prior to the individual's arrival in the United States. This broader coverage increased the cost from \$3.09 to \$3.50 per month.

A further change, expected to become effective November 1, 1956, and made possible through Congressional action, will thereafter relieve the Korean faculty members from paying for health and accident coverage. When the new plan goes into effect, insurance costs will be paid for directly by ICA/Washington. However, since there was an understanding that ICA would not pay premiums in excess of \$3.36 per month, a new policy contract, with slightly less liberal coverage is being negotiated.

Exchange of Art Work. A proposal was made in December, 1955 to the officials of Seoul National University that there be a two-way exchange of art work by faculty and students of the sister institutions. This proposal was concurred with and plans for the exchange came to fruition during the period.

Although such an exchange is not a part of the formalized program under the ICA contract and could not be financed as such, it would

show members of the two university communities something of each other's cultural achievements.

This exhibit, it was hoped, would supplement the academic character of operations under the contract by demonstrating to Minnesotans something of the nature of art in Korea and art instruction at Seoul National University. Similarly, when an exhibit is prepared at Minnesota during 1956-57, faculty, students, and friends of Seoul National University will have the opportunity of seeing what Minnesota students are producing in connection with their university work, as well as some representative work of the faculty.

The Korean exhibit constitutes a cross-section of Korean contemporary art, including oil paintings, water colors and caseins, each with a distinctly Korean character. Also included were photographs showing classes in session, artists at work under typical Korean conditions, and photographs of other types of plastic art too bulky or fragile for shipment.

The exhibit was sent by ocean freight from Inchon, Korea on August 30, 1956 and reached San Francisco on October 12, 1956. Upon arrival in Minneapolis, a schedule will be made for its display both in the Twin Cities and elsewhere. A catalog is to be published.

Private Gifts to the Libraries of Seoul National University. Six individuals have contributed professional books and periodicals for use in the various libraries of Seoul National University since our ICA contract began.

Otis T. Weaver, Washington, D. C., a staff member of the U. S. Department of Agriculture, contributed to the library of the College of

Agriculture, Suwon a substantial number of books and bulletins, including the USDA Yearbooks, 1912-25.

Dr. William A. Riley, professor emeritus of entomology and economic zoology, Institute of Agriculture, University of Minnesota, contributed books and pamphlets from his professional library to the library, College of Agriculture, Suwon.

Dr. Harold Macy, dean, Institute of Agriculture, University of Minnesota, contributed periodical volumes to the library, College of Agriculture, Suwon, as follows: Food Technology Vol. 1-9 (1947-55); Journal of Milk Technology (1946); Journal of Milk and Food Technology (Vol. 10-18).

Thomas P. Hughes, associate professor of mechanical engineering, Institute of Technology, University of Minnesota, contributed a library of some 80 volumes covering industrial laboratory work.

James M. Lufkin, instructor in English, College of Science, Literature, and the Arts, University of Minnesota, contributed to the library, College of Engineering, some 33 books on mechanical engineering from the collection of his father, before his death an engineer in the Minnesota Highway Department.

Dr. Walter C. Stolov, a spring, 1956 graduate of the College of Medical Sciences, University of Minnesota, contributed some 20 volumes of important journals in the field of physics, to the library, Seoul National University.

Nurses' Uniforms Given to Korea. Through the efforts of the Nursing College Board, University of Minnesota, approximately 371 pounds of nurses' uniforms were shipped from Minneapolis on August

10, 1956 to the School of Nursing, Seoul National University. These were donated by the spring, 1956 graduates and collected by the Nursing College Board.

When the uniforms reached Seoul, they were presented officially in the office of President Yun, Il Sun on September 17, 1956. Those present, in addition to Dr. Yun, were Dr. Myung, Choo Wan, Acting Dean, College of Medicine; Dr. Lee, Myung Bok, College of Medicine, Acting Principal, School of Nursing; four student nurses; Dr. Arthur E. Schneider, Chief Adviser in Korea; and Miss Gertrude Koll, Administrative Secretary.

This was the second year that Minnesota donated uniforms to Korea, the class of 1955, School of Nursing, having likewise sent some 300 uniforms to Korea in two separate shipments. Unfortunately, only the first shipment of 86 uniforms actually reached Korea. Efforts are being made to trace the other 214.

II. OFFICE OF THE CHIEF ADVISER IN KOREA

October 19, 1956 marks the end of the second year of University of Minnesota staff activity in Korea under the three-year ICA/Minnesota contract involving Seoul National University. During this two-year period a great deal has been accomplished in terms of the contract objectives of assisting Seoul National University to improve its teaching and research in the three major areas involved - Agriculture, Engineering and Medicine.

Agreements reached and procedural foundations laid during the first six-month period have served as a basis for increasingly smooth operations in subsequent periods. The cordial cooperative relationships developed with Seoul National University's President and his staff, and with the Republic of Korea's Ministry of Education and other Korean agencies involved have resulted in the type of friendly atmosphere conducive to progress under an endeavor of this nature.

In American channels the UNC Economic Coordinator for Korea and members of his staff, especially the Chief, Division of Education and his co-workers, the Director of the Office of Program Planning, and the Public Works Division of the Office of The Rehabilitation Engineer, have been of great assistance in making it possible to plan and carry out certain aspects of the technical assistance undertaking, particularly with regard to providing funds and engineering advice and assistance relative to physical plant rehabilitation and improvement, and making available money for the re-equipping of laboratories and classrooms.

The contract accomplishments of this two-year period in the areas of staff exchange and equipment procurement have, of course, been

possible only because of the great interest and unflagging effort of University of Minnesota personnel in the United States. Though taken for granted, this full-measure contribution to the cooperative undertaking is recognized by all concerned in Korea as being indispensable.

Staff Exchange. The heart of the technical assistance cooperative project with Seoul National University is staff exchange. A tabulation covering this exchange appears on page 10 of this report.

During this 6-month period the Foreign Language Institute of Korea continued to be of very great assistance in improving the English language aural/oral competence of prospective program participants.

Korean channel participant processing delays commented upon in the report for October 19, 1955 - April 19, 1956 received an encouraging amount of remedial attention during the period.

Minnesota Staff in Korea. Fourteen staff members, exclusive of the Chief Adviser and his Administrative Secretary, have served or are serving in Korea. Eight of these served during the period covered by this report.

During the past six months 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, 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 familiarize themselves with the details of curricula, courses, teaching methods and procedures currently in effect in their areas; to become acquainted with the kind, amount and quality of research undertaken; to learn of

the major problems affecting teaching and research in their areas; to establish appropriate liaison with technical societies or agencies in their technical fields; to avail themselves of every opportunity to gain first-hand knowledge of the country, its people and their aspirations, potentialities and limitations; and, through all of the foregoing to carry out to the best of their ability the contract objective of assisting Seoul National University to improve its teaching and research in the fields of their responsibility.

At the conclusion of his tour of duty each staff member prepares a report in which is incorporated a summary of his activities in Korea and major recommendations relative to his area of responsibility. The major content of these reports is discussed in detail with Seoul National University personnel concerned prior to the departure of the staff members preparing them. The reports are always discussed in detail with the Dean of the College involved and with the President of the University.

Copies of the reports are placed in the hands of Seoul National University's President and the Dean of the College concerned and are transmitted to other Seoul National University staff members where appropriate, and to OEC's Division of Education (and occasionally to other OEC offices) when such distribution appears appropriate and desirable, and to the University of Minnesota.

All concerned in Korea benefitted during this 6-month period from discussions with Dean H. Macy of Minnesota's Institute of Agriculture who served with OEC's Office of Agriculture during the spring of 1956, and from consultations with Minnesota's Vice President for Academic Administration Malcolm M. Willey and Vice President for Business Administration William T. Middlebrook, who visited Korea in connection with project matters from August 6-10, 1956.

Plans have been formulated regarding additional University of Minnesota staff members desired for service in Korea in each of the three broad contract fields.

The great time lag between plans for procuring classroom and laboratory equipment and the arrival of these essentials in Korea has continued, during the past six months, to delay some proposed project staffing actions. However, equipment has now started to arrive and it is expected that the flow will continue until funds presently allocated therefor are expended. Staffing actions may be guided accordingly.

The slowness characterizing receipt of materials for physical plant rehabilitation and improvement has also continued to bear adversely on the total effectiveness of University of Minnesota staff members in Korea. Some rehabilitation materials procured with FY 1955 funds arrived in Korea during this 6-month period, but practically all of the planned physical plant improvement work remains for future accomplishment.

The previously reported lack of housing for families and absence of authorization for University of Minnesota staff members to bring dependents to Korea continue to be major obstacles to the recruitment of long-term personnel for project service.

Equipment Procurement. Further work on classroom and laboratory equipment and supply needs for each of the three contract areas was accomplished by Minnesota staff members and their Korean colleagues during this 6-month period. These lists were transmitted, per usual procedure, to Minnesota for screening and procurement action.

During this period the first of the equipment and supplies procured by Minnesota under Contract Amendment Number 5 arrived in Korea.

As of September 30, 1956 the invoice value of equipment and supplies received totalled \$89,190.74. This amount is made up of the following sub-totals:

Items for the College of Agriculture	\$10,703.70
Items for the College of Engineering	55,628.57
Items for the College of Medicine	22,858.47

With minor exceptions all of this equipment arrived at the Colleges concerned in good condition.

Physical Plant Rehabilitation and Improvement. As a result of special effort on the part of OEC's Division of Public Works, review of Korean-prepared physical plant repair and improvement plans and bills of material for FY 1956 projects were completed during the last quarter of the fiscal year. This was followed by preparation (also by OEC Public Works) of the required Project Implementation Orders - Commodities which serve as the basis for ROK Office of Supply procurements. The allocation for materials and supplies required for these improvements totals \$1,025,000 and is made up of the following items:

1. Additional rehabilitation, College of Engineering	\$100,000
2. Additional rehabilitation, College of Medicine	175,000
3. New School of Nursing, College of Medicine	100,000
4. New classroom - laboratory building and auditorium, College of Agriculture	650,000

A considerable amount of work was done during the period on plans and specifications for additional physical plant rehabilitation and improvement work expected to be financed from FY 1957 funds. These plans contemplate the appropriate completion of rehabilitation work and new construction already started and the initiation of a dormitory construction project at the College of Engineering.

Offices. Adequate.

Billets. 1. Seoul. - During this period two Minnesota staff members have been housed at the Chosun Hotel, where accommodations are satisfactory. The rest of those working in the Seoul area (four) have been housed at the OEC (old KCAC) Compound where accommodations leave much to be desired. During this period some improvements were made in Compound room furnishings and dining facilities, somewhat alleviating the depressing aspect of the place. However, major inconveniences such as location of bath and sanitary facilities, stove heat, and lack of a reasonable amount of privacy, continue.

OEC's new residential halls in the Yong-San area are expected in the near future to take care of most of its personnel without families in Korea - except those housed at the Chosun Hotel, Kookje Hotel and Sudo House. The first unit of these new billets will be occupied in October of 1956 and the others, it is expected, by the first of the year.

However, it is understood that OEC plans to retain and continue to operate a billet unit at the present OEC Compound. The present OEC plan is understood to be that new personnel will, in general, be housed at these billets initially and will remain there until eligible to bid on a room in one of the better billets as vacancies occur. Since length of service in Korea is, under OEC bidding procedures, a major criterion on the basis of which rooms are awarded, Minnesota staff members coming to Korea in the future for service in the Seoul area may, under present OEC directives and policies, expect to spend some part, if not all, of their relatively short (as compared to OEC personnel) periods of service in a billet hardly in keeping with their salary levels or the position prestige they should maintain.

2. Suwon. - After months of delay the billet at the College of Agriculture was finally readied by OEC for use in July. The billet has been occupied since that time by Minnesota staff members serving with the College of Agriculture.

Despite the inadequacies of some of the preparatory work (with particular reference to the water, sewage and electrical systems) and the aggravating delays in having even simple repair and improvement needs taken care of, the billet has served its purpose adequately thus far.

Transportation. Adequate.

Project Status Analysis. A further critical review of the entire project, both technical assistance and contract support features, was made by concerned Korean authorities (Seoul National University's President and staff, and the ROK Ministries of Education and Reconstruction, particularly) and Minnesota and OEC personnel during this period. Minnesota personnel participating in this on-the-ground inquiry included, in addition to those serving on the project in Korea, Vice President for Academic Administration Malcolm M. Willey, Vice President for Business Administration William T. Middlebrook, and Dean of the Institute of Agriculture H. Macy.

The result of the Korean review of the project was a recommendation from the President of Seoul National University to the Minister of Education that the ICA/Minnesota contract be extended for two years (to September 28, 1959) and that the cooperative undertaking be continued along present lines and within the \$1,800,000 originally approved for the technical assistance portion of the program. This recommendation was concurred with by the Minister of Education and transmitted to OEC.

This seemed to OEC and Minnesota personnel involved to be a reasonable and sound proposal. OEC is currently taking action with ICA/Washington on the matter, and Vice Presidents Willey and Middlebrook are presenting the proposal for consideration by those concerned at Minnesota.

Proposed Project Expansion. Republic of Korea authorities (primarily the Ministers of Education, Reconstruction, and Home Affairs; the Chief of the Office of General Affairs; and the President of Seoul National University) have decided to accept OEC's proffered technical aid in the field of Public Administration. The University of Minnesota has been requested to expand its contract activities to include this field. The matter is currently under consideration at Minnesota and at ICA/Washington.

Plans for the Next Six Months.

1. The major endeavor during this period will be for Minnesota staff members to continue their education concerning Korea and the frame of reference pertaining to their areas of responsibility, to guide their activities as set forth under "Minnesota staff in Korea," and to strive to be of utmost assistance to Seoul National University in helping to effect improvements in teaching, research, organization and administration.
2. Though it is planned that only one additional Seoul National University staff member will leave for the United States for advanced studies under the cooperative project unless the contract is extended, thought will continue to be given to and tentative plans made concerning more Seoul National University faculty members participating in the program.
 - a. In conjunction with the above, ways and means of further assisting proposed program participants to improve their aural/oral English proficiency will be explored.
3. Plans for additional University of Minnesota staff members to serve on the project in Korea will receive continued attention. Rehabilitation accomplishments and equipment arrivals will receive specific consideration in such plans.

4. Seoul National University authorities 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 be maintained with Seoul National University staff members 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 from their point of view, and
 - b. To assist them in any way feasible to carry out effectively their part of cooperative project objectives.
7. Further specific attention will be given the area of Veterinary Medicine, but major plans and action in this field will be deferred until the return of the Dean (now at Minnesota) early in 1957.
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 be explored at greater length with OEC and Embassy Education personnel.

Seoul National University, General. Among events and data of significance to the administration of Seoul National University during the past six months are the following:

1. President of Seoul National University Dr. CHOI Kyu Nam was appointed by President Rhee as ROK Minister of Education, vice Dr. LEE Sun Keun, resigned.
2. Former Vice President of Seoul National University Dr. YUN Il Sun was advanced to President.
3. Former Dean of the College of Education KOH Kwang Man became Vice Minister of Education.

4. Former Academic Dean LEE Chong Soo became Dean of the College of Education.
5. Dr. CHO Pyong Wook was appointed Dean of the University (the former title of this position was Academic Dean).
6. Dr. MYUNG Choo Wan became Dean of the College of Medicine, vice Dr. KIM Sung Chin, resigned.
7. Seoul National University observed its tenth anniversary in October, 1956.
8. Seoul National University's College of Agriculture celebrated its fiftieth anniversary in September, 1956.
9. The University is marshalling its resources to further effectuate its long-worked-upon plan to center all freshman course work in the College of Liberal Arts and Sciences. It is hoped that, by the beginning of the first semester of 1957 it will be possible to accommodate in the College of Liberal Arts and Sciences all freshmen students of the College of Education and the College of Commerce in addition to those of the other eight colleges currently being served thereby. This would leave only the freshman students of the College of Engineering and the College of Agriculture to be brought under the plan at a later date.

Seoul National University authorities, backed by the Ministry of Education, hope through this major change to accomplish a marked strengthening of basic departments, improve instruction, and weld the various colleges into a more tightly knit whole.

10. Primarily through the interest of Seoul National University's Presidents CHOI and YUN, Dean of the College of Fine Arts CHANG and Minnesota's Vice President for Academic Administration Malcolm M. Willey an art exchange (outside of ICA-financed cooperative project) was arranged between the two universities. The Korean portion of the exchange has already been shipped to the United States; the Minnesota portion will come to Korea at a later date.
11. Minnesota's graduating nurses again contributed a quantity of nurses' apparel to their sisters at Seoul National University's School of Nursing.
12. A gift of books was received from University of Minnesota staff member James M. Lufkin for Seoul National University's College of Engineering.
13. A gift of technical magazines for the Physics Department of the College of Liberal Arts and Sciences was received from University of Minnesota graduate Dr. Walter C. Stolov.

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Fifth 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, 1956 - April 19, 1957



Minneapolis 14, Minnesota
April 19, 1957

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I. OFFICE OF THE CAMPUS COORDINATOR

The Cooperative Project. The University of Minnesota entered into a three-year, \$1,800,000 contract on September 28, 1954 with the U. S. Foreign Operations Administration, now the International Cooperation Administration, designed to strengthen Seoul National University of Korea. Operations in the U. S., anticipating successful contract negotiations, began through an interim contract on August 1, 1954. Operations in Korea began on October 19, 1954 with the arrival of the Chief Adviser who began an uninterrupted service now totalling two and one-half years.

This report is the fifth in the series of semi-annual progress reports required by the contract (Article II B). This report, like the earlier ones, attempts to sketch in broad strokes the significant happenings and the measureable progress concerning operations under the contract. Attention is called also to unsolved problems and plans for the future.

Korean Advisory Committee. Only one meeting (January 30, 1957) of the Korean Advisory Committee was held during the period covered by the present report. The Committee, as in the past, continued its services of advice and counsel on an individual and informal basis on policy matters relating to the contract.

The January 30, 1957 meeting was called for the purpose of studying the text of Amendment No. 10 to the Contract, as proposed by ICA/Washington, and making recommendations thereon to the President. The proposed text, although including most of the material contained in the text as drafted originally by the University of Minnesota, introduced three new items which the Committee seriously questioned. Briefly there were objections to the following new provisions:

1. "Each staff member sent to Korea by the Contractor will serve under the contract for a period of at least one year unless otherwise approved in advance in writing by ICA."
2. "Before arranging for any training period in excess of one year, Contractor shall obtain the prior written approval of ICA."
3. "A satisfactory certificate of performance to be submitted with and covering the same period as each 'No-Pay' voucher. For services rendered in Korea, Certificate of Performance (Form FOA 603-A) to be executed by the Director, OEC, or his authorized representative."

Concerning item No. 1, the Committee felt that operations under the contract having been carried out for two and one-half years with unquestioned success, with periods of service in most cases of from 3 to 6 months and plans for the balance of the extended contract having been based primarily on 6-month periods of service, the requirement of one year's service was neither desirable nor feasible. Members of the Committee who had met with the U. N. C. Economic Coordinator for Korea on January 16, 1957 recalled that, although Mr. Warne felt personally that periods of service of one year or more were preferable, he indicated his willingness to agree to shorter periods as provided for in our work plans. It was furthermore pointed out that the one year provision was no doubt added to the Amendment primarily for the new and essentially different situation involved in the field of Public Administration.

In item No. 2, it seemed again that the requirement was intended to apply primarily to Public Administration. It was pointed out that plans

for the Korean faculty members now studying in the United States were based on a maximum training period of three years through mutual agreement between the Contractor and the University. It was assumed that extensions beyond three years would require, in individual cases, approval of ICA/Washington. The next contingent of Korean faculty members in Agriculture, Engineering, and Medicine was expected to arrive in the United States in the fall of 1957. They would come for an initial period of one year. There seemed no reason to suppose that for those whose progress justified the full two years remaining of the contract period, the necessary approval of ICA/Washington could not be secured.

Although item No. 3 seemed to impose an unnecessary and meaningless requirement, it was felt that the University of Minnesota should not refuse to agree to the amendment on such a technicality as this, especially since the certificate was to be signed, not by the Korean government, but by the U. N. C. Economic Coordinator for Korea or his authorized representative.

The Committee, with the above considerations in mind, voted unanimously to recommend approval of the amendment to President J. L. Morrill and the Board of Regents.

At the request of the Chief Adviser in Korea, the Committee voted approval of the following: "No staff member requiring special equipment and supplies for his work in Korea will be scheduled to leave Minnesota until such equipment and supplies are known to be present at the college concerned."

Public Administration Added to Contract. Amendment No. 10, which became effective upon approval by ICA/Washington on February 11, 1957, added to the existing ICA contract the sum of \$525,000 (\$125,000 covering

the period ending September 28, 1957) for a program in the field of Public Administration to continue until September 28, 1959.

Discussions concerning a possible contract in Public Administration had covered a period of nearly two years beginning with a visit to Korea by Dr. Lloyd Short, professor and director, Public Administration Center, in mid-March, 1955. Dr. Short, while consulting on Public Administration problems at the invitation of OEC, had been invited to confer with President Choi, Kyu Nam and members of his staff on the subject of developing this field at Seoul National University.

Later, on May 16, 1955, a letter from Dr. Schneider requested that Dr. Short prepare for President Choi the broad outline of a basically adequate undertaking in Public Administration for Seoul National University, together with a budget covering an initial period of three years.

This outline, together with a budget estimate totalling \$485,350, was transmitted to President Choi through the Chief Adviser in Korea on June 14, 1955. Unfortunately, this communication never reached its destination. A duplicate copy, sent on August 22, finally reached Korea and was acknowledged on August 30, 1955. Further action then awaited consideration by the appropriate officials of the ROK government and, for a time, it appeared that the necessary approvals for such a program might not be forthcoming. In the meantime, ICA/Washington requested the University of Minnesota to indicate whether it would be interested in such a contract addition should it be offered. The Korean Advisory Committee, at a meeting held December 20, 1955, agreed that the interests of everyone concerned, including Seoul National University, would best be served by adding the field of Public Administration to the present contract should an official request be received later.

No further word was received until a letter from the Chief Adviser in Korea, dated March 19, 1956, indicated that the Public Administration proposal had come to light again and that some specific action might be expected before the close of the 1956 fiscal year. Later a Project Proposal and Approval Summary, dated April 16, 1956, covering the contract addition in Public Administration was received. It proposed a 3-year program supported by ICA funds totalling \$525,000, of which \$125,000 were to be made available for the initial year.

A phone call from Washington on May 9, 1956 indicated ICA's desire to have the University of Minnesota undertake the proposal. Dr. Lloyd M. Short, in a letter to ICA dated June 1, 1956, indicated that the University of Minnesota would undertake the program provided satisfactory contract terms could be negotiated. Further discussions concerning the proposals were held in Washington by the Coordinator and Mr. Lunden on June 15, 1956. Later, on June 28, 1956, Dr. Short set forth in a letter to ICA the conditions under which the University of Minnesota would undertake the program. Hoping to hasten action on extending the contract and adding to it a program in Public Administration, the Coordinator drafted a proposed contract amendment which, following discussion and approval by the Korean Advisory Committee on October 10, 1956, was transmitted to ICA/Washington. On October 31, 1956, in response to a telegram, a revised budget for the Public Administration project in the amount of \$525,000 was sent to ICA/Washington.

Finally, on January 26, 1957, ICA/Washington transmitted copies of Amendment No. 10 to the University of Minnesota for approval. The text, as drafted by ICA/Washington, was given careful study at a meeting of the Korean Advisory Committee on January 30, 1957. The Committee, although

noting certain undesirable provisions, felt that the understandings reached at the time of the visit of Mr. William E. Warne, U. N. C. Economic Coordinator for Korea, would make it possible to operate the contract successfully. The Committee, therefore, voted unanimously to recommend approval of the Amendment to President Morrill and the Board of Regents.

The Amendment (No. 10) was approved by the Board of Regents on February 8, 1957, signed officially, and transmitted to ICA/Washington with a covering letter from which the following quotations indicate the reservations which the University of Minnesota had concerning certain of its provisions:

". . . we had some difficulty in deciding to accept this contract . . . If we felt that ICA would adhere rigidly to the provision that staff members must serve a minimum period of one year in Korea, we could not agree to this amendment. However, the concluding language in paragraph 2 'unless otherwise approved in advance in writing by ICA' together with assurances received when Mr. William E. Warne was here on January 16, 1957 that this requirement would not be exercised arbitrarily, enabled us to agree to this otherwise unsatisfactory provision.

"Our objection to paragraph 9 would be if ICA were unwilling to agree to periods of study in excess of one year when responsible faculty members from the University of Minnesota and from Seoul National University recommended a longer period. It has been our judgment as a result of operations under the contract to date that, in general, the most able young Korean faculty members can render much more effective service upon their return to Korea when they are allowed to study for periods of two or, in some cases, three years. Again, assurances given us by Mr. William E. Warne have been considered sufficient to justify our accepting this otherwise unsatisfactory provision."

Operations Begin in Public Administration. Professor George A. Warp, associate director, Public Administration Center, has been designated to "backstop" operations in Public Administration added to the ICA contract through Amendment No. 10.

Professor Warp left Minneapolis for Korea on March 27, 1957, reaching Seoul on April 3, to secure a first-hand view of the Public Administration situation, to plan for bringing the first group of Korean trainees to the United States, and to discover the needs in Korea for the service of faculty members from the United States. Preliminary plans called for spending from three weeks to one month in Korea.

Earlier, Professor Warp, accompanied by the Coordinator, spent March 7 and 8, 1957 in Washington, D. C. discussing contract plans with ICA staff members. Professor Warp then spent a week visiting other universities operating Public Administration contracts and discussing their problems with staff members concerned.

Agricultural Advisers. Three faculty members from the Institute of Agriculture began service in Korea during the period covered by this report. Roy O. Bridgford, associate professor emeritus of agronomy, arrived in Korea on March 19, 1957 to serve for a period of one year. His trip, which began officially on February 25, 1957, was routed through the Philippines and Japan to enable him to gain familiarity with agricultural practices in those two countries as they relate to comparable problems in Korea. Dr. Clarence E. Mickel, professor and head of the Department of Entomology and Economic Zoology, and Dr. Thomas H. King, professor of plant pathology, left for Korea on March 29, 1957. Both of them, likewise, were routed through the Philippines and Japan with the same objectives in view as was the case with Professor Bridgford. Both were scheduled to reach Korea on May 1, 1957.

Three faculty members from the Institute of Agriculture completed service in Korea since the last report. Dr. Frank H. Kaufert, professor and director, School of Forestry, left Korea on November 7, 1956, having served $3\frac{1}{2}$ months under the contract. Paul M. Burson, professor of soils, left Korea on November 19, 1956, and served in excess of $6\frac{1}{2}$ months under the contract. Dr. Andrew Hustrulid, professor of agricultural engineering, left Korea on December 19, 1956, having served somewhat more than five months under the contract.

The Institute of Agriculture has now provided 11 of the members of its faculty and administration for service in Korea under the ICA contract, including its dean (services not charged to the contract) and a professor of forestry who serves as Chief Adviser in Korea. The total service under the contract of these faculty members to date is approximately $61\frac{1}{2}$ months or slightly more than 5 man-years.

Engineering Advisers. J. Harvey Evans, associate professor of naval architecture, Massachusetts Institute of Technology, left Boston on March 25, 1957 to serve for a period of three months in Korea. He spent three days at the University of Minnesota for orientation and consultation with members of the faculty and administrative staff of the Institute of Technology. He arrived in Korea on April 6, 1957.

Dr. Paul Andersen, professor of civil engineering, completed his assignment and left Korea on December 3, 1956. His services covered a period of approximately 5 months and ended on December 22, 1956.

Professor William W. Staley, professor of mining, University of Idaho, who began service on June 16, 1956, will continue to serve in Korea until late summer, 1957, in accordance with his appointment to serve under the contract for a period of approximately 15 months.

The Institute of Technology has now provided 8 individuals for service in Korea, 4 from its own faculty and 4 from other institutions. Their service to date totals $45\frac{1}{2}$ months, or nearly 4 man-years.

Medical Advisers. Margery S. Low, assistant professor, School of Nursing, began service under the ICA contract on January 1, 1957. She left Minneapolis on March 7, reached Korea on March 19, and will serve for a period of approximately a year as an adviser to the School of Nursing, Seoul National University.

Three faculty members from the College of Medical Sciences are scheduled to leave shortly for service in Korea. They are: Dr. James H. Matthews, instructor, Department of Anesthesiology, to serve for one year; Dr. Edmund B. Flink, chief, Medical Services, Minneapolis Veterans Hospital, for six months; and Mr. Glenn R. Mitchell, to serve as consultant in hospital administration for a period of one year. Dr. Matthews and Mr. Mitchell will be leaving on or before May 1, 1957. Dr. Flink plans to leave August 1, 1957. This group, including two physicians, one nurse, and one hospital administrator, will bring to five the total number of medical staff members to serve under our contract in Korea. The service under the contract to date of medical staff from the University of Minnesota totals approximately 7 months.

Korean Faculty Participants Total 103. The accompanying table reveals that 1 Korean faculty member has reached the United States for study since the previous report and that 6 have returned to Korea. This brings the total number of participants to 103, the number who have completed their training and returned to Korea to 40, and the number presently studying in this country to 63. Of this latter total, 58 are studying at the University of Minnesota and 5 at other institutions. Of these 5, 3 are at Massachusetts Institute of Technology, 1 is at Yale, and 1 at the West

Virginia University. The 63 presently studying in the United States are divided as follows: Agriculture, 15; Engineering, 29; Medicine 19.

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

	Arrivals	Total No. of Particip.			Departures	Still Participating			Total
		Agric.	Eng.	Med.		Agric.	Eng.	Med.	
1st Report	7	2	4	1	0	2	4	1	7
2nd Report	44	11	19	21	3	9	19	20	48
3rd Report	7	16	20	22	5	13	17	20	50
4th Report	44	25	46	31	26	16	31	21	68
5th Report	1	25	47	31	6	15	29	19	63
TOTALS	103	25	47	31	40	15	29	19	63

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 member participants under our ICA contract. The last two columns show the cumulative man months and 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 97 man years of graduate study had been provided under the ICA contract for the 103 Korean faculty members who had been supported through March 31, 1957.

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

Academic Achievement of the Koreans. The immediately preceding report provided data on the credits taken and the marks earned by the 60 Korean faculty members who had registered for courses at the University of Minnesota from the beginning of the contract through the 1956 Summer Session. A tabulation made comparisons for each of the three colleges involved and also provided separate tabulations for those who had been in residence for three or more quarters. It is believed that the data for those who have studied for three or more quarters are more meaningful since less weight is given to the initial one or two quarters of study when many of the Koreans audit most if not all of their courses until they acquire more facility in English and, as a consequence, feel more confident of their ability.

The accompanying tabulation presents similar data for 59 Korean faculty members who have studied at the University of Minnesota and are still studying in the United States. No data appears for the three Koreans studying at the Massachusetts Institute of Technology and the one studying at Yale since no transcripts of their records have been received. The tabulation includes the grades covering all quarters from each Korean's arrival through the winter quarter, 1957.

The table reveals that the average Korean faculty member who had studied for 3 or more quarters earned 9.2 graduate credits per quarter, as compared with the previous tabulation which showed 7.0 graduate credits per quarter. For those in agriculture, the figures are 7.3 and 7.1; for engineering, 9.7 and 6.7; and for medicine, 10.1 and 7.0. The increase probably reflects the correlation between the proficiency in English and the length of the periods of study of the Koreans and, with the increased proficiency in English, the ability of the Koreans to carry successfully more courses for credit and fewer on an audit basis.

SUMMARY OF CREDITS AND MARKS FOR 59 KOREAN FACULTY MEMBERS
PRESENTLY STUDYING IN THE UNITED STATES

	AGRICULTURE		ENGINEERING*		MEDICINE		TOTAL*	
	All Koreans	Koreans with 3 or More Qtrs.	All Koreans	Koreans with 3 or More Qtrs.	All Koreans	Koreans with 3 or More Qtrs.	All Koreans	Koreans with 3 or More Qtrs.
No. of Students	15	9	25	10	19	11	59	30
Grades	Credits	Credits	Credits	Credits	Credits	Credits	Credits	Credits
A	138	120	300.5	269.5	200	188	638.5	577.5
B	156	128	286	229	207.5	202.5	649.5	559.5
S	59	59	15	12	282	276	356	347
C	59	53	85	55	54	54	198	162
Total of Above	412	360	686.5	565.5	743.5	720.5	1842	1646
Audit	188	114	529	177	274	105	991	396
Fail	8	8	4	4	5	5	17	17
Other	34	32	79.5	63.5	106	97	219.5	192.5
GRAND TOTAL	642	514	1299	810	1128.5	927.5	3069.5	2251.5
No. of Quarters	61.5	49.5	88.5	58.5	87.5	71.5	237.5	179.5
Av. Grad. Cr./Qtr.	6.7	7.3	7.8	9.7	8.5	10.1	7.8	9.2

*Does not include data for 4 Korean engineering faculty members studying at MIT and Yale for whom no transcripts have been received.

Achievement of Faculty Members Who Have Returned. Forty Korean faculty members have completed their studies and/or observations and consultations in the United States and have returned to Korea. A study of their records reveals that 15 were enrolled for less than 3 quarters and, for the most part, audited such classes as they were registered for. No transcripts have been received for 4 of those who attended other institutions. Two (both of them deans) enrolled for no courses. The accompanying table summarizes the academic records of the 34 for whom transcripts were available and provides a separate tabulation for 19 of them who were enrolled for 3 or more quarters.

SUMMARY OF CREDITS AND MARKS FOR 34 KOREAN FACULTY MEMBERS
WHO HAVE COMPLETED THEIR STUDIES IN THE UNITED STATES

	AGRICULTURE		ENGINEERING		MEDICINE		TOTAL*	
	All Koreans	Koreans with 3 or More Qtrs.	All Koreans	Koreans with 3 or More Qtrs.	All Koreans	Koreans with 3 or More Qtrs.	All Koreans	Koreans with 3 or More Qtrs.
No. of Students	9	4	15	6	10	9	34	19
Grades	Credits	Credits	Credits	Credits	Credits	Credits	Credits	Credits
A	34	34	9	9	58	58	101	101
B	55	55	51.5	51.5	20	20	126.5	126.5
S	84	71	10	0	31	31	125	102
C	19	19	15	15	0	0	34	34
Total of Above	192	179	85.5	75.5	109	109	386.5	363.5
Audit	50	13.5	366	261	275	250	691	524.5
Fail	0	0	0	0	0	0	0	0
Other	9	3	33	15	33	33	75	51
GRAND TOTAL	251	195.5	484.5	351.5	417	392	1152.5	939
No. of Quarters	28	20	36.5	26.5	36	34	100.5	80.5
Av. Grad. Cr./Qtr.	6.9	8.95	2.34	2.85	3.03	3.21	3.85	4.52

*Does not include data for 2 deans who did not register and 4 who attended other institutions and for whom no transcripts have been received.

Degrees Earned. The preceding report listed four Korean faculty members who had earned Master's degrees since the contract began. Omitted in an earlier report was the fact that Lee, Ki Young had been granted the degree, Doctorat de l'Universite' de Paris, on January 28, 1956.

Three additional Korean faculty members received degrees from the Graduate School during the period covered by the present report: Choi, Jong Wan, teaching assistant, M. S. (civil engineering); Lee, Socker, teaching assistant, M. S. (mechanical engineering); and Ryu, Han Yeol, teaching assistant, M. S. (agricultural engineering).

Extensions for Advanced Degrees. Twelve Korean faculty members have been granted extensions of their graduate study periods to enable them to complete the requirements for the Ph.D. degree. The names of the faculty members are as follows: Agriculture---Cho, Chai Moo, teaching assistant, soils; Lee, Chul Choo, teaching assistant, agricultural engineering; Ryu, Han Yeol, teaching assistant, agricultural engineering; Pyo, Hyun Koo, instructor, horticulture; Engineering---Choi, Jong Wan, teaching assistant, civil engineering; Hahn, Tae Hee, instructor, chemical engineering; Kang, Woong Ki, teaching assistant, chemical engineering; Lee, Socker, teaching assistant, mechanical engineering; Park, Won Hee, teaching assistant, chemical engineering; Medicine---Chang, Kim Yong, teaching assistant, physiological chemistry; Kim, Jae Nam, teaching assistant, anatomy; Lee, Ho Wang, teaching assistant, bacteriology. These extensions of either one or two years were agreed to by President Yun and his associates of Seoul National University upon the recommendation of the individual's adviser and dean at the University of Minnesota.

Four Korean faculty members received extensions of their graduate study periods to enable them to complete requirements for the Master's

degree. Their names are as follows: Agriculture---Kim, Kap Duk, teaching assistant, forestry; Engineering---Wie, Sang Kyoo, lecturer, aeronautical engineering; Medicine---Lim, Jung Kyoo, teaching assistant, pharmacology; Sim, Bo Sung, instructor, surgery.

Other Study Extensions. Two additional Korean faculty members in Agriculture were each allotted extensions of six months beyond the one-year period originally granted. They are: Park, Hong Nai, lecturer, agricultural economics; and Shim, Sang Chil, assistant professor, agricultural biochemistry. Mr. Park's extension was given in the hope that he might complete an advanced degree and Professor Shim's to enable him to make further studies in the field of physics.

Two additional faculty members in Engineering received one-year extensions for further study. They are Chung, Myung Sik, teaching assistant, civil engineering; and Woo, Jae Lin, instructor, textile engineering.

Two additional faculty members in Medicine received extensions for further study. Kim, Chu Wan, teaching assistant, radiology, was given an extension of five months; Lee, Sang Kook, teaching assistant, pathology, was given a one-year extension.

To Repeat English Program. The immediately preceding report discussed at some length the full-time program offered in August and September, 1956, to provide intensive orientation in the English language to the 30 Korean faculty members who had just arrived to begin advanced study with the opening of the fall quarter. The favorable results secured from this intensive program led to a decision to provide a similar experience for the Korean faculty members scheduled to begin their studies at the University of Minnesota in the fall of 1957. Dr. Harold B. Allen, who headed the program last year, has agreed to assume responsibility for the 1957 program.

Plans are already being made in Korea to complete the necessary processing of new SNU program participants so that they can reach the University of Minnesota by August 1 or as soon thereafter as possible.

College Level Advisers Authorized. The use for college-level advisers was initially proposed by Dean A. F. Spilhaus and discussed at a meeting of the Korean Advisory Committee on March 3, 1955. The Committee authorized the Coordinator to seek approval from FOA so that such service could be utilized when needed. Finally, after almost two years of discussion between the University of Minnesota and ICA/Washington, authority has been given to employ such advisers. The authorization appears in Amendment No. 10 from which the following is quoted: "In addition, contractor is authorized, insofar as circumstances require, to provide the services of one college-level adviser (at not to exceed half time) and one secretary (at not to exceed half time) in each of the three fields, agriculture, engineering, and medicine."

In-bred Eggs Shipped to Korea. A total of 1,280 eggs from disease-free stocks of in-bred chickens and turkeys were shipped by plane to Korea on February 7, 1957. The shipment, which consisted of 100 Broad Breasted Bronze turkey eggs, 100 Broad White turkey eggs, 360 New Hampshire eggs (line 500), 360 Single Comb White Leghorn eggs (line 520), and 360 White Rock eggs (line 530), reached Korea on February 11, 1957 and were immediately transferred to incubators.

This project was planned by Dr. Elton L. Johnson, professor and head, Department of Poultry Husbandry, University of Minnesota, at the request of Yun, Sang Won, professor and head, and Ohh, Bong Kug, teaching assistant, Department of Animal Husbandry, College of Agriculture, Seoul National University, before Professor Yun returned to Korea in late September, 1956, after spending six months at the University of Minnesota. The project had

received approval from Cho, Baik Hyun, dean, College of Agriculture. The eggs were sent in early February so that they could be hatched, the young stock reared, and then be available for study by Mr. Ohh when he finishes his Master of Science degree in poultry genetics and returns to Korea in late 1957.

Mr. Ohh, under the guidance of his adviser, prepared a dietary formulation, including vitamins and antibiotics, for use in Korea to insure as high a livability as possible for the in-bred stocks. Shipment by air of the vitamins and antibiotics was made on March 15, 1957.

It is hoped that this shipment of eggs will prove to be of significant value to the people of Korea through the years in developing some poultry stocks for their use and perhaps for use in certain types of crossing programs that might be advantageous in improving native stocks.

Exhibit of Korean Art. The exhibit of art work done by the students and faculty of the College of Fine Arts, Seoul National University, that was discussed in the previous report, was shown in the University Gallery for approximately one month, beginning January 8, 1957. An attractive catalog of the exhibit had been prepared, including an interpretative statement on Korean art by Dean Chang and this added substantially to the understanding of the viewers.

The showing was formally opened on the afternoon of January 8 with a tea to which were invited the Korean faculty members studying at this university and a select group of individuals interested in art from the University community and the Twin Cities generally. The exhibit was held over through February 11 so that it could be viewed by members of the Dome Club, an organization of wives of members of the State Legislature and State officials.

The next two monthly showings of the exhibit were at the Tweed Gallery of the Duluth Branch of the University of Minnesota and at Rochester, Minnesota, location of the Mayo Foundation for Medical Education and Research, a division of the University of Minnesota. During the academic year, 1957-58, the exhibit will be shown in various university and college art galleries from coast to coast.

The exhibit at the University of Minnesota attracted a great deal of favorable attention and comment. Many persons were able to attend because the gallery was open and it was possible to view the exhibit before, after, and during intermission periods during Minneapolis Symphony concerts and other events held in Northrop Memorial Auditorium.

Library Gifts. Gifts of professional books and periodicals from six individuals were acknowledged in the immediately preceding report. Additional gifts of this nature have been made during the period covered by the present report and, in addition, there were earlier gifts which were overlooked in the previous listing. Two gifts of professional books have been made by the University of Minnesota since operations under the contract began. The first consisted of some 50 scholarly books shipped in November, 1954. Two years later, President J. L. Morrill set aside the sum of \$325 for the purchase of a carefully selected list of recent books of the University of Minnesota Press. These were shipped in October, 1956.

Other gifts of this nature shipped to Korea earlier included a file of the Journal of the Society for Engineering Education (1948-54) from Dean A. F. Spilhaus; one of the Bulletin of the American Physical Society (1948-55) from Dean A. L. Vaughan; 11 volumes of professional journals from

the Department of Pediatrics, College of Medical Sciences; and two copies of all series issued to date by the Agricultural Experiment Station and the Agricultural Extension Service from the Institute of Agriculture. Recently, Dr. Gaylord W. Anderson, professor and director, School of Public Health, donated 210 issues of four different medical journals; the Hennepin County Medical Society donated an extensive collection of medical journals; and Professor George C. Manning of the Massachusetts Institute of Technology donated his valuable life-long collection of Transactions of the Institution of Naval Architects.

Nurses' Uniforms. The immediately preceding report stated that two shipments of nurses' uniforms donated by the graduating classes of 1955 and 1956 to the School of Nursing, Seoul National University, had been shipped to Korea. It was indicated also that a portion of the 1955 donation had failed to reach its destination. These uniforms turned up recently and have now reached Korea. Transportation costs were provided by the World Service Committee, Westminster Presbyterian Church, Minneapolis.

Special Program for Engineering Faculty. The immediately preceding report described the special program provided for a group of senior faculty members (largely department heads) of the College of Engineering, Seoul National University. Originally the plan had been for the senior faculty members to spend approximately six months in the United States primarily at the University of Minnesota, beginning April 1, 1956. Unfortunately there were delays. One faculty member arrived on April 4; seven arrived early in May; one arrived in late August; and the tenth did not arrive until September 18. As a result of a further change in the plans, it was agreed that Park, Hee Sun and Kim, Hi Chul could spend an entire year in the United States to enable them to enroll in more classes and have a

longer time for observation and consultation in areas related to their professional fields.

Per Diem for Contractor's Staff Increased. The original FOA contract provided a travel allowance, while in travel status, of \$10 per day for staff members and consultants performing work under the contract and \$5 per day for dependents under 11 years of age. Price increases since that time had made this allowance completely inadequate. Last summer, under Amendment No. 9, approval was given to increase the per diem for Korean faculty members studying under the ICA contract to \$12, while in travel status. Amendment No. 10 raised the amounts for Contractor's staff members and dependents to \$12 and \$6 respectively.

Equipment Procurement. Procurement of equipment and supplies continues. Unfortunately, satisfying government requirements makes progress in this area far slower than anyone could have imagined. Delays, for one reason or another, seem less the exception than the rule.

They include the usual time required for screening the lists which are prepared in Korea; writing specifications; asking for, securing, and awarding bids; and the actual filling of orders and shipment to the forwarding agents. Many items must be custom built, resulting in additional delay. Often there is a further delay by the vendor in supplying the required documentation, receipt of which is necessary before the items can be included in a shipment to San Francisco as part of the cargo for the next Pacific Far East Lines vessel. These are the main sources of delay, but there are others too numerous to mention here.

The only satisfying aspect of the operation is that shipments do continue to arrive at the Port of Inchon, Korea, on every vessel of the Pacific Far East Lines which brings cargo from San Francisco. Actual

expenditures through February 28, 1957 had totalled \$494,649.31. In addition, outstanding obligations covering orders placed but not yet delivered to the forwarding agents totalled \$641,545.78. Thus, equipment and supplies valued at \$1,136,195.09, including transportation and export packing, had been ordered and were either on their way or actually at their destination.

Reports from the Chief Adviser in Korea indicated that total receipts of equipment and supplies through March 31, 1957, totalled \$423,125.28. These totals do not include the cost of such items as transportation, insurance, the preparation of required documents, or other services provided by the forwarding agents.

The University of Minnesota realizes how desperately the equipment and supplies are needed at Seoul National University. Everything humanly possible is being done to expedite the operation.

II. OFFICE OF THE CHIEF ADVISER IN KOREA

April 19, 1957 marks the mid-point of what is now (see Part I) the five-year ICA/Minnesota contract involving Seoul National University. Contract endeavors during this 6-month report period are viewed as having resulted in additional solid accomplishment in the fields of agriculture, engineering and medicine, and essential preliminary steps were taken in the new area of public administration which was added to the overall undertaking by mutual agreement of participating agencies on February 11, 1957.

During this 6-month period the Seoul National University Cooperative Project was the subject of a number of discussions with the UNC Economic Coordinator for Korea, the Assistant Economic Coordinator for Technical Cooperation, and the Chief of OEC's Division of Education. These discussions centered about accomplishments to date, staffing, contract extension and expansion, and future plans. It was encouraging to note that, though this technical assistance project is minor when viewed on the basis of cost in relation to the total aid program in Korea, the UNC Economic Coordinator and his staff members concerned consider the undertaking as major in terms of potentiality for Korea.

The cordial cooperative relationships commented upon in previous reports continued during this period. At the working level these relationships involve primarily Seoul National University's President and his staff, the Deans of the Colleges involved and their staffs, the Chief of OEC's Division of Education and his co-workers, personnel of the Public Works Branch of the OEC Office of the Rehabilitation Engineer, the Program Planning Division and the Participant Training Program Branch of the Office of the Assistant Economic Coordinator for Program and Economic Policy. Minnesota staff members continued to find their reception by personnel of OEC's technical

components in the contract fields concerned to be cordial and their contacts with these specialists to be educational, helpful and productive.

Excellent cooperation on the part of the ROK's Ministry of Education and other Korean agencies involved continued to be enjoyed during this period, and the Foreign Language Institute of Korea gave additional valued assistance.

Staff Exchange. The heart of the technical assistance cooperative project with Seoul National University continues to be staff exchange. Data on this major aspect of the program to date appear on pages 7 to 18 of this report.

Seoul National University Staff Member Program Participants. With the extension of the ICA/Minnesota contract by Amendment 10 dated February 11, 1957 it became possible to arrive at firm decisions concerning both lengthening the graduate study periods abroad of some Seoul National University faculty members and selecting others to begin their participation. Suggested extensions of stay for selected staff members were based on Seoul National University's requirements in the specialized fields concerned and advisers' recommendations relative to participants' capabilities and further educational needs to prepare them for more adequately filling their teaching and research roles at the University on returning to Korea. On these bases, lengthened periods of graduate study abroad were recommended for 8 staff members of the College of Agriculture, 9 of the College of Engineering, 7 of the College of Medicine and 2 of the College of Veterinary Medicine. Recommended extensions varied in length from three months to 2 years.

Planning and preliminary actions concerning the selection and processing for departure of additional Seoul National University staff members for participation in the cooperative project abroad starting in FY 1958 were

taken during this 6-month period. At the end of this period plans were in the process of being carried out looking toward sending to the United States in late July of this year:

Nine staff members in the field of Agriculture (including two in Veterinary Medicine)

Seven staff members in the field of Engineering

From four to eight staff members in the field of Medicine

From eight to twelve staff members in the field of Public Administration

Significant and lasting benefits to Seoul National University are expected to accrue through the graduate study opportunities afforded its faculty members under the cooperative project. Among the improvements which already have been mentioned by Seoul National University's President and/or Deans concerned as having resulted in large measure from the efforts of staff members who have returned from studies abroad those of a general nature pertaining to all contract fields include:

1. Modernization and up-grading of course content in all of the specialized fields concerned.
2. Stimulation of research activities.

Minnesota Staff in Korea. Eighteen staff members, exclusive of the Chief Adviser and his Administrative Secretary, have served or are serving in Korea. Of this number one (Professor W. W. Staley, Mining Engineering) has been in Korea during this entire report period, four completed their periods of service in November or December, 1956 and four are recent arrivals.

During the past six months 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, 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 familiarize themselves with the details of curricula, courses, teaching methods and procedures currently in effect in their areas; to become acquainted with the kind, amount and quality of research undertaken; to learn of the major problems affecting teaching and research in their areas; to establish appropriate liaison with technical societies or agencies in their technical fields; to avail themselves of every opportunity to gain first-hand knowledge of the country, its people and their aspirations, potentialities and limitations; and, through all of the foregoing to carry out to the best of their ability the contract objective of assisting Seoul National University to improve its teaching and research in the fields of their responsibility.

The following four staff members completed their periods of service in Korea during this period and, prior to departure, prepared and fully discussed with their Korean and American colleagues reports embodying essential background material, major observations, and recommendations pertinent to assisting to improve teaching and research in their respective fields:

Dr. Frank H. Kaufert, Director and Professor, School of Forestry,
Institute of Agriculture, University of Minnesota.

Dr. Kaufert, who served as adviser to Seoul National University's College of Agriculture in the field of Forestry, left with his Korean and American colleagues the following major recommendations which have been drawn from his 73-page report:

"Organizational Status

- "1. It is recommended that consideration be given to renaming the College of Agriculture the 'College of Agriculture and Forestry'. The latter was the name of the College until liberation and integration as part of Seoul National University. The recommended name change would recognize the importance of forestry in Korea in the same manner that it is recognized in the Ministry of Agriculture and Forestry. It would emphasize the close relationship between forestry and agriculture as well as their difference. It would give the type of recognition to forestry in the College that is needed to enable it

to become the recognized single strong school of forestry in Korea. Such a change would give recognition to the existence of forestry within the College without detracting in any manner from the importance of agriculture. The writer believes that agriculture and forestry education in Korea should be closely associated, and that the great importance of forestry to agriculture and the entire economy requires recognition of the type proposed.

- "2. It is further recommended that the present Department of Forestry be designated the 'School of Forestry, College of Agriculture and Forestry'. The Department of Forestry is now generally referred to as the School of Forestry; the suggested change would thus bring its designation into agreement with what it is commonly understood to be. It would provide the University, College and School of Forestry with another means of emphasizing that this institution plans to develop a forestry training and research center of strength and high standing.

- "3. A third organizational recommendation is that the School of Forestry be organized into two departments; Department of Forest Production, and Department of Forest Utilization. It is the writer's considered opinion that Forestry cannot, as a single department in the College of Agriculture, develop to the extent and in the manner necessary to give it recognized dominance and stature in the realm of Korean forestry education and forestry generally. The two departments suggested are logical and commonly recognized. They encompass the entire field of forestry, production and utilization. Although the desirability of a third department, Forest Erosion Control, is frequently suggested by Korean foresters, the writer feels that this is presently an important aspect of Forest Production and should be included under that area. The forestry activities proposed for inclusion in the Department of Forest Production are: silviculture, management, mensuration and photogrammetry, forest tree genetics, dendrology, protection, surveying, engineering, and policy. Included in the Department of Forest Utilization would be: logging, products processing and manufacture, wood chemistry, and wood technology. With acquisition of the several additional staff members recommended later in this report, these departments of the School would be somewhat different in size, but they would compare very favorably in size and strength with existing departments of the College.

"It is the writer's conviction that adoption of these organizational proposals will materially assist the University and College in developing the type of forestry training center needed in Korea. Such recognition of the importance of forestry in the institution, together with other additions and changes proposed, should eventually result in bringing greater order out of the present chaotic condition of forestry education in Korea. The University, College, and School of Forestry could well be planning other means of elevating instruction at this institution

above that of the other seven Korean forestry schools. It is suggested that consideration be given to eventually making the School of Forestry a 'Senior College and Graduate Training Center', with students admitted by examination to the junior or third year, and with elimination of freshmen and sophomore classes. It is possible that by this means the School could draw from other forestry schools, as well as from other basic training programs, a group of particularly outstanding students. Since all but two of the professional forestry courses are included in the third and fourth years, such a change would not seriously complicate present instructional plans. It is admitted that such a change may be far in the future, but it should not be overlooked as a possibility.

"Facilities

- "1. The designation of a section of the new building planned for the College as the School of Forestry will be helpful in giving the type of recognition needed by Forestry for development into the single, strong, recognized Forestry School of the Nation.
- "2. Because of the complete lack of forest utilization research in Korea at present, there is opportunity for the College to make immediately practical and economic contributions through research in this field. The need for utilization research and the importance of having sufficient equipment for teaching of forest utilization courses call for the construction of a Forest Utilization Laboratory. It is suggested that this Laboratory be sufficiently large to house not only the equipment purchased and the additional equipment recommended but a combination classroom-laboratory as well. Such provision would make it possible to concentrate most of the utilization training in one place, near the materials and equipment needed in this training. Because of the total lack of forest utilization research in Korea, the College through its Forest Utilization Laboratory could make important contributions to Korea's economy and could take the kind of research leadership in forest utilization that it has gained in forest tree genetics. The field of forest utilization is one of the few areas in all of Agriculture and Forestry where there is a total lack of research and where College leadership is still possible.
- "3. The construction of several buildings at the Kwangyang Experimental Forest and at the two Protection Districts (Chusan and Kwandong), which are considered of sufficient area and variety to take care of all possible teaching and research needs of the School of Forestry, is important to the forestry training and research programs. The structures and items of equipment needed to make the Kwangyang Experimental Forest such a field center are given in one section of this report.
- "4. The College and School of Forestry are faced with a grave and important problem with regard to the continued protection and management of the large area of the Kwangyang Experimental Forest in the Yongok and Chikjon Protection Districts little needed or used for research. Since the Experimental Forest

contains some of the best remaining forest of Korea, it could be a profitable management operation for the College and School if they could obtain for use all or a good share of the potential income. Under the present tenureship arrangements, all present and potential income will go to the Central Government. It is recommended that the possibility of obtaining all or part of the income from sale of products on the Kwangyang Experimental Forest be further investigated. If the possibility of obtaining and using such income does not exist, then the University, College, and School will be faced with a serious decision on what to do with the large area in the Yongok and Chikjon Protection Districts. If additional funds for continuance of protection and management of these areas could be made available by the Central Government, the University might well hold on to these areas. If the present rate of destructive cutting continues, the Kwangyang Experimental Forest could take on even greater value.

- "5. Additional equipment having an approximate cost of \$6,300 is recommended for purchase for use in Forest Production teaching and research. This equipment list includes tents, a small electric generating plant, and communications system equipment. These special items are needed in the rehabilitation and re-equipping of the Kwangyang Experimental Forest.
- "6. Final recommendations on equipment for Forest Utilization teaching and research will be made following the writer's visit to the Philippines. It is roughly estimated that the cost of the minimum equipment needed for a Forest Utilization Laboratory adequate for teaching and research under present conditions will be about \$15,000.

"Staff

"These recommendations on staff needs were considerably influenced by the writer's conviction that all staff members of the School must be engaged in research and provided with time for research, in addition to their instructional duties. Also, the almost complete lack of forest production and utilization research in Korea gives the College excellent opportunity to assume leadership in other fields in addition to the presently established and recognized leadership in forest tree genetics.

- "1. The minimum added staff needs of the School are considered to be:
 - a. One man in forest utilization teaching and research
 - b. One man in aerial photogrammetry, logging, and engineering
(now not available or handled largely by lecturers)
 - c. One man in forest soil erosion control (now handled by a lecturer)
 - d. One man in forest tree genetics to assist Dr. Hyun

In addition sufficient funds should be provided to employ graduate student assistants, particularly in silviculture, utilization, and genetics.

- "2. Every effort should be made to assure that Forestry staff members are trained at least to the M. S. level, either in Korea or in some other country. Also, it is recommended that consideration be given to sending Instructor K. B. Yim to Minnesota for additional training.
- "3. The younger staff members need additional forestry experience. Some of this can be obtained through teaching and research. But more valuable training, that would give them greater confidence and improve their effectiveness as teachers, could be obtained through short periods of employment or assignment to the Bureau of Forestry, Central Forest Experiment Station, or provincial forestry groups.

"Curriculum and Instruction

- "1. It is recommended that for the present, the single, strong, and reasonably well-balanced forestry curriculum be continued for all students, but that more electives be provided by eliminating the requirement for two semesters of Wood Chemistry and by reducing the Wood Preservation requirements to one semester. If a strong demand for graduates more thoroughly trained in Forest Utilization develops, consideration should be given to establishing a curriculum in this field.
- "2. It would appear desirable to require or encourage students to utilize some of their elective credit for course work in writing and public speaking, which they will use more in their life's work than any other courses.
- "3. As duplicating facilities become available to the College, it is recommended that all instructors prepare low cost course material in this form for their classes. This will enable greater coverage of subject matter, which is often quite limited under the present system of few texts and almost total reliance on lectures.

"Graduate Training and Research

- "1. A strong graduate training center in forest production and forest utilization is needed in Korea. The forestry training center of the College of Agriculture should be developed to satisfy this need. This will require at least the increase in staff recommended; the provision of time for research; research training, interest, and ability on the part of staff members; and some provision of funds or scholarships for graduate students.
- "2. The research needs of Korea in all fields of forestry are so great and the forestry situation is so critical that, for the time being, the majority of the research should be directed to the solution of practical and pressing problems. Work in close cooperation with other agencies, other departments in the College, the Bureau of Forestry, Central Forest Experiment Station, and provinces is essential."

Paul M. Burson, Professor of Soil Science, Institute of Agriculture, University of Minnesota, served as adviser to Seoul National University's College of Agriculture in the field of his specialization.

Professor Burson's major recommendations, as drawn from his 107 page report, are quoted as follows:

- "1. Establish a Soil Science curriculum in the College of Agriculture as a section in the Department of Agricultural Chemistry.
2. Name of Department to be: 'Department of Agricultural Chemistry and Soil Science.'
3. Develop the curriculum and subject matter on the basis of the soil and agricultural needs of Korea.
4. Develop a program of laboratory teaching including field laboratory activities.
5. Improve classroom teaching techniques by using visual aids such as photography, charts, graphs, movies and demonstrations.
6. Place major emphasis, at the beginning of the new curriculum, on the courses in Soil Fertility and Management, Soil Classification, Genesis and Soil Survey.
7. Establish the Soil Science curriculum on a major and minor basis to allow a student to select his electives as a minor in another department of the College if he so desires.
8. Make arrangements now for the young men who are in the United States studying Soil Science to study Soil Genesis and Classification, and Soil Survey in the classroom, laboratory and field so as to become trained in modern methods and techniques.
9. Every staff member in Soil Science should participate in doing some phase of research work along with his teaching activities.
10. Further develop and expand, with the Central Experiment Station, the program of staff exchange where personnel of both organizations will do both teaching and research.
11. Develop cooperative graduate student research projects with the Central Experiment Station.
12. Develop, with the Central Experiment Station, a program of in-service training during the summer to give prospective soil surveyors, and future graduate students and research workers, field experience while working for their B. S. degree.

13. Develop a student advisory system in the department, to assist students in selecting a course of study to best fit them for their future in the field of Soil Science.
14. Select the prospective outstanding students in the second or third year of their college training who are interested in doing research or extension work and give them special guidance in their selection of courses.
15. The Ministry of Education and the Ministry of Agriculture and Forestry should establish a joint committee to study, coordinate and develop a cooperative program of teaching, research and extension.
16. This same or a similar committee to develop a coordinated national program of landuse, by outlining specific responsibilities and the contribution each bureau can make to such a program in agriculture, forestry and education as based on specific bureau data and information.
17. Develop and establish the International system of soil classification, soil survey and landuse.
18. Develop a national landuse or land policy program.
19. Set up a separate section of Soil Science in the Central Experiment Station under the direction of a trained soil scientist who will be responsible for all soil surveys, soil testing and soil research in Korea.
20. Develop a uniform program of soil research throughout all the substations of the Central Experiment Station.
21. Put into each substation three soil scientists, each trained in one of the following fields - Soil Classification and Soil Survey, Soil Fertility and Management, and Soil Testing.
22. Develop a research program in Soil Science with a balance between the practical and fundamental principles. Start this program now with major emphasis on the practical or applied to be followed by selecting the important basic or fundamental problems for more detailed study.
23. Train and develop your own college staff in Soil Science."

Professor Burson's report also contains detailed recommendations relative to curricula and course content.

Dr. Paul Andersen, Professor of Civil Engineering, Institute of Technology, University of Minnesota, served as adviser to Seoul National University's College of Engineering in the area of his specialization.

Professor Andersen included the following comments and recommendations in his final report:

"The Civil Engineering department has been successful in attracting competent engineers to its staff and able young men to its student body. It has physical facilities in terms of floor space, testing machines and other equipment which, if properly used and wisely augmented, will enable it to supply the Republic of Korea with civil engineers of high caliber.

"The Civil Engineering department of Seoul National University is also, through its staff members, giving leadership to the profession in general. It does not, at this time, by research and writing furnish ideas to the industrial community of Korea. Of this its faculty members are aware. Their most pressing problem is to find a formula which will enable them to devote their full energies to the further development of the Civil Engineering Department and the Engineering College.

"There is at the present time among staff members considerable dissatisfaction with the Civil Engineering curriculum. It is felt that courses which are now taught over as many as four semesters could well be covered in one or two by reducing the number of courses taught per semester and increasing the number of hours for each. In this manner the total number of hours for students and faculty would remain the same. Such arrangement would be especially beneficial to students, because subjects which are natural prerequisites to advanced courses, could be completed before the latter are begun. As an example, the study of sanitary engineering is facilitated if the student is already familiar with basic structural engineering, especially concrete structures.

"Objections have also been raised to the lack of laboratory and drawing room work in the present curriculum, as well as to its very one-sided nature; it completely by-passes courses in elementary electrical and mechanical engineering. In his first report the writer has, also, called attention to the inadequacy of the instruction in English.

"The curriculum proposed in this communication has been discussed with the senior staff members of the Civil Engineering Department and met with their approval. It is believed that the plan of study specified in the table, immediately following this section, corrects the faults and meets the criticism of the present curriculum.

"Main features of the proposed curriculum are:

1. Elimination of German as an obligatory subject and increase in the requirement in English from one to two years.
2. Required laboratory work in surveying, hydraulics, engineering materials, soil mechanics, plain concrete and sanitary engineering.
3. Required drawing room work in bridge, highway and railroad engineering.

4. Required courses during the senior year in elementary electrical and mechanical engineering.
5. Division of senior year students in the last semester into three groups each specializing in structural, sanitary or transportation engineering.

"Engineering education should afford opportunities for close contacts with practice. In Civil Engineering this can best be accomplished by class inspection trips to large projects either under construction or completed. Seoul National University is very fortunately located in this respect. Large undertakings in the various fields of Civil Engineering are (and will be for many years) in the course of construction in or near Seoul. For the past three years the students under the guidance of the faculty have occasionally visited the construction sites of local projects. These incidental trips should be systematized and their number increased.

"The inspection trip should include only the senior year students. An orientation lecture should precede each trip, and the students should be required to submit individual reports on their observations."

Dr. Andersen's report then follows with a complete proposed Civil Engineering curriculum designed to eliminate undesirable features of the present curriculum and to effect improvements recommended.

Recognizing the responsibility of University faculty members not only to do a quality job of teaching but to add to the fund of human knowledge Dr. Andersen makes the following comments and suggestions on sponsored research:

"Technological research is a necessary function of an engineering college. By engaging in regular research work the faculty members can continue their own development and growth. They will be able to keep abreast of new methods, techniques and inventions and thus bring stimulus and incentive to their students and professional colleagues.

"There is a keen realization of this among the staff members of the Civil Engineering department and also a strong desire to include in their future programs research projects which will serve primarily the needs of the Korean economy. For the first time in its existence the department has now available equipment and personnel capable of such undertakings.

"As the conduct of engineering research will be a new experience for the staff members, it is proposed that the initial program be of a modest nature and that applied rather than basic research be emphasized.

"The following is a list of projects dealing with subjects, with which the staff has had experience. There is at hand evidence that each of these projects can find ready sponsorship.

1. A Building Code for the Republic of Korea

There is at present no ordinance which lists loads, stresses and strains that can be allowed on buildings and other structures. An old Japanese code, which is hopelessly out of date, is sometimes followed; but usually bases for design are left to the discretion of the builder. There is considerable dissatisfaction with this state of affairs. The code should regulate the use of concrete, steel, brick, timber and other materials. Possible sponsor: Ministry of Commerce.

2. Utilization of Used Rails for Bridge and Building Construction

There is annually a large supply of worn railroad rails that have been replaced by new ones. Because of the high price of imported structural steel, these used rails were recently used for all primary and secondary members in a major highway bridge (over Naktong River, 10 miles west of Taegu,...). The proposed project should deal with the systematic utilization of discarded rails for bridge and building construction. Possible sponsor: Ministry of Transportation.

3. Soil Testing for ROK Government Agencies and Private Firms

There is available now in the Civil Engineering department equipment for making soil tests, upon which to base designs of dams, bridge piers, wharves and numerous other structures. Sponsorship of this project has already been proposed by: Ministry of Agriculture, at a conference on November 6, 1956 (present Kang Chongmu, Director of Land Bureau; Pak Kisung, Chief of Construction Section; Professor Choi Kyung Yol and the writer)."

Dr. Andersen also made with his Korean colleagues a thorough study of floor space and equipment requirements for Civil Engineering and left specific recommendations on both of these matters. Relative to floor space, Dr. Andersen found no shortage of area required but a definite need for re-arrangement, improvement and additional partitions. Proposed changes are set forth in the report. Dr. Andersen's comments and recommendations on new equipment and laboratories follow:

"During the month of October, 1956, the Civil Engineering Department received additional equipment for laboratory work in meteorology, hydraulics, surveying, soil mechanics and highway engineering. A brief description of the main items in each and the status of these branches follow.

1. Meteorology and Hydraulics.
Weather recorder (wind pressure, velocity and direction, sunshine); mercury and aneroid barometers; thermometers; anemometer; snow and rain gage; hygrothermograph; evaporation hook gage; water stage recorder; current velocity meter.
2. Surveying.
Theodolites (2); transits (5); levels (4); transit levels (2); plane tables (5). Old equipment consisted of transits (5); levels (3); plane tables (14).
3. Soil Mechanics and Highway Engineering.
Unconfined compression test apparatus; triaxial compression test apparatus; direct shear test apparatus; permeometer; fixed type consolidometer; platform scale consolidometer; standard liquid limit device; desicator; asphalt penetrometer; asphalt ductility tester; rotary extractor for asphalt; flow trough; humidity cabinet; electric oven; electric furnace; standard sieves with shaker; osment friquette testing machine with molds.

"The equipment for meteorology and hydraulics is very limited and can only be used for lecture demonstrations. In surveying there are enough instruments for field exercises for the entire class of Civil Engineering students. In soil mechanics and highway engineering there is also sufficient equipment for student laboratory sessions in testing and evaluating soil samples and road building products.

"The establishment of a structural laboratory is recommended. The department has decided to reserve floor space for a concrete and structural laboratory in Room No. 239 and approved of the proposed equipment list The structural laboratory will initially concentrate on concrete making and testing for classroom exercises and research work for outside agencies. Floor space and equipment will be sufficient for laboratory sections of 20 students.

"Eventually a hydraulic and sanitary laboratory should be added to the Civil Engineering Department. Because applied hydraulics is also an important subject in other departments especially those of mechanical engineering and naval architecture, it is proposed at some future date to establish a common hydraulic laboratory for civil, mechanical and naval architectural departments. This scheme would eliminate duplication and overlapping of personnel and facilities and should receive careful and sympathetic consideration. The three departments are, at present, attempting to coordinate their needs. It is the intention of the writer to review the proposed plans and make definite recommendations at a future date."

Dr. Andersen's concluding remarks, directing attention to the place of the Civil Engineering Department within the College of Engineering are quoted as follows:

- "1. The writer believes that the proposed curriculum may well serve as a pattern for revisions of other department curricula. In fact, some of the suggestions which have been made are dependent on similar revisions in other departments. Thus, the completion of the chemistry requirement in the first semester and the physics requirement in the following semester should, for efficiency of the College as a whole, be matched by the reverse order of these subjects in some other department. In this manner personnel and equipment of chemistry and physics departments will be able to function continuously at full capacity.
- "2. Serious consideration should be given to the establishment of a department of theoretical and applied mechanics. The subject of mechanics cuts across all engineering specialties. Unlike drawing and surveying, which are also fundamental, it is constantly growing and invading new fields. Great financial savings and educational advantages could be realized from the creation of a department of mechanics.
- "3. Sponsored research should be solicited in all departments of the Engineering College. It should be used as a source of prestige and additional earnings for the faculty members. Seoul National University should prevail upon the Korean government to change its decision of not allowing additional compensation for staff members engaged in sponsored research financed by outside support.
- "4. The Engineering College administration should set up rules for facilitating part time teaching for its faculty members at other educational institutions. These rules should be worked out in conjunction with the other colleges which employ instructors from Seoul National University."

Dr. Andrew Hustrulid, Professor of Agricultural Engineering,
Institute of Agriculture, University of
Minnesota, served as adviser to Seoul National
University's College of Agriculture in this
area with primary emphasis on physics.

Dr. Hustrulid's major observations and suggestions relative to course outlines and laboratory exercises are quoted as follows:

"COURSE OUTLINES

"As one will note by reviewing the material in Appendix A, only mechanics, electricity, magnetism and sound are presently included in General Physics. The other areas of physics - heat, light, and modern physics - are included in the Advanced Physics. In my opinion there are 2 faults with this procedure.

1. Since General Physics is a terminal course for all the agricultural students except agricultural engineers it is desirable that they be exposed to the whole field of classical physics.
2. The term Advanced Physics is a misnomer because, as now given, the course Advanced Physics is only a continuation of General Physics. If the present scheme is to be continued a logical description of the courses would be General Physics 101, 102, 103 and 104, dropping the term, Advanced Physics.

"Also as noted in Appendix A very few problems were assigned to the students. They had no text book other than a mimeographed translation into Korean of a part of the book the lecturer used for reference. In the classes which I attended the lecturer more or less read the mimeographed or his own notes rather than "lecturing" and working out examples. Students cannot become proficient in physics without applying the principles in the solution of problems.

"In the suggested course outlines which follow, the time devoted to mechanics in General Physics has been drastically reduced as compared to the present (1956-57) course offering in order to make room for heat and light. It is believed that such a procedure will give a much better balanced and useful course for students in general agriculture. It will also be satisfactory for the students in agricultural engineering because they get additional work in mechanics in (Advanced) physics.

"I. General Physics

The suggested course outlines for General physics En 101 and En 102 are given in Appendix B. These outlines are set up on the basis of 2 lectures per week and the desirability of students in Agriculture getting some subject matter from the whole field of classical physics rather than just a part of it as is the case presently. Such a course should be much more useful to students taking only one year of physics. Obviously, the sections included need to be selected with care in order to give adequate coverage and at the same time be more than a superficial discussion of a large number of topics. The topics need to form a coherent whole and serve as a good foundation in moving to more advanced work and at the same time be a challenge and a stimulus toward achievement for the students.

"The course outlines are given in complete detail including suggested topics, time devoted to each, and the appropriate lecture demonstrations. At first glance the large difference in the total number of lectures planned for the first and second semesters might seem to be an error but this is not the case. It is the result of the large difference in the length of the two semesters. In 1956 the first semester, April 3 to July 20 inclusive, had a total 109 days and the second semester, September 1 to December 20 and February 4 to February 26, inclusive, will have a total of 134 days.

"Unfortunately there is no textbook which covers the topics exactly in the order given. Most American textbooks are designed for 3 to 5 lectures per week for one year and the shorter ones are written at a

lower mathematical level than is necessary for Korean college students. For this reason it seems desirable that the lecturer be given sufficient time to prepare mimeographed notes of his own, taking advantage of the mathematical training of the students.

"In presenting demonstration lectures as suggested in these outlines considerable time is required to set up, disassemble, maintain and repair the equipment. This additional time requirement must be recognized by the administration by supplying a technician to assist the staff member giving demonstration lectures.

"II. Advanced Physics

The suggested course outlines for Advanced Physics are given in Appendix C. These outlines include advanced material on some topics introduced and briefly discussed in General Physics and expands the coverage by including many new topics. The purpose is to utilize the training received in General Physics as a foundation for a more advanced and broader training in physics. In these courses calculus should be used at every opportunity.

"It is urged that the same textbook be selected for these courses as the Engineering College uses for their courses in physics.

"Since physics is so very important to the agricultural engineers, it cannot be emphasized too strongly that the instructor of these courses must assign and expect the students to solve a large number of problems.

LABORATORY

"Experience gives convincing evidence that the proper appreciation of the methods of science can best be developed by having laboratory work form an essential part of the course. The laboratory serves to exemplify and illuminate the physical principles studied in the classroom and gives a student a working knowledge of some of the methods and instruments which are used quite generally in many laboratories to solve problems of the most varied type, both physical and biological. It is highly questionable that a sound working knowledge of physics, or even its proper appreciation, can be gained by a student without some direct experience in the laboratory. The opportunity to use laboratory equipment and develop skill in its use is especially important for students in the College of Agriculture. Nowhere in their previous training or experience have they had any chance to develop the necessary techniques or even use very simple laboratory apparatus.

"A list of appropriate laboratory experiments has been selected to complement the course outline for General Physics, En 101 and En 102. These experiments are listed below."

After considering and making specific recommendations concerning space allotment, library reference materials, and calibration equipment, Dr. Hustrulid's report includes the following summarized recommendations:

"In order to have physics instruction at a high level it is recommended:

1. That definite space allotments be made for use for physics instruction consisting of the following properly equipped rooms in a group - lecture room; preparations, storage, and shop room; and 2 laboratories to take care of 20 students each at one time.
2. That the course content of General Physics be changed to include the 5 areas mechanics, heat, sound, electricity and magnetism, and light, since this is a terminal course in physics for most of the students in Agriculture.
3. That the course in General Physics be expanded to include laboratory work of 2 hours per week. It would be desirable to increase the number of lectures to 3 per week making a total of 4 credits per semester including laboratory.
4. That the (Advanced) Physics course content be changed to complement the General Physics course and build on the foundation laid in that course. It would be desirable to increase the work in (Advanced) Physics to at least three credits per semester.
5. That mimeographed physics notes or texts at the proper level be made available to the students so that the class period may be used for discussion and demonstration of principles and solving example problems.
6. That additional undergraduate level textbooks and laboratory manuals be purchased for the Library and that the American Journal of Physics be added to the journal list.
7. That a technician be employed to set up laboratory and lecture demonstrations, to maintain the equipment, and to build simple demonstration and laboratory equipment.
8. That additional demonstration equipment be purchased to supplement the apparatus already ordered.
9. That the necessary laboratory equipment be purchased as outlined in Appendix D.
10. That standardizing equipment such as thermometers and voltmeters be purchased out of the general college funds to be used for calibration of laboratory and research apparatus.

11. That all the equipment obtained from abroad be carefully inventoried and data such as origin, date, catalog, serial number be kept in a permanent file in order to get repair parts, etc., in the case of need.
12. That someone be sent to the United States for graduate work in Physics with emphasis on learning the skills and techniques of lecture demonstrations and to become familiar with physical measuring instruments of all types."

The following essential reference material and recommendations are included in the following appendices to the report:

"Appendix A - Outline of Physics Courses as Offered 1956 - 1957

Appendix B - Suggested Outlines for General Physics
En 101 and En 102

Appendix C - Suggested Topical Outline for 'Advanced' Physics

Appendix D - Detailed List of Equipment Needed for Physics
Laboratory"

In addition to his main mission with the College of Agriculture, Dr. Hustrulid gave invaluable assistance to Seoul National University's College of Engineering relative to instruction, laboratory work as an essential part of instruction, and equipment needs in the field of physics. A separate brief report was prepared for the Dean, College of Engineering on these matters.

The major content of these reports was discussed in detail with Seoul National University personnel concerned prior to the departure of the staff members preparing them. The reports are always discussed in detail with the Dean of the College involved and with the President of the University.

Copies of the reports are placed in the hands of Seoul National University's President and the Dean of the College concerned, are transmitted to other Seoul National University staff members where appropriate, and are made available to OEC's Division of Education (and occasionally to other OEC offices) when such distribution appears appropriate and desirable. Copies are of course always sent to the University of Minnesota.

Relative to the above recommendations and those submitted by other staff members in preceding report periods the following comments are considered of significance:

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 and 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. Recent and expected near future arrivals of Minnesota staff members for cooperative project service in Korea are commented upon in Part I of this report.

Equipment Procurement. Funds requested for laboratory and classroom equipment for agriculture, engineering, medicine and supporting facilities of Seoul National University have been allocated (for FY 1956) or are expected (for FY 1957) as follows:

Equipment Funds, Seoul National University Cooperative Project

	<u>FY 1956</u>	<u>FY 1957</u> <u>(expected)</u>	<u>Total</u>
Agriculture	\$ 260,000	\$ 50,000	\$ 310,000
Engineering	730,000	500,000	1,230,000
Medicine	450,000	70,000	520,000
Veterinary Medicine	50,000		50,000
Liberal Arts and Sciences (For premedical courses)	50,000		50,000
Seoul National University General (For printing facility)	<u>35,000</u>		<u>35,000</u>
Total.	\$1,575,000	\$620,000	\$2,195,000

As of March 31, 1957 the invoice value of laboratory and classroom equipment and supplies purchased by Minnesota for Seoul National University and received in Korea totalled \$423,125.28. This amount is made up of the following sub-totals:

Items for the College of Agriculture	\$102,354.34
Items for the College of Engineering	257,180.51
Items for the College of Medicine	63,590.43

Some of this equipment is already in use; the use of some items must await provision of additional laboratory space and facilities or local currency for installation. Both of these needs are receiving attention.

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. Completed lists were transmitted, per usual procedure, to Minnesota for screening and procurement action.

Physical Plant Rehabilitation and Improvement. Funds requested for physical plant rehabilitation and improvement for agriculture, engineering and medicine have been allocated (for FYs 1955 and 1956) or are expected (for FY 1957) as follows:

Rehabilitation and Improvement Funds, Seoul National University
Cooperative Project

	<u>FY 1955</u>	<u>FY 1956</u>	<u>FY 1957</u> <u>(expected)</u>	<u>Total</u>
Agriculture	\$422,300	\$ 650,000	\$ 159,000	\$1,231,300
Engineering	65,200	100,000	676,000	841,200
Medicine	<u>63,500</u>	<u>275,000</u>	<u>345,000</u>	<u>683,500</u>
Total	\$551,000	\$1,025,000	\$1,180,000	\$2,756,000

As of the end of this report period a considerable amount of the construction materials and supplies procured by the ROK Office of Supply with FY 1955 funds had arrived in Korea and had been delivered by that agency to the colleges for which intended. Some materials procured with FY 1956 funds have also arrived.

Some important rehabilitation was accomplished at the College of Engineering and Medicine with FY 1955 funded materials during this period. Construction of new dormitories and a kitchen-messhall at the College of Agriculture (with FY 1955 funded materials) began in March, 1957.

It is hoped that a sufficient quantity of key building materials will shortly be delivered so that a considerable amount of additional

rehabilitation and improvement work planned for accomplishment at the College of Agriculture with FY 1955 funds, and at all three Colleges with 1956 funds, may be undertaken during the next 6-month period.

Billets. Adequate at the Chosun Hotel, at the Residential Halls and at Suwon; inadequate at the OEC Compound where incoming single, male staff members are still billeted initially and where they must stay until successful in bidding for better quarters.

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 attention will be given to initiating the program in the new contract area of Public Administration.
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 in helping to effect improvements in teaching, research, organization and administration.
5. Seoul National University authorities 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 Seoul National University staff members 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 from their point of view, and
 - b. To assist them in any way feasible to carry out effectively their part of cooperative project objectives.

8. Further specific attention will be given the area of Veterinary Medicine, but major plans and action in this field will be deferred until Dean Thorp of Minnesota or his representative is able to spend some time in Korea. This assistance is now planned for the fall of 1957.
9. 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. Among events of significance to the administration of Seoul National University during the past six months are the following:

1. As a part of the overall program in Korea of the George Peabody Teachers College group, operating under an ICA contract in the field of teacher education, Seoul National University's College of Education is receiving specific assistance.
2. Dean Cho Baik Hyun was reappointed for another 4-year term as head of the College of Agriculture.
3. Dean Park Myung Jin was reappointed for another 4-year term as head of the College of Dentistry.
4. The new head of the College of Commerce is Dean Kwon Oh Ik.
5. The new heads of the Colleges of Liberal Arts and Sciences and Pharmacy, respectively, are acting Deans Lee Jin Soo and Chai Dong Kyu.
6. Minnesota's nurses of the March graduation class again contributed a quantity of nurses' apparel to their sisters at Seoul National University's School of Nursing.

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Sixth 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
April 19, 1957 - October 19, 1957

Minneapolis 14, Minnesota
October 19, 1957

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I. OFFICE OF THE CAMPUS COORDINATOR

The Sister Relationship. The educational project designed to strengthen Seoul National University of Korea is being carried on under a contract entered into on September 28, 1954 between the University of Minnesota and the U. S. Foreign Operations Administration (now the International Cooperation Administration). Originally a three-year project, a two-year extension agreed to on February 11, 1957, advances the termination date to September 28, 1959. At the same time that the contract was extended, a new area, Public Administration, was added to the three areas, Agriculture, Engineering, and Medicine, included in the original contract.

The current report is the sixth in the series of semi-annual progress reports required by the contract (Article II B). This report, as was the case with the previous ones, aims to call attention to what seem to be the significant developments and to point out progress being made in the achievement of the objectives of the program. Emphasis is also placed on the unsolved problems and plans 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. It also enables the Campus Coordinator to secure advice and counsel on an informal basis concerning difficult operational problems.

Members of this Korean Advisory Committee are: Dr. Malcolm M. Willey, Vice President, Academic Administration, Chairman; Mr. William T. Middlebrook, Vice President, Business Administration; Dean Harold Macy, Agriculture; Dean A. F. Spilhaus, Engineering; Dean Harold S. Diehl, Medical Sciences; Mr. L. R. Lunden, Comptroller; Dr. Gaylord W. Anderson, School of Public Health; Professor John C. Kidneigh, School of Social Work; Dr. Lloyd M. Short, Public Administration Center; Dr. Tracy F. Tyler, Secretary.

The only meeting of the Committee held during the period covered by the present report was on September 25, 1957. It was called for the purpose of discussing contract matters with Mr. William E. Warne, UNC Economic Coordinator for Korea, who spent that afternoon at the University of Minnesota enroute back to Korea after conferences in Washington, D. C. with the ICA staff, and in New York.

The discussion centered on a letter to President J. L. Morrill written by Mr. Warne on August 9, 1957 and calling attention to certain criticisms of the University's operations in Korea made by the U. S. General Accounting Office. The Committee spent the greater portion of the meeting discussing with Mr. Warne the University's official answers to the points made in his letter and also its rebuttal to the GAO criticisms.

Other matters discussed were the following:

1. Would the University be willing to undertake additional phases of the program involving Seoul National University?
2. What criteria are used in selecting Korean faculty members for graduate study and for extensions of study periods?
3. What steps are needed to insure that equipment procured under the contract is installed and used?
4. What is the housing situation in Korea now and in the immediate future for staff members and their families.
5. Are visits of principals to Korea important in promoting the objectives of the contract?

This was the second visit Mr. Warne had paid to the University of Minnesota, the first one having been made on January 16, 1957. Such visits as this are greatly appreciated by the University since they make possible a free and open discussion of many important contract matters that are difficult, if not impossible, to handle as satisfactorily through correspondence between places which are nearly half way around the world apart.

Coordinator Makes Inspection Trip to Korea. The Campus Coordinator, Dr. Tracy F. Tyler, made his first trip to Korea in mid-May, 1957 and spent two weeks there visiting operations under the contract and familiarizing himself with the situation at Seoul National University. He arrived in Korea on May 20, 1957 and left on May 31, 1957.

During his two weeks in Korea, the Campus Coordinator conferred on several occasions with Mr. William E. Warne, UNC Economic Coordinator for Korea; Dr. Choi, Kyu Nam, ROK Minister of Education; Dr. Yun, Il Sun, SNU President; Dean Cho, Baik Hyun, College of Agriculture; Dean Hwang, Yung Mo, College of Engineering; Dr. Myung, Choo Wan, Dean, College of Medicine. These individuals, together with the Chief Advisor in Korea, were most directly concerned with contract operations.

He had the privilege of visits to the three colleges involved in the original contract, spending two days and two nights at the College of Agriculture, Suwon, one day at the College of Engineering, and two half days at the College of Medicine. These visits gave time to discuss problems which might need exploration and progress that had been made with the Deans and department heads of the three colleges. It also provided the welcome opportunity of meeting once again faculty members who had completed their studies in the U. S. under the ICA contract and were then back at their posts in Seoul National University.

One entire day was devoted to short visits to the other SNU colleges. Colleges visited during the morning were: College of Liberal Arts and Sciences; University Museum, University Library, College of Music, College of Veterinary Medicine, College of Fine Arts, College of Law. The afternoon was spent in completing the tour and was concluded at the College of Education where a coffee hour was provided for the participants in the tour.

Colleges visited were: College of Dentistry, College of Pharmacy, College of Commerce, College of Education.

The Korean officials arranged a number of dinners, luncheons, and other affairs in honor of their guest. These were greatly appreciated, as were the many attractive gifts and the "Certificate of Appreciation," a beautiful scroll hand-lettered in Korean. The Coordinator, at the invitation of Mr. Warne, discussed the Minnesota project at the regular bi-weekly luncheon for the 150 members of the OEC staff in the new OEC Club. SNU Deans and Minnesota staff members were special guests on this occasion.

The major credit for the success of the visit goes to Dr. Arthur E. Schneider, Chief Advisor in Korea, and to his Secretary, Miss Gertrude Koll. Dr. Schneider planned a back-breaking schedule of activities, assisted the Coordinator in every possible way, and was host to him and to the other Minnesota personnel on several occasions. Through the Chief Advisor's efforts, it was possible to secure in two all-too-short weeks an invaluable picture of the existing situation and of probable future needs.

Perhaps, most important of all, the visit provided a first-hand background that will enable the Coordinator to make his relationships with Seoul National University staff members on the Minnesota campus much more personal and understanding and will provide a new perspective to his day-to-day work with them.

Planning Public Administration Operations. In the previous report attention was called to the trip to Korea made by Professor George A. Warp to secure a first-hand view of the Public Administration situation. Professor Warp left Korea on April 26, 1957, stopping in Los Angeles to confer on Public Administration matters with officials of the University of Southern

California which has a contract in Iran. He returned to Minneapolis on April 30, 1957.

Professor Warp discussed his findings with ICA staff members in Washington, D. C. and with staff members of the University of Pennsylvania in Philadelphia on a trip June 10-15, 1957. The latter institution has a contract for a Public Administration program in Pakistan.

A report, summarizing his findings and setting forth the proposed program for Korea, was prepared on June 25, 1957 and sent to Korea and to ICA/Washington for appropriate distribution. Later, there was an indication that OEC in Seoul felt that operations in Korea should be accelerated beyond that contemplated in the report. Whether competent staff members can be secured soon for service in Korea is not yet known. Every effort is being made to staff and begin operations in Korea at the earliest possible time.

Professor Warp and Dr. Short took advantage of the annual meetings of the American Political Science Association in New York to interview prospective staff members for service in Korea. Professor Warp also visited Washington, D. C. during this same trip (September 4-11) and interviewed other prospective staff members and conferred, together with the Coordinator, with ICA staff members.

Public Administration Training Program Begins. The first group of trainees in Public Administration arrived at the University of Minnesota in August, 1957 so as to participate in an English language and orientation program prior to the beginning of fall quarter classes on September 30, 1957. The trainees totalled 13, of whom 11 were from the faculty of Seoul National University and 2 from the ROK Government. The former are being trained to staff the proposed School of Public Administration in the College of Law at SNU and the latter to staff the National Officers Training Institute

operated by the ROK Government Office of General Affairs to provide in-service training for government officials.

Agricultural Advisers. Two faculty members from the Institute of Agriculture completed their service in Korea during the period covered by this report. Dr. Thomas H. King, professor of Plant Pathology, left Korea on August 16, 1957, having served under the contract for 5½ months. Dr. Clarence E. Mickel, professor and head of the Department of Entomology and Economic Zoology, left Korea on September 5, 1957, having served under the contract for approximately 6 months. Roy O. Bridgford, associate professor emeritus of Agronomy, continues a service in Korea which began officially on February 25, 1957.

The Institute of Agriculture has now provided 11 of the members of its faculty and administration for service in Korea under the ICA contract, including its dean (services not charged to the contract) and a professor of forestry who has served as Chief Adviser in Korea since October 19, 1954. The total service under the contract of these faculty members (excluding the dean) is in excess of 82½ months or nearly 7 man-years.

Engineering Advisers. J. Harvey Evans, associate professor of Naval Architecture, Massachusetts Institute of Technology, left Korea on June 27, 1957, having served under the contract for approximately 3½ months. Professor William W. Staley, professor of Mining, University of Idaho, left Korea on August 23, 1957, having served under the contract for approximately 15½ months. Thus, as this report is being written, no engineering advisers are serving in Korea. Tentative plans call for the sending of Professor Clarence E. Lund to Korea on approximately April 1, 1958 for a second period of service. Recruitment of additional engineering advisers is being vigorously prosecuted.

The Institute of Technology has now provided 8 individuals for service in Korea, 4 from its own faculty and 4 from other institutions. Two of the latter rendered service in fields (Naval Architecture and Textile Engineering) not offered at the University of Minnesota. The service to date of these 8 faculty members totals in excess of 53 months, or approximately $4\frac{1}{2}$ man-years.

Medical Advisers. As this report is being prepared, four members of the faculty of the College of Medical Sciences of the University of Minnesota are serving in Korea. Margery S. Low, assistant professor, School of Nursing, reached Korea on March 19, 1957; Dr. James H. Matthews, assistant professor, Department of Anesthesiology, and Glenn R. Mitchell, assistant director, University Hospitals, reached Korea on May 6, 1957; Dr. Edmund B. Flink, professor of medicine and chief, Medical Service, Minneapolis Veterans Administration Hospital, reached Korea on August 9, 1957. Dr. Matthews, Miss Low, and Mr. Mitchell plan to serve at least one year in Korea and Dr. Flink six months.

This brings to five the number of medical staff members to serve in Korea and to approximately 27 months or $2\frac{1}{4}$ years the total service to the date of this report.

A sixth medical faculty member had been expected to begin service in Korea. He was Professor Herbert M. Bosch, professor of public health engineering, who was scheduled to serve as a consultant in Korea for a period of one month beginning approximately November 10, 1957. It had been expected that he would go to Korea from Japan where he is serving a period of two months with the World Health Organization. Unfortunately, serious illness necessitated cancellation of this plan.

Veterinary Medical Adviser. Dr. Willard L. Boyd, former professor and head of the School of Veterinary Medicine, University of Minnesota,

reached Korea on September 9, 1957 to undertake a special three-month service for the College of Veterinary Medicine of SNU. Having had primary responsibility for establishing and serving as the first head of the School at the University of Minnesota, his advice and counsel on administrative problems facing the Korean College should be invaluable.

Public Administration Advisers. No advisers in Public Administration have begun service in Korea so far. However processing is underway to send a major man to assist in the in-service training program, probably before January 1, 1958. Processing has also begun for a top level academic man to go to Korea by the spring of 1958. This will implement the plans which have been made to begin instruction in Public Administration in Korea on a special course basis in the fall of 1958.

Korean Faculty Participants Total 135. The accompanying table reveals that 32 Korean faculty members have reached the United States for study since the previous report and that 36 have returned to Korea. This brings the total number of participants to 135, the number who have completed their training and returned to Korea to 76, and the number presently studying in this country to 59. Of this latter total, 54 are studying at the University of Minnesota and 5 at other institutions. Of these 5, 2 are at Lowell Technological Institute, 1 is at the Oak Ridge Institute of Nuclear Studies, 1 is at Massachusetts Institute of Technology, and 1 is at the University of California, Davis. The 59 presently studying in the United States are divided as follows: Agriculture, 19; Engineering, 17; Medicine, 10; Public Administration, 13.

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

	Arrivals	Total No. of Particip.				Departures	Still Participating				Total
		Ag.	Eng.	Med.	Pub.Ad.		Ag.	Eng.	Med.	Pub.Ad.	
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
TOTALS	135	32	54	36	13	76	19	17	10	13	59

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 member 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 125.8 man years of graduate study had been provided under the ICA contract for the 135 Korean faculty members who had been supported through September 30, 1957.

	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					

Academic Achievement of the Koreans. The last three reports attempted to provide data on the academic records made by the Korean faculty members studying under our ICA contract. In the two most recent reports, tabulations were presented showing the distribution of grades made in the separate fields of Agriculture, Engineering, and Medicine by all of the Koreans studying and/or auditing in each field and by those whose studying and/or auditing had covered three or more quarters.

The present report presents comparable data in a somewhat different manner. The transcripts or other data concerning the 103 Korean faculty members who had been supported for graduate study under our ICA contract produced the following tabulation:

Deans of Agriculture and Medicine who came for observation and consultation		2
Faculty members who audited all courses taken		33
Faculty member who earned no grades		1
Faculty members registered for less than 9 credits		7
Earned Doctor's degree solely through research at Pasteur Institute		1
Faculty members who registered for 9 or more credits		
Have returned to Korea	33	
Still studying in U. S.	<u>26</u>	<u>59</u>
		103

The marks made by the 59 Korean faculty members who had registered for substantial credit loads and whose purposes seemed to have been primarily to take courses for credit, rather than as auditors, were then secured. Of these, 33 have returned to Korea and 26 are still studying in the United States. Twenty-one of the 59 have earned Master's degrees. The marks as recorded on their transcripts were not tabulated separately by field, as was the case in the two previous reports, but were all grouped together. This resulted in the accompanying tabulation:

MARKS MADE BY 59 KOREAN FACULTY MEMBERS REGISTERED FOR 9 OR MORE CREDITS

Grade	All 59 Koreans No. of Qtr. Credit Hours	33 Koreans Completing Studies No. of Qtr. Credit Hours	26 Koreans Still Studying in U. S. No. of Qtr. Credit Hours	21 Koreans Who Earned Master's Degrees No. of Qtr. Credit Hours
A	987	470 $\frac{1}{2}$	516 $\frac{1}{2}$	632 $\frac{1}{2}$
B	1,030 $\frac{1}{4}$	527 $\frac{1}{4}$	503	498 $\frac{1}{2}$
S	539	329	210	180
C	<u>322</u>	<u>98</u>	<u>224</u>	<u>122</u>
TOTAL OF ABOVE	2,878 $\frac{1}{4}$	1,424 $\frac{3}{4}$	1,453 $\frac{1}{2}$	1,433
Audit	1,012	675	337	317 $\frac{1}{2}$
Fail	5	4	1	0
Other (D, Incom- plete, dropped, etc.)	<u>291$\frac{1}{2}$</u>	<u>97$\frac{1}{2}$</u>	<u>194</u>	<u>76$\frac{1}{2}$</u>
SUB-TOTAL	1,308 $\frac{1}{2}$	776 $\frac{1}{2}$	532	394
GRAND TOTAL	4,186 $\frac{3}{4}$	2,201 $\frac{1}{4}$	1,985 $\frac{1}{2}$	1,827
No. of individuals	59	33	26	21
No. of Quarters of individual regis- tration	333	167	166	151 $\frac{1}{2}$
Average No. of quarters per individual	5.64	5.03	6.38	7.21

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

1. The average number of graduate credits earned per quarter:
 - a. All 59 Koreans 8.64
 - b. 33 Koreans completing studies 8.53
 - c. 26 Koreans still studying 8.76
 - d. 21 Koreans who earned Master's degrees 9.46

2. The average number of credits taken on an audit basis per quarter:
 - a. All 59 Koreans 3.04
 - b. 33 Koreans completing studies 4.04
 - c. 26 Koreans still studying 2.03
 - d. 21 Koreans who earned Master's degrees 2.10

3. The average number of credits per quarter resulting in failure:
 - a. All 59 Koreans 0.015
 - b. 33 Koreans completing studies 0.024
 - c. 26 Koreans still studying 0.006
 - d. 21 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 59 Koreans 0.88
 - b. 33 Koreans completing studies 0.58
 - c. 26 Koreans still studying 1.17
 - d. 21 Koreans who earned Master's degrees 0.50

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 59 Koreans	33 Koreans Completing Studies	26 Koreans Still Studying	21 Koreans Who Earned Master's Degrees
A	34.3	33.0	35.5	44.1
B	35.8	37.0	34.6	34.8
S	18.7	23.1	14.5	12.6
C	<u>11.2</u>	<u>6.9</u>	<u>15.4</u>	<u>8.5</u>
TOTALS	100.0	100.0	100.0	100.0

This is indeed a commendable record and is even more meritorious in view of the fact that the Korean faculty members are studying in an entirely new and different environment and that all their work must be done under a severe language handicap.

Degrees Earned. The fourth and fifth reports gave the names of 8 Korean faculty members who had earned advanced degrees in studies carried on under our ICA contract. Seven were Master's degrees and one, a Doctorat de l'Universite de Paris.

During the period covered by the present report degrees have been granted by the Graduate School to the following 10 individuals: Cho, Chai Moo, teaching assistant, M. S. (soils); Cho, Kun Chan, lecturer, M. S. (electrical engineering); Hahn, Mansop, teaching assistant, M. S. (aeronautical engineering); Hahn, Tae Hee, instructor, M. S. (chemical engineering); Kang, Woong Ki, teaching assistant, M. S. (chemical engineering); Lee, Chul Choo, teaching assistant, M. S. (agricultural engineering); Park, Won Hee, teaching assistant, M. S. (chemical engineering); Park, Zin Hwan, teaching assistant, M. S. (agricultural economics); Suh, Chai Chin, teaching assistant, M. S. (mechanical engineering); and Lee, Chung Han, assistant professor, M. E. (electrical engineering) (Yale). In addition, Dr. Kim, Chu Wan, passed successfully the examination of the American Board in Diagnostic Roentgenology in Washington, D. C., September 26, 1957.

Four additional Korean faculty members completed all requirements for Master's degrees by the end of the summer, but not in time for the awards to be made at the second Summer Session Commencement Exercises, 1957. Consequently, it is presumed that the degrees will be officially granted at the fall quarter Commencement Exercises in December, 1957. The faculty members

referred to are: Chung, Hoo Sup, teaching assistant (plant pathology); Lee, Ho Wang, teaching assistant (bacteriology); Rhee, Sang Don, teaching assistant (physiology); Sim, Bo Sung, instructor (neurosurgery).

Extensions. During the period covered by the present report, 8 additional Korean faculty members have been granted extensions of their periods of graduate study to complete degree requirements or to finish the course work deemed essential for the successful carrying on of their duties at Seoul National University. The names of the faculty members are as follows: Agriculture--Ko, Chae Koon, teaching assistant (agricultural engineering); Lee, Su Rae, teaching assistant (agricultural biochemistry); Lee, Young Sang, teaching assistant (animal husbandry); Yoon, Suk Bong, assistant professor (veterinary medicine); Engineering--Kim, Dong Kie, teaching assistant (mining engineering); Yim, Sahng Jun, lecturer (naval architecture); Medicine--Kim, Chu Wan, teaching assistant (radiology); Song, Ho Seung, associate professor (medicine).

Full-time English Language Program Continued. Following the plan used during the summer of 1956, the Korean faculty members who were to begin their studies in the U. S. in the fall of 1957 were brought to the University of Minnesota in advance of the opening of classes so that they could devote full time to an intensive English language program. This program was designed exclusively to improve their linguistic ability to fit into their graduate and post-doctoral study.

Again under the direction of Dr. Harold B. Allen, associate professor of English, the staff comprised five experienced instructors, three who had served similarly in 1956 (Ruth Roberts, Richard Narvaez, and Millard Miller) and two who were replacements (Mrs. Margaret Forbes, assistant professor of classics, and John Pulleyn, instructor in romance languages).

The program generally followed the pattern established in 1956 (in turn modeled upon that of the Michigan English Language Institute), with certain changes in text materials and extra-class activity. Pretesting permitted classification of the Koreans in three groups differentiated by ability to use English. All three groups pursued intensive work five hours a day for six days a week in reading, composition, structural pattern practice, pronunciation drill, and pronunciation laboratory. Time devoted to the various aspects differed according to group needs.

Although the program initially suffered two handicaps, all evidence points to the conclusion that it was distinctly more successful than that of 1956. The handicaps were, first, that the Koreans did not arrive as early as was expected and hence lost some part of anticipated instruction, and, second, that because they came singly or in small groups over a period of a month (August 10 to September 15) much staff time was spent in repeating the day-long pretesting examinations for each set of arrivals (except the last).

The greater success in 1957 is shown clearly in the comparison of pre-test and post-test results of both the standardized and the locally devised tests and also the impromptu compositions. Although three of the thirty Koreans dropped slightly but not significantly in the aural testing and four received lower grades in the subjectively-ranked second impromptu themes, every Korean manifested improvement in pronunciation and in reading (some remarkably so). Except for the steady score of the middle group in written composition, the average for each group in each area tested was gratifyingly, sometimes amazingly, higher in the post-tests. In every area for each group the scores were much higher than the corresponding scores in 1956.

Without attempting to weigh such imponderables as motivation (which the staff adjudged much higher in the 1957 students, particularly in the homogeneous

public administration group), it is possible to isolate at least three factors leading to this year's measurable success. First is the fact that, as a result of experience and training, the 1957 contingent was better able to understand and use spoken English than had been the case with earlier groups. Average pretest scores were higher than those in 1956. Second is the increased experience of the staff in dealing with the special language problems of Koreans (three taught in the 1956 program, and one replacement had had experience also in teaching Koreans earlier at Minnesota). Third is the use of two different texts which provided a basis for superior class drill and exercises.

Equipment Procurement. No good purpose would be served by pointing out again the difficulties faced in procuring materials from funds supplied by the U. S. Government. Suffice it to say that the procurement operation is being carried forward with as great rapidity as possible.

Actual expenditures through September 30, 1957 totalled \$824,728.93. In addition, outstanding obligations covering orders placed but not yet delivered to the forwarding agents totalled \$601,293.56. Thus, equipment and supplies valued at \$1,426,022.49, 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 Advisor in Korea indicated that total receipts of equipment and supplies through September 30, 1957, totalled \$628,514.35. These totals, it must be kept in mind, are only the invoice value of the goods and do not include the cost of such items as transportation, insurance, the preparation of required documents, or other services provided by the forwarding agents.

An additional sum of \$620,000 is soon to be made available for the procurement of equipment and supplies from FY 1957 funds. This will be

the third allocation and will bring the total provided for procurement to date to \$2,195,000.

Home Leave and Educational Allowance. The University of Minnesota has been attempting for many months to secure the approval of ICA/Washington to make the "home leave" provision applicable to its staff as it is to the staff of OEC. More recently, because of the importance of an "educational allowance" to the long-term staff members being recruited to serve in Public Administration, negotiations have been carried on with ICA/Washington to add this provision to the contract. As this report is being written, ICA/Washington has indicated that both these provisions would be added to the contract through Amendment No. 11. This amendment, soon to be agreed to, is expected also to provide additional funds in the amount of \$620,000 for the purchase of equipment and supplies for the Colleges of Agriculture, Engineering, and Medicine.

College Level Advisers. Under the provisions of Amendment No. 10, we now have two college-level advisers, together with secretaries. Professor Clarence E. Lund has been serving in Engineering since February 11, 1957. Dr. Clyde H. Bailey, Dean and Professor Emeritus of the Institute of Agriculture, has been serving in Agriculture since July 1, 1957.

Minnesota Art Exhibit. The exhibit of student and faculty art work from the University of Minnesota will be sent to Korea by the last of January, 1958, in accordance with the plans of Seoul National University for its exhibition. The bulk of the exhibit has been on view recently in the third floor Gallery at the University of Minnesota. This exhibit is being sent to Korea in accordance with an agreement made to exchange exhibits of art work between the two sister institutions. The Korean exhibit was shown at

the University of Minnesota during January, 1957 and this year is being shown in various university and college art galleries from coast to coast.

Minnesota Attracts Koreans. There seems to be no question but that the existence of the contract between ICA and the University of Minnesota has led to other Koreans coming to the University of Minnesota for study. This probably explains why there are approximately as many Koreans presently studying at the University of Minnesota under other auspices as there are under the ICA contract and why, in Korea, the University of Minnesota is becoming the best known of the universities in the United States.

Gifts. The Smithsonian Institution, Washington, D. C., donated a collection of some 60 specimens of rocks, minerals and ores to the Department of Mining Engineering, College of Engineering, Seoul National University. These specimens had been requested by Professor Hong, Choon Ki while he was in Washington in 1956. They reached Korea on June 22, 1957.

Korean Social Affairs. Numerous social affairs are arranged for the Korean faculty members by their deans, department heads and advisers within the colleges where they are studying, and by other interested members of the University community. In addition, there are also, from time to time, events which involve the entire Korean group.

The Korean faculty members from Seoul National University joined with the other Korean students in the Twin Cities in giving a party for their advisers and other friends on May 4, 1957 in Newman Hall. An excellent musical program was followed by an address by Mr. Choo, Young Han, Korean Consul General in San Francisco.

The Korean faculty members were guests at an open house on May 12, 1957, given by the Campus Coordinator and Mrs. Tyler. Also invited as guests were President and Mrs. J. L. Morrill and members of the Korean Advisory Committee and their wives.

President J. L. Morrill was host at a coffee hour in the Campus Club on Monday, October 14, 1957. Guests were the thirty Korean faculty members who had just arrived to begin graduate study at the University of Minnesota and the members of the Korean Advisory Committee.

The Korean faculty members are becoming increasingly more interested in campus activities. They have provided important leadership in the Korean Student Association and are participating effectively in the activities of the Foreign Student Council.

II. OFFICE OF THE CHIEF ADVISER IN KOREA

October 19, 1957 ends the third year of operations in Korea under the five-year ICA/Minnesota contract involving Seoul National University. During the past six months contract endeavors continued in the fields of agriculture, engineering, medicine and public administration. In the field of agriculture Minnesota advisers in entomology, plant pathology and veterinary medicine arrived for service in Korea; the field of medicine saw greatly increased activity in overall college-hospital administration, and in the areas of nursing, anesthesiology and internal medicine; overall advisory activities, with special emphasis on mining and metallurgy, continued in the field of engineering; in public administration the first Korean participants began advanced work at Minnesota; and planning actions continued in all Cooperative Project areas.

Concerning physical things more Minnesota-procured equipment arrived during the six-month period for each of the original contract areas, and physical plant rehabilitation and improvement continued with ICA-funded materials at the Colleges of Agriculture, Engineering and Medicine.

The close cooperative relationships with both Korean and American agencies, as commented upon in previous reports, continued during this period. At the working level these relationships involve primarily Seoul National University's President and his staff; the Deans of the Colleges involved and their staffs; the Chief of OEC's Division of Education and his staff; personnel of the Architectural Engineering Branch, Public Works Division, Office of the Rehabilitation Engineer, OEC; and personnel of the Technical Training Branch, Program Documentation Division and of the Project Branch, Program Planning Division, Office of the Assistant Economic Coordinator For Programs and Economic Policy. Less frequently these cooperative relationships involve

direct contact with personnel of the Republic of Korea Ministry of Education, the Republic of Korea Office of General Affairs, the United Nations Command Economic Coordinator for Korea and members of his immediate staff, and personnel of the United States Embassy in Seoul, primarily the Cultural Attache'.

Minnesota staff members continued to find their reception by personnel of OEC's technical components in the contract fields concerned to be cordial and their contacts with these specialists to be educational, helpful and productive. Minnesota staff members, in turn, attempted to be of assistance to OEC personnel when specific requests for such assistance were made and when it was possible to give such assistance without neglecting the major contract areas. The main contributions in this regard during the past six months were in the field of mining engineering.

The Foreign Language Institute of Korea gave additional valued assistance during this report period.

Staff Exchange. This area continues to be the core of the Seoul National University Cooperative Project. Overall staff exchange data appear on pages 6 to 15 of this report.

Korean Program Participants. During August and September of 1957, 30 additional Seoul National University staff members left Korea for the United States to begin advanced studies under the project. Of this total 7 are in the field of agriculture (including 1 in veterinary medicine), 7 in engineering, 5 in medicine and 11 in public administration. For training in public administration two staff members of the Republic of Korea Office of General Affairs likewise began graduate studies at Minnesota under the program.

In the processing of this group of Korean participants for departure an unfortunate delay was encountered in Korean channels. This delay, not attributable to Seoul National University or the Ministry of Education, resulted

in all of this fall's contingent reaching the United States late - the earliest arrivals by two weeks and the last by a month and a half. The result was that much of Minnesota's advance planning for the reception, indoctrination, and oral/aural English improvement of this group accomplished much less than had been anticipated. In the hopes that a similar situation might be avoided in the future, this matter was taken up with Seoul National University, the Ministry of Education and OEC - the latter to take appropriate action with other concerned components of the Republic of Korea Government.

Minnesota Staff in Korea. A total of twenty-four staff members, exclusive of the Chief Adviser and administrative secretary, have now served or are serving in Korea. Of this total 11 saw service during this report period - 4 in agriculture (including 1 in veterinary medicine), 2 in engineering, 4 in medicine and 1 in public administration. Of the 11 who were here during the past 6 months 5 have completed their periods of service and 6 are on continuing assignments.

During the past six months 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, 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 familiarize themselves with the details of curricula, courses, teaching methods and procedures currently in effect in their areas; to become acquainted with the kind, amount and quality of research undertaken; to learn of the major problems affecting teaching and research in their areas; 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 needs in their areas of specialization; 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 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 Seoul National University to improve its 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.

The following four staff members completed their periods of service in Korea during the past six months and, prior to departure, prepared and fully discussed with their Korean and American colleagues reports embodying essential background material, major observations, and recommendations pertinent to assisting to improve teaching and research in their respective fields.

Professor W. W. Staley, Professor of Mining Engineering, University of Idaho. Professor Staley, who served as general adviser and adviser in mining engineering and metallurgy to Seoul National University's College of Engineering for 14 months left with his Korean and American colleagues the following Summary and Conclusions which are included in his 117-page report:

"It is sincerely hoped that the reader arrived at the Summary and Conclusions by the long route and not by the most direct one. Also it is hoped that the report will be accepted as a critical analysis and not as a collection of criticisms which it is in no way intended to represent.

"It is difficult to prepare a brief statement which will contain the essence of the recommendations made in the body of the report. Objectively, the report is an attempt to indicate how curricula at the College of Engineering may be improved. The standard for making the comparison and recommendations which follow are quite naturally influenced by American practice for engineering education.

"Basically, there is nothing extraordinarily out-of-line with the present College of Engineering curricula and methods. However, in view of the very modern laboratory facilities which are arriving almost daily, considerable alteration of course structure and content was believed desirable if laboratory usage and lecture-room instruction were to be modernized and thus permit full advantage to be taken of the arriving equipment. Rehabilitation of the building and facilities were all designed with the idea of improving Korea's economy. It does not seem desirable to retain a quite different Japanese educational influence.

"In the following paragraphs the actions, conclusions and recommendations of this adviser are briefly summarized. These comments are not given in any particular order of significance or recommendation.

1. An introduction was prepared to explain why mineral industry education is necessary to the economy of Korea.
2. Engineering requirements were discussed.
3. Many of the recommendations apply to all Departments in the College of Engineering in addition to Mining and Metallurgy.
4. Recommendations were made to adopt a system of initials or abbreviations to represent each department of instruction, and further suggestion made to assign numbers to courses in conjunction with the initials. A system of using the numbering for each year was also suggested. The advantage of preparing and recording student records under this system was pointed out.

5. It was suggested that a more realistic outlook be taken of the time devoted to laboratory work and recommendations were made regarding the hours to be assigned to laboratory classes. Also, attention was called to several courses that should have definite minimum hours of laboratory work.
6. Several assignment sheets from an American University were obtained and included for guidance in developing certain freshman and/or sophomore courses.
7. The rearrangement of freshman and sophomore courses was discussed in considerable detail.
8. It was recommended that the Dean appoint a committee to investigate the cultural courses now required, to include in their report recommendations for obtaining uniformity among the departments for their requirements and, finally, to determine the minimum total number of credits to be taken in cultural courses.
9. The recommendation was made that the various departments confine teaching to their own particular fields, to discontinue the encroachment on allied subjects in other departments, and to call upon other departments for service courses. It was furthermore recommended that laboratory equipment and supplies be immediately reassigned to the departments specializing in instruction requiring such materials.
10. A total absence of prerequisites was noted. This has in some cases permitted or encouraged advanced courses occurring in the curricula before the completion of introductory subjects. Recommendation was made that prerequisites be established for all courses beyond the freshman year. In connection with this it was recommended that a College of Engineering Catalog or Bulletin should be printed. Curricula at the College should be stabilized as soon as possible, and there is no reason for not doing so immediately following the completion of rehabilitation. After this is accomplished the Catalog would need republishing at only infrequent intervals. A yearly addendum could be issued, when occasion demanded, to note any absolutely necessary changes. Each year a single page Calendar of Important Dates for the College Year could be published.
11. The practice of faculty members changing their department's curriculum requirements at a minute's notice (and this time interval is to be taken literally) is deplorable and the practice should be stopped immediately. It is recommended that the following standard procedure be instituted for making Catalog changes: a. The departmental faculty first approves all course changes, including the content; b. The head of the department then recommends the desired alterations to the Executive Committee or Council representing the College of Engineering faculty. By majority vote the recommendations are approved by this Committee or Council; c. And finally, the entire College faculty, meeting for this purpose, reviews and approves proposed Catalog changes. Any other procedure will keep curricula in an impossible state of confusion.

12. Various courses now listed for the Mining and Metallurgy Departments were reviewed and recommendations made for dropping, combining, shortening, or adding new courses. In some instances, suggestions were made for changing the present content of courses.
13. The present situation concerning elective courses was quite thoroughly studied. Numerous suggestions were submitted for improving opportunities and for eliminating the excessive duplication between courses and between departments. It was further recommended that a wide choice of business topics be made available (at present as electives, but at some future date some may become required), and that members of the faculty on the Main Campus of Seoul National University be called upon as the instructors for these courses.
14. The desirability of establishing a practice field camp at a semi-operating mine for the Mine Surveying and the Field Geology courses was reviewed and recommendations made in favor of this action.
15. In setting up the mineral industry departments at the College of Engineering insufficient recognition was given to several optional fields of application. Therefore, it was recommended that an option be offered in Mining Geology (in the Mining Department), and Ore dressing option (in the Metallurgy Department), and a Ceramics option in the Chemical Engineering Department with close consultation from the Metallurgy Department.
16. Several recommendations were made regarding research and graduate study; among these was offered the possibility of a liaison with the University of the Philippines for exchanging graduate students and possibly faculty members.
17. In several Appendices were given actual lecture and laboratory assignment outlines for guidance in teaching similar courses at the College of Engineering.

In addition to his main report, Professor Staley prepared separate reports on visits he made to various mining and metallurgical establishments in South Korea and on other subjects of significance to the College of Engineering. These reports cover the following subjects: Mineral Assay Laboratory at Taejon; Macha-ri, Hambaek, Sangdong and Changsung Coal and Tungsten Areas; Taechon-ni Gold Dredging Project near Mokpo; Ku Ma Gold Mine; Changhang Smelter; Instructions, Equipment and Supplies for Preparing Slides and Transparencies; Mineral Resources of South Korea (primarily material prepared by others, but rearranged and added to by Professor Staley to improve its value and utility); Summary of Export Materials (a translation from the Korean and included as an appendix in

ceding report); Processes for Manufacturing Sulfuric Acid; History of College of Engineering.

Relative to his report, Professor Staley also made note of the following in his summary:

"A few services that might be rendered by the Dean's office were discussed. It can be further amplified by remarking that wide publicity should be given to the very complete facilities rapidly developing at the College of Engineering. The laboratory facilities and useful knowledge gained from the education of students abroad are available to government agencies and private concerns aiding research programs and improving products and production. If full advantage by these agencies is not taken of what the College has to offer, the program will not have completely accomplished its purpose.

"Progress in rehabilitating Mining Compound buildings was discussed. In this writer's opinion the results have been most satisfactory. In addition, the erosion and drainage problem surrounding the campus and left by the United States Army has been greatly rectified. Equipment loaned by the Korean Military Advisory Group materially aided the erosion control program."

Miscellaneous activities undertaken by Professor Staley include checking and helping with arriving equipment, all departments; assisting Head, English Department with book translation and preparation for publication, to be later used in English courses at the College; teaching two classes for senior and graduate Mining students (a total of 2 credits); and representing Minnesota-Seoul National University at the Office of the Economic Coordinator atomic energy meetings.

Professor Staley also noted that during the period of his stay in Korea the College of Engineering has been able to offer considerable help to several organizations supervising rehabilitation work. There is no need to discuss these; simply listing them will give sufficient explanation.

1. Strength tests on concrete specimens for the United States Army and the Korean Military Advisory Group
2. Metallurgical investigation of grinding media for the Office of the Economic Coordinator
3. Assistance to the Office of the Economic Coordinator Mining Department

4. Assistance to Ku Ma Gold Mine (private concern)
5. Assistance to McGraw-Hyd carbon Company: a. To obtain engineering help; b. For translatio of operating instructions for fertilizer plant.
6. Assistance in enlisting the aid of the Korean Military Advisory Group to obtain the loan of equipment for use on the erosion and drainage problem endangering the campus

Professor J. Harvey Evans, Associate Professor of Naval Architecture, Massachusetts Institute of Technology. Professor Evans, who served as advisor to the Department of Naval Architecture and Aeronautical Engineering at Seoul National University's College of Engineering, prepared his final report under the following subject headings: Naval Architecture in Korea; Aeronautical Engineering in Korea; Orientation of Training for Aeronautical Engineers; Naval Architecture Curriculum; Aeronautical Engineering Curriculum; Equipment Needs; Housing for Laboratory Facilities; and Possible Future Procurement.

As appendices were included material under the following headings: Ship-building in Korea; Utilization of Naval Architecture Graduates; Other Institutions Teaching Naval Architecture; Proposed Curricula; and Detailed Equipment Estimates and Specifications. Under the latter were included: Towing Tank Design and Equipment; Photoelastic and Flow Analysis Equipment; Wind Tunnel Components; Books, Transactions and Periodicals; Stability Instruction Model; and Instructional Sound Movie Films.

Professor Evans' major recommendations were:

1. That the curriculum set forth in Appendix IV of his report be on the basis for future instruction in Naval Architecture.
2. That the Aeronautical Engineering curriculum be reviewed further by Seoul National University and Minnesota personnel concerned, simplified to the extent possible, and geared to Korea's needs for graduates in this field.
3. That basic courses such as Strength of Materials, Thermodynamics, etc., continue to be taught to Naval Architecture students by other departments.

4. That equipment needs be satisfied as funds permit in the following priority order: for undergraduate instruction, for graduate instruction, for research.
5. That, to the extent funds permit, books, equipment and facilities for Naval Architecture and Aeronautical Engineering be obtained as described and summarized in the report.
6. That a likely candidate for instructing in Marine Engineering be selected and sent to the United States for at least three academic terms of study.

Dr. Thomas H. King, Professor of Plant Pathology, University of Minnesota.

The final report of Dr. King, who served as adviser to Seoul National University's College of Agriculture in the field of Plant Pathology, is presented under the following headings: Summary of Recommendations; Importance of Plant Pathology in Korea; Present Control Practices; Chemical Availability; Trained Plant Pathologists Now in Korea; and Plant Pathological Training in Korea.

Under the latter heading, information is organized into the following categories: Seoul National University; College of Agriculture; Departments; Staff; Student Enrollment; and Department of Biology.

Department of Biology data appear as follows: Biology curriculum (undergraduate); Undergraduate teaching in plant pathology; Plant pathology staff; Plant pathological course additions to biology curriculum; Graduate teaching in plant pathology (with sub-headings: Requirement for master of science degree; Increasing of course credit; Suggested additions of graduate courses in plant pathology; and Additional staff for plant pathology); Teaching methods; Staff Research; Recommended further research in plant pathology; Publication of research; and Additional equipment recommended for plant pathology.

In the report's appendix appear: Lectures presented during assignment; Colleges and experiment stations visited while in Korea; List of diseases collected and identified while on assignment in Korea; and List of College of Agriculture teaching staff in 1957.

The summary (which includes recommendations) of Dr. King's report is noted as follows:

"More than 100 plant diseases were collected and identified during the assignment in Korea. Every major crop was found to be affected with one or more well known destructive diseases.

"Losses as high as 80 percent of the total stand of plants occurred and it was not unusual to find at least a 30 percent reduction in yield in most all of the important crops grown in Korea.

"Attempts are being made to control plant diseases by the application of fungicides and the use of resistant varieties when available. However, control is largely ineffective because the incorrect fungicide is often used for the disease concerned; the applications are not timed correctly to control the disease; the spray equipment is inadequate to cover the plant thoroughly with the fungicide, and often the chemicals applied cause more injury to the crops than the disease.

"Many good fungicides are being imported into Korea for the control of plant diseases and in addition there are a number of agricultural chemical companies formulating fungicidal sprays and dusts. At the present time, Sulphur, Fermate, Ceresan M, Captan, Arasan, Calcium Ceresan, Bordeaux Mixture and Liquid Lime Sulphur are available and many of the diseases that are causing serious losses could be controlled if there were trained plant pathologists to provide the necessary technical information.

"As far as the adviser could determine there are no trained Korean plant pathologists. There are a few graduates of the Biology Department of the College of Agriculture of Seoul National University who have bachelor of science degrees and are teaching plant pathology in some of the provincial experiment stations. It appears that there has been little realization on the part of the agricultural administrators of the importance of plant diseases and as a result the existing plant pathology sections are staffed with inadequately trained as well as poorly paid personnel.

"The greatest service that the College of Agriculture of Seoul National University could render to Korean agriculture would be the development of an outstanding department of plant pathology for training the plant pathologists necessary to control the diseases of Korean crops.

"It is recommended that the Department of Biology curriculum of the College of Agriculture be reorganized to permit a student to specialize in plant pathology in his undergraduate training. It will be necessary to add some new plant pathological courses, change some required courses to elective courses and in some cases reorganize or consolidate existing courses. A plant pathology major should learn more about the crops he will be working with than is required in the present biology curriculum.

"As now constituted the biology curriculum for master of science degree candidates requires that a student take the same wide range of subjects that he took in his undergraduate studies. It would seem advisable for the candidate

to specialize more in his chosen field, especially in the case of those interested in plant pathology since they are exposed to only a few courses in this specialized profession in the undergraduate curriculum. A system of major and minor courses could be specified in the requirements for both the master of science and doctor of philosophy degrees. To adequately train candidates to become professional plant pathologists, it is recommended that seventeen new courses be gradually developed for addition to the curriculum in the next ten years.

The most urgent and pressing problem facing the College of Agriculture is the selection and training of at least five more students for staff positions in the field of plant pathology. These students should be sent to the United States for advanced training to include obtaining the doctor of philosophy degree as far as possible. They would be the nucleus of a staff for organizing a separate Department of Plant Pathology in the near future and would be capable of training additional personnel in Korea for the profession of plant pathology.

It is conservatively estimated that in addition to developing a strong teaching and research department of plant pathology at the College of Agriculture, Korea needs in the next ten years at least 50 trained plant pathologists to study and develop controls for the plant diseases that are causing serious losses to major crops. In addition to training professional plant pathologists, the College of Agriculture also has the responsibility of educating associated fields in agriculture as to the importance of plant diseases to production and quality.

It was gratifying to find that in addition to their teaching duties many staff were doing research, and this was especially true of staff members who studied at Minnesota. Research should be encouraged wherever possible for in addition to the personal satisfaction that a staff member achieves, it enhances his teaching knowledge and in most cases makes him a more stimulating teacher."

The report contains specific suggestions relative to carrying out the recommendations made.

Dr. Clarence E. Mickel, Professor and Head, Department of Entomology and Ecological Zoology, University of Minnesota. Dr. Mickel's final report is organized under the following subject headings: Preface; Summary of recommendations; Insect damage to food crops, Stored food and forests; Korean entomological personnel; The teaching of entomology and zoology at the College of Agriculture, Seoul National University; Research in entomology and zoology; Classification, improvement of teaching and effective use of instructor's time; A program for the development of entomology and the training of

entomologists; Physical facilities and equipment; Appendix A - Topical outlines of courses in entomology and zoology; Appendix B - Undergraduate program for biology majors; and Appendix C - Graduate study program.

The "Summary of Recommendations" prepared by Dr. Mickel is quoted as follows:

1. The entomological and zoological activities of the present Department of Biology be reorganized into a new Department of Entomology and Zoology.
2. A new course 'Chemical Control of Insects' be established at the earliest possible date.
3. Mr. Choi Seung Un be sent to the University of Minnesota as soon as possible, for at least one year, to prepare himself to teach 'Chemical Control of Insects' by study with Dr. L. K. Cutkomp and other members of the entomology staff. An M. S. degree should be completed.
4. Dr. L. K. Cutkomp be invited to the College of Agriculture, Seoul National University, for a six months' tour of duty upon the return of Mr. Choi from the University of Minnesota. This will make it possible to specify definite insecticides and efficient spraying equipment for Korean conditions and enable the College to have Dr. Cutkomp's advice and counsel in setting up the new course 'Chemical Control of Insects.'
5. Apiculture be made an integral part of the new Department of Entomology and Zoology.
6. Class scheduling be modified to provide for two one-hour lectures per week and two two-hour laboratories per week.
7. General Entomology, Agricultural Entomology and Forest Entomology be reduced from two semester courses to one semester courses.
8. All Agronomy and Forestry majors be required to take General Entomology.
9. A new course 'Insect Transmission of Plant Diseases' be established.
10. Mr. Hyun Jae Sun be sent to the University of Minnesota to study with Dr. A. C. Hodson and Dr. A. G. Richards in the field of insect ecology primarily and with supplementary work in insect physiology, with the objective of a Ph.D. degree.
11. A course in Insect Ecology be established upon Mr. Hyun's return from the University of Minnesota.
12. The graduate course 'Aphidology' be given on an undergraduate basis.

13. Ultimately courses in 'Principles of Economic Entomology,' 'Regulatory and Legal Entomology,' and 'Insect Physiology' be established.
14. All the energy of the New Department of Entomology and Zoology be directed to undergraduate teaching for the time being.
15. Coordination of College of Agriculture and Institute of Agriculture be established to provide for joint appointment of an entomologist, thus providing the Institute with the only professionally trained entomologist available, and providing the College research opportunities for its entomological staff and advanced students.
16. Graduate program of instruction in entomology be postponed until staff numbers three persons with advanced degrees, one of which is a Ph.D.
17. Best undergraduate majors in entomology be encouraged and assisted in applying for assistantships in entomology at American universities.
18. Three office-laboratories, and three teaching laboratories be planned for the new classroom building.
19. A controlled temperature room be provided in the new building for the teaching and research needs of the staff and advanced students.
20. Two additional research dissecting microscopes be added to the teaching and research facilities of the staff and advanced students.
21. Storage equipment of 400-drawer capacity be provided for the housing of the teaching and research insect collection.
22. A constant temperature water bath be provided for teaching and research in the field of Insect Transmission of Plant Disease.
23. Ten gallons of dioxene be provided (not available in Korea) for use in preservation of insect larvae used for teaching and laboratory work.
24. One-half pound of 600 mesh carborundum (not available in Korea) be supplied for use in the study of viruses transmitted by insects."

Specific suggestions for carrying out the recommendations made are presented by Dr. Mickel.

The content of these reports is always the subject of much discussion with Korean colleagues during the course of their preparation. 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.

Public Administration. Professor George A. Warp spent the period April 3 - 26 in Korea to develop, with all parties concerned, a basic plan for carrying out the contract undertaking in this area. Before leaving Korea Professor Warp presented a verbal report concerning his suggested plan and implementation recommendations to the President of Seoul National University and his staff concerned, to Republic of Korea Ministry of Education officials (with OEC Division of Education representatives participating), and to the UNC Economic Coordinator and members of his immediate staff.

Professor Warp's formal recommendations, entitled "Korean Public Administration Program - Report" were published on June 25, 1957. The preamble of this report is quoted as follows:

"This report is intended to present a broad plan for the development of the Public Administration program under the ICA-University of Minnesota contract. It was prepared after a three-and-one-half week survey in Korea and after visits to ICA offices in Washington, Indiana University (Thailand) in Bloomington, the University of Michigan (Philippines) in Ann Arbor, Michigan State University (Viet Nam) in East Lansing, the University of Pennsylvania (Pakistan) in Philadelphia, and the University of Southern California (Iran) in Los Angeles."

Copies of this report were distributed to all concerned in Korea and some portions of the staff exchange portion of the plan were carried out, and in the process of being carried out, during the remainder of this report period. Some aspects of the proposed plan are, as of the end of this report period, still undergoing discussion.

To define the general plan for the Public Administration undertaking which has become an ICA/Minnesota contract area the following is quoted from Professor Warp's report:

"Essential features. A Public Administration School or Institute or Center (hereafter referred to as School) will be established at Seoul National University, and the School will be modeled somewhat after the Institute of Public Administration at the University of the Philippines.

"The School will offer a graduate training program leading to a master's degree in Public Administration. Students will be drawn from economics, political science, psychology, and sociology and from such professional colleges as engineering, agriculture, and medicine, as well as law. It is expected that all universities in Korea will send students. The School also may offer an under-graduate program leading to a bachelor's degree in Public Administration. Some courses may be scheduled so as to be convenient for government employees who desire to take academic work after their regular office hours.

"The School will carry on a research program for the study of administrative problems and for translation of foreign materials and will endeavor to publish studies and translations. A special Public Administration reference and research library will be established.

research "The National Officers Training Institute in the Office of General Affairs continue to develop its special training courses for government employees, recruit a full-time staff to serve as the core of its faculty, and will set up a small working library."

Additional Minnesota Staff. Recent and expected near future arrivals

Minnesota staff members for cooperative project service in Korea are commented upon in Part I of this report.

Equipment Procurement. Funds requested for laboratory and classroom equipment for agriculture, engineering, medicine and supporting facilities of Seoul National University have been allocated as follows:

Equipment and Supply Funds, Seoul National University Cooperative Project

	<u>FY 1956</u>	<u>FY 1957*</u>	<u>Total</u>
Agriculture	\$ 260,000	\$ 50,000	\$ 310,000
Engineering	730,000	500,000	1,230,000
Medicine	450,000	70,000	520,000
Veterinary Medicine	50,000		50,000
Liberal Arts and Sciences (For premedical courses)	50,000		50,000
Seoul National University General (For printing facility)	<u>35,000</u>	<u> </u>	<u>35,000</u>
Total	\$1,575,000	\$620,000	\$2,195,000

*As of the end of this report period the contract amendment needed to transfer these amounts to Minnesota for procurement purposes had not been formalized.

As of September 30, 1957 the invoice value of laboratory and classroom equipment and supplies purchased by Minnesota for Seoul National University and received in Korea totalled \$628,415.35. This amount is made up of the following sub-totals by Colleges:

Agriculture	\$156,946.59
Engineering	337,867.87
Medicine	130,572.44
Veterinary Medicine	3,127.45

Some 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. Completed lists were transmitted, per usual procedure, to Minnesota for screening and procurement action.

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 Funds, Seoul National University
Cooperative Project

	<u>FY 1955</u>	<u>FY 1956</u>	<u>FY 1957*</u>	<u>Total</u>
Agriculture	\$422,300	\$ 650,000	\$ 159,000	\$1,231,300
Engineering	65,200	100,000	676,000	841,200
Medicine	<u>63,500</u>	<u>275,000</u>	<u>345,000</u>	<u>683,500</u>
Total	\$551,000	\$1,025,000	\$1,180,000	\$2,756,000

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

As of the end of this report period most of the construction materials and supplies procured by the Republic of Korea Office of Supply with FY 1955 funds had arrived in Korea and had been delivered by that agency to the colleges for which intended. Additional materials procured with FY 1956 funds also arrived during the period.

(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 the question arises as to just what changes have occurred at Seoul National University in the contract fields concerned since the inception of the program. To obtain an answer to this question from the point of view of Seoul National University, the President of the institution was requested to consider the matter on the basis of the following outline:

1. For specifically designated departments (including the Seoul National University Hospital) and courses: a. What is the nature of improvements which have resulted primarily from the efforts of staff members who have returned from studies abroad under the project?; b. To what degree has it been possible to carry out plans which Minnesota staff members who have served or are serving in Korea have, with their Seoul National University colleagues, been instrumental in developing?
2. To what extent is laboratory and classroom equipment which has been received in use for the purposes intended?: a. What effect has this equipment had thus far on courses concerning which laboratory work is given?; b. As a result of this equipment what changes in laboratory offerings or requirements have been initiated thus far? What in addition are planned for the first semester of 1958?
3. For specifically designated departments, what is the nature of progress made in research as a result of the cooperative project?

4. What is the nature of changes in administration attributable in whole or part to the cooperative project?
5. What building and facilities rehabilitation and improvement work has been accomplished with materials provided through contract support funds?: a. What effect has this had on teaching and research?
6. What library and library practice improvements have occurred as a result of the cooperative project?

At the President's request each of the Deans concerned prepared report material on the basis of this outline. These reports follow.

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

"1. Staff members exchange:" (A table showing by name, department, field, etc., all of the College of Agriculture staff members who have studied, or are studying, abroad under the project has been deleted as not essential to this 6-month progress report.)

"...A total of 27 staff members have participated, and 10 of them already returned to their posts.

"Staff members returned from Minnesota have been adopting the new methods in teaching and laboratory practicing through their experiences and practices in Minnesota. For example, they prepared mimeographed text books for student use instead of copying down the lecture in a note book as they used to do. Thus, in the teaching and practicing students, many new developments have been made by those trained in Minnesota. Following are the details:

Chi, Young Lin. Professor Chi made a general investigation in the agricultural field at Minnesota. He has been now teaching the element of agriculture, since he returned. In spite of his short stay in Minnesota, he also made a study in the administration of the Department. Through his experiences at Minnesota he revised the curriculum of the Department and has been making a great effort to adopt the new current teaching and practicing methods which are now prevailing in the United States.

Kim, In Kwon. Professor Kim studied plant genetics and worked out a thesis, "Inheritance of Stem Rust (*Puccinia graminis tritici*) Resistance in a Triangular Cross in Spring Wheat." He has been teaching plant breeding, crops production and laboratory work. Beside his teaching work, he is leading a research work for breeding of rice possessing blast (*Piricularia oryzae*) resistance.

In the teaching and practicing students, he is adopting a current method, using ready-made pictures and slides instead of notes at the lecture as they used to do.

Yu, Tal Young. Professor Yu studied the floriculture and vegetable crops at Minnesota. He was specially interested in the new development of orchid and chrysanthemum cultivation. It was good to say that Mr. Yu had a nice

opportunity to meet Dr. Knudsen at Cornell University. So this made a good chance to bring a new idea in the cultivation of orchid and chrysanthemum in Korea. He is teaching the vegetable crops and floriculture for junior and senior students, since he returned. He collected thousands of slides and is utilizing many slides in his lecture for the best demonstration.

Lee, Tai Hyun. Professor Lee studied Horticulture. He particularly specialized in the physiology of fruit trees at Minnesota. He has been teaching the principle of cultivation, pomology and the laboratory work of pomology (in particular the general physiological laboratory work), since he returned. Besides his teaching work, he has been carrying on a research work, i.e., the effect of urea foliar-application to post-harvest apple trees on the development of incomplete flower buds. He also adopted many new ways in teaching students, using slides and wall maps.

Yun, Sang Won. Professor Yun studied animal husbandry and nutrition at Minnesota, and also had a chance to study animal feeding and management in various colleges and experiment stations in U. S. A. He is teaching feeds and feeding animals, and applied animal feeding nutrition and laboratory work. Through his experiences, he revised the curriculum to fit the prevailing ways in the United States. He had set a research work on swine feedings and on grass energy of common feed stuffs.

Lee, Yong Bin. Professor Lee studied animal breeding and was specially interested in artificial insemination of animals. He has been teaching animal breeding, meat science and physiology of reproduction and laboratory work, since he returned to the school. He is also teaching artificial insemination to four hundred technicians at a short course training institute, in cooperation with the Ministry of Agriculture and Forestry in Korea. He has been engaging a co-research of swine breeding work and artificial insemination in the Animal Research Center, Ministry of Agriculture and Forestry. Through his experiences in Minnesota, he is adopting new methods of teaching and practicing students, using wall maps and slides.

Kim, Ho Sik. In spite of his short stay in Minnesota, Professor Kim made a research work on several strains of the *Aspergillus oryzae*. He has been teaching industrial fermentation and laboratory work since he returned. Besides his teaching he is leading several research works: a. Natural control method of pine moths by fungi; b. Experiment of sugar beet cultivation in Korea; c. Alcohol production by the culture. Through his experience in Minnesota, and following Dr. Bailey's and Professor Burson's suggestion, Professor Kim revised the curriculum of the Department and paying a great effort to make up an improved department along the suggestion made by Dr. Bailey and Professor Burson in future.

Park, Zin Hwan. Mr. Park studied farm management as a major and statistics as a minor. He is now teaching rural sociology, statistics and seminar in agricultural economics. In his plans for future studies and activities are included: a. Theoretical inquiry for the problem of how to apply the theory of production economics in far eastern conditions; b. More concentration in farm management research work using modern statistical techniques; c. Lead students majored at Department of Agricultural Economics to be better friends with farmers and farming.

Paik, Woon Hah. Professor Paik studied entomology and applied entomology. He is teaching entomology, applied entomology and laboratory works. A research work on the control of the harmful insects, which is desperately needed for the increasing of the food production in this country, has been initiated by Mr. Paik under the direction of Dr. Mickel.

Chung, Hoo Sup. Mr. Chung studied plant pathology in Minnesota, and specialized in diseases of cereal crops. He is teaching plant pathology and micro-biology and laboratory work, since returned. He is using many prepared slides at his lecture for the best demonstration. In spite of plant pathology being one of the important subjects as a basic course for many departments concerned, this College has not had a good trained man in this field. Mr. Chung is the only man in this field. It will be expected that he can build up a good foundation of the plant pathology in both applied and theoretical phases in this country.

"The following improvements which have resulted primarily from Minnesota staff members who have served in the College of Agriculture, Seoul National University, have been made: a. Minnesota staff members carefully studied the list of equipment and instruments already ordered for the respective departments, and whenever they found a new item was necessary for a department, they added it to the previous list. In this regard, they made a great contribution to make up a good standardized laboratory; b. Dr. King and Dr. Mickel had especially made a contribution in teaching the graduate students, for the school made a special class for graduate students, to teach the micro-techniques and field training; c. Also Dr. Mickel and Dr. King carefully studied the prevailing curricula for the respective departments and they made many helpful suggestions for future development of the departments; d. They took the field trip through the country, and had good opportunities to observe the real situation in this country. Following this trip they made a wonderful suggestion to develop the applied plant pathology and applied entomology for the increased sound production of various crops; e. Professor Bridgford has been leading investigations on many varieties of soybeans, wheat, and barley brought from the United States to check whether these varieties are adaptable to Korea or not. He also gave many suggestions in teaching and practicing students; f. Suggestions made by Minnesota staff members, to be accomplished in future, are still pending for various reasons.

"2. The progress in research.

"Since the many equipment, instruments and chemicals have arrived at the College, research works at each department have been initiated in many ways: a. At the Department of Forestry, an anatomical study and investigation of physical properties of exotic species in Korea have been carried on with the material received. Also, a research in tree breeding has been conducted by Dr. Hyun; b. Various stock feeding experiments have been conducted for a good demonstration purpose at the Department of Livestock, including the individual research work mentioned before; c. At the Department of Agricultural Chemistry the following problems are being investigated: (1) Natural control of pine moths by fungi; (2) Experiment of sugar beet cultivation in Korea; (3) Alcohol production by the submerged culture; d. Research work in applied plant pathology and applied entomology which is desperately needed for the increasing of food production in this country has been initiated by Mr. Paik and Mr. Chung under

the direction of Dr. Mickel and Dr. King at the Department of Agricultural Biology; e. At the Department of Livestock, eggs of hens and turkeys were transported from Minnesota by air, and hatched and raised to find adaptability to this country. The results will be reported later.

"3. Not much change was made in administration contributable to the cooperative project since the last report was made. As a decision-making body in administration, however, the Dean has set a regular department heads' meeting once a week from last spring. All the matters regarding this cooperative project are discussed and decided finally at this meeting.

"4. As far as the laboratory work and field practice are concerned, as the report made before, it was almost impossible to carry them out at the College, because nothing had been left for accomplishing these purposes until necessary equipment and instruments arrived under this cooperative project. However, following the arrival of equipment and instruments from Minnesota, each department had gradually started to move toward the plan they made for the laboratory work and field practice. For example: a. Department of Agriculture: This Department had a great difficulty to practice students even in the field, because of the lack of equipment and instruments. Now these difficulties are eliminated very much in the field and laboratory as well. Scales, germinator, moisture meter, microscope, etc., are used for micro-technique, and balances, glassware, and chemicals for the laboratory works of crops and horticulture, new; b. Department of Forestry: This Department was the same as the others. However, part of laboratory works at this Department had been carrying on nicely. Receiving many surveying equipments (from UNKRA aid), hundred percent of work has been carried on for wood technology. Much equipment ordered has not arrived yet, but using microtome, microscope, moisture-meter, dessicator, screw micrometer, glassware, and chemicals, etc., wood anatomical work and part of wood physics laboratory work have been carried on. For the silvicultural laboratory work and field practices, this Department has been doing quite nicely with instruments received. Student practice for Forest Management with the equipment such as growth borer, callipers, xylometer, hipso-meter, tape, etc., has been going on; c. Department of Livestock: Using tube-mill, milk tester, ice-cream freezer, milk-cooler, artificial insemination apparatus, scales, thermometers, incubators, refrigerator, microscope, glasswares and chemicals, this Department started laboratory works in animal breeding, swine production directed by Professor Yong Bin Lee, and in feed and feeding, poultry nutrition directed by Professor Sang Won Yun from last semester. Of course, not sufficient laboratory work was made, since electricity and water supply are still not enough; d. Department of Agricultural Engineering: For the surveying practices in the field, this Department has been using all surveying equipment received from Minnesota, from last semester, and the physics laboratory, with the equipment and instruments received, is being directed by Prof. In Kun Han and Bong Soo Kim; e. Department of Agricultural Chemistry: In spite of this Department having unfortunately suffered by fire last spring, equipment and instruments received under this project had been mostly rescued. Under this circumstance the Dean allocated a new laboratory room for basic-chemical laboratory work. Now, using balances, microscopes, water-bath, refrigerators, PH-meter, heater, booster, thermometer, glasswares, chemicals, etc., organic chemistry laboratory for basic course, directed by Lecturer Chan Joi Kim, and soil laboratory directed by Lecturer Wang Kum Oh, and other laboratory work for graduate students directed by Professor Ho Sik Kim have been carried on from last semester;

Department of Agricultural Biology: It was a hard nut to crack to determine how the botany laboratory work and zoology laboratory work should be carried out, because of large number of equipment and instruments, and much space were needed for 270 students. However, receiving equipment and instrument such as microscopes, incubator, colorimeter, slidewarmer, germinator, PH-meter, balances, refrigerator, magnifier, etc., and glasswares and chemicals, these laboratory works have been fully directed by Professor Soo Won Kang and Professor Tchang Bok Lee. Also, entomology laboratory directed by Professor Woon Hah Paik and plant pathology laboratory by Mr. Hoo Sup Chung are being conducted.

"Thus, as far as utilization of the received equipment, instruments and chemicals is concerned, much progress has been made. (Note: A table showing equipment received during the past six months has not been included.)

"5. With materials provided through contract support funds, rehabilitation of the buildings and facilities has been carried on since April, 1957. The following table shows the buildings being reconstructed under the FY '55 Project:

<u>Name of Building</u>	<u>Number</u>	<u>Remarks</u>
Dormitory (three storied)	3	To be completed Nov. 30, 1957
Dining room	1	To be completed Nov. 30, 1957
Greenhouses	2	Bidding under way
Work Shop	1	Bidding under way
Farm instrument storage	1	Bidding under way
Livestock shed	1	Bidding under way
Silo	1	Bidding already completed
Library (extension)	1	Bidding already completed
Main building (addition of 1 story)	1	Completed

"The completion of the main building third story has been a great help to staff members, since the study rooms of the teaching staff have been short in number. Following the completion of the main building third story, 13 staff rooms have become available.

"6. Library development: a. The library at the College of Agriculture has been receiving more than 1,000 books and 90 different kinds of scientific magazines which are desperately needed for the preparation of the lectures, references, and student use; b. Under the guidance of Mr. Ostvold, chief of library of the Institute of Agriculture, University of Minnesota, this library changed the classification and cataloging system into the Library of Congress system. This new classification and cataloging system has been a great help toward accomplishing a more effective operation and use of the library; c. The books, magazines and other publications which have arrived at the library are being used almost a hundred per cent; d. Staff members and students have become more familiar with and now use to a greater extent foreign current new books. These publications will be a great help to staff members and students to get the latest knowledge and information."

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

"General: With the building materials under FY 55 and corresponding counterpart funds buildings No. 3 and 5 have been completely renovated except

plumbing, heating and electrical wiring. FY 56 counterpart funds will take care of the plumbing, heating and electrical wiring of building No. 5 by end of this year. Steel pipes for this purpose which were purchased under FY 56 are expected to be delivered by middle of October and insulated wires and switches are already on hand. With the FY 56 plywood and lumbers, all doors of buildings No. 1, 2 and 4 are under construction and expected to be fixed by middle part of October. Fortunately we could manage to get our Government funds to replaster building No. 1, 2, and 4, last year. In addition to the counterpart funds about 20,000,000 hwan of next year's ROK Government funds will enable to complete all laboratory tables, library desks and furnitures for the faculty by next spring. For security reasons steel grates were installed in all windows of the first floors of building No. 1, 2, 3, and 4 except front sides of the building No. 1 and 2 which are exposed to be watched by guards at all times.

Department of Architecture: Originally intended to put much more emphasis on design works rather than constructional analysis. Nobody will deny the recommendations contained in the advisors' reports, which were written after carefully analyzing the local conditions and consulting with Korean colleagues to improve the specialized fields concerned, is agreeable. To materialize these suggestions and recommendations, however, there are lots of formidable factors of obstacles. Due to such obstacles, after having three men being trained under this project no specific improvements in either designing or curriculum in this department has been noticeable. Several carpenter's tools are received and they will be installed by end of this year. More emphasis on improvement is going to be put from next semester.

Chemistry:

1. After returning from the States, they are trying hard to teach in the classrooms in the same way as they learned in the States making substantial prints of texts to cover up the shortage of the text books. New design of laboratory rooms to be installed in the building No. 5 and emphasis on good maintenance of laboratory equipment and students cleaning habits of their laboratory rooms are remarkable.

2. About 70 per cent of the equipment which were received are being used and the remaining 30 per cent will be used after being installed in the building No. 5.

Qualitative Analysis Room: By using the centrifuge the laboratory works are quite expedited. Using the window fan the pollution of the room air is much lessened, at the same time, in order to save chemicals the system has been changed from macro to semi-micro.

Quantitative Analysis Room: By using the weighing, heating, titrating instruments and water still, the laboratory works of the students are convenient and effective.

Starting from the next semester, after all equipment received being installed in the scheduled rooms in building No. 5, total number of analysis works to be taken by the student per each semester will be increased about 30 per cent.

Chemical Engineering:

1. This department has three men to return from the States after getting Ph.D. degree within two years. Three men already returned after studies under this project. Original intention was to put more emphasis on chemical engineering instead of applied chemistry. Local conditions do not allow this department to rely entirely on chemical engineering.

To take care of the equipment, this department has adopted to check-in and -out system when students want to use the equipment in their laboratory rooms. Good maintenance and strict instructions to be given to the students beforehand are attributable to the efforts of the faculties who have returned from their study under this project.

2. Among total allocations of \$79,294.39 of this department for the equipment under FY 55, \$32,013.99 worth equipment, mostly equipment for unit operations, have not yet been procured. The equipment requested under FY 55 could be classified into three parts, i.e., unit operation, physical chemistry and general chemistry equipment. Most of the last two parts equipment has been received.

The pyrex glass wares are used for the physical chemistry laboratory rooms of the sophomore, such as, distillation, distribution low, absorption, fractional distillation and chemical kinetics; and for industrial analysis rooms of junior, such as, phosphorous determination in apatite, determination of -CHO, and C = O by iodine method, sugar determination and nitrogen determination; and for the unit organic processes laboratory of junior, such as, nitration, sulfonation, amination, etc; and for the industrial chemical laboratory rooms of senior, such as, preparing cellulose acetate, ion exchange resin, viscose, orange II, methyl orange, aspirin, and plastics. Other equipment, such as thermostat, vacuum pumps and P.H. - meters are used also effectively in above laboratories.

The following equipment are used in measuring various experimental values: Potentiometer - for the measurement of potentiometric titration electromotive force; Refractometer - for the measurements of refractivities and densities of various solutions; Conductivity bridge - for the measurements of conductivity.

It is obvious that most of above mentioned laboratory work were not offered without those equipment.

From next semester, a building of building No. 5 covering 12,297 square feet of floor space will be equipped with the various incoming facilities to be used as the unit operation and special research laboratories.

3. Professor Kim, Dong Il, while he was in the States, got the practical idea about safety glass which has been one of his main interests for a long time. Using several equipment newly received under this project, he succeeded to make triplex glass with imported plastic sheet. Now he is undertaking to expand pilot plant size laboratory.

Professor Lee, Chai Sung, the department head, is underway on his research works of "Synthetic gasoline, synthetic rubber and plastic compounds out of

Korean anthracite". As the first step of this research work he has to control the contents of components of the generated gases. With the aid of the new equipment, such as, gas analyser, flow meter, wet test meter, pressure regulator, optical pyrometer, etc., the components of the generated gases are now perfectly under control. Within several months I am sure that we can expect some successful result at least on one of his research works.

Department of Civil Engineering:

1. The improvements in curriculum and teaching methods of this department attributable to the efforts of the faculty returned from the States under this project are as follows: a. The number of subjects to be taken at the same time are reduced from 12-13 to 7-8; b. A subject is normally to be finished in one semester - despite strong offense by a professor who insisted to teach a subject for two years; c. All subjects other than basic ones for the civil engineering are simplified, on the other hand basic subjects are much more emphasized; d. A subject, "Design of Foundation", is newly added which has been found as one of the basic subjects for the civil engineering. All basic subjects, such as, Stresses of Structures, Hydraulics, Steel Structures and Design of Foundation, have an hour a week for exercises or tests regularly; e. The exercises of the subjects are emphasized more on the numerical calculations than theory.

The improvements carried out by the suggestions made by Dr. Andersen from the University of Minnesota: a. Same as above a; b. In order to make the faculty stay in the college and make them busy, the department is trying to get some experimental works from outside with pay, up to now it was in vain. The department head is quite optimistic about this outside works, especially from the U. S. 8th Army.

2. The extent to which laboratory equipment received in use: a. Surveying instruments - are fully in use; b. Soil test equipment - mostly are in use, except triaxial test; c. Concrete testing laboratory - this room is not fully equipped. All equipment on hand are fully in use; d. Hydraulic test laboratory - only a few items are received, will be equipped under the FY 58 funds if approved.

Department of Electrical Engineering:

1. This department has the largest number of faculty returned from the States under this project, eight of them came back by end of last August. Since their return, many text books are used in their lectures, more home works and weekly tests are given. They are discussing about the curricula to make simplified and effective. More improvements are expected from next semester. This department is one of the departments I am worried about. More intercooperations should be emphasized.

2. Most equipment, about 90 per cent received are in use effectively, except several motor-generators which are undertaken to be installed by end of this year.

Major laboratory tests excluding basic laboratory works are as follows: Characteristics of battery, load characteristics of various D.C. motors and generators, measurements of D.C. machines, various tests of transformers, tests of induction regulators, no-load and load characteristics of an alternator, regulations of alternator, characteristics of synchronous motor, tests of rotary converter, etc.

Department of Electronics:

1. This department has only one man trained under this project and another one under Government funds. They have improved a lot the teaching methods, such as, many text books are in use with considerable home works. This is the one of the most improved departments which take good care of their equipment using check-out and-in system for the students.

2. Practically no equipment were available before the ICA equipment except several basic ammeters and voltmeters received under UNKRA Project. Most laboratory works have been carried out after the ICA equipment received, and since the equipment of this department are mostly portable which do not need to be installed, they are 100 per cent in use.

3. With the various measuring instruments and meters laboratory tests by the students are being done more practically and exactly both in quality and quantity. The number of subjects of laboratory work are now being given to the students is one a week instead of the former one a month.

4. The laboratory reports of the students are being improved gradually in both accuracy and rapidity. Consequently the students have keen interests about the laboratory works and they are aware of the importance of the good maintenance of the equipment.

5. The amateur radio station and the radio shop - to repair radio sets at free - are newly established and the latter is attracting quite an attention not only from the College but also from the entire university.

6. Major laboratory tests are as follows: Electromagnetism and other basic tests, high frequency, lab., circuit theory lab., antenna lab., electron tube lab., etc.

7. Planning for the first semester of 1958. To facilitate the quick demonstration during class hours, the necessary equipment will be attached to the main class rooms of this department with protective facilities.

Transistor and servomechanism labs. will be newly established.

Characteristics of the propagation of the scattering waves in ultra-short waves will be tests after the completion of the antenna and its accessories which is being undertaken with the counterpart funds now.

Department of Mechanical Engineering:

1. The improvements in classrooms are much or less the same as other departments, such as emphasis of numerical calculations, home works, frequent tests, etc.

The subject of air conditioning is newly added, after Assistant Professor Kim, Hyo Kyun who studied air conditioning at the University of Minnesota returned. In some recent industrial fields, the air conditioning problem became more important for the quality control of the products.

2. About 70 per cent of equipment is in use effectively, others will be in use from next semester.

Newly added laboratory, works with new equipment are: Stress analysis laboratory, exhaust gas analysis of internal combustion engine, refrigeration cycle analysis, heat treatment of steel with high frequency furnace, etc.

3. With the completion of low temperature laboratory by the end of March next year, it is possible to test the heat transmission coefficients of building materials. This is going to be a good practice not only for the students but for the Korean building material industries. It will be a great help to improve the quality of the building materials in Korea.

Department of Metallurgy:

1. Textbooks for the students are scarce, reproductions of good textbooks are needed. Temporarily typewritten copies with blueprints are used. Home works are having greater weights to the grading system. Lectures are closely related to their laboratory works.

According to the Professor W. W. Staley's suggestion, equipment requested under FY 57 are concentrated to ore dressing laboratory, realizing the importance of ore dressing in this department.

2. About 60 per cent of equipment received are now in use. Other heavy equipment, such as crushing roll, pulverizer, ball mill, wilfley table, vibrating screen, etc., will be set up in building No. 5 and will be used from next semester.

The major laboratories newly established with new equipment are: Iron metallurgy laboratory - Quick carbon test and sulfur determination of steel; Physical metallurgy laboratory - Microscopic structure of metals. This laboratory needs badly the H_2 - gas for the high frequency melting furnace.

3. From next semester, welding, both lecture and laboratory, will be added. The welding room will be in building No. 5.

Department of Mining:

1. The improvements in lectures are: The contents of the lectures are scheduled by week, by month and by semester; The curriculum is scheduled to be changed gradually. Textbooks are in use as much as possible. Two lectures, coal (anthracite) preparation and security in mine pits, are newly added.

According to Professor W. W. Staley's advice they are preparing to send the students out to various mines during vacations for the geological practice and survey in mine pits.

2. Most equipment of this department are going to be set up in building No. 5, and they are heavy equipment. However, light equipment are in use or used as follows: a. Geophysical prospecting: Potentiometer, vibroground - During last summer vacation, students went to Hamback Coal mines to practice for one month under the supervision of Professor Hong; Geiger counter, cintilometer - During same period, the student checked the uranium minerals at Samchok; b. Surveying: Transits - Are in use for mine survey; c. Optical instruments and specimens (rocks and minerals) and mineral microscope are being used in mineral tests and specimens which were brought from the States by Professor Hong are valuable for the students.

Department of Naval Architecture and Aeronautics:

1. Three man returned from MIT. Lectures of naval architecture are remarkably improved, using several translated text books. As far as the naval architecture is concerned, I am proud of it, but for the aeronautics quite worried. Advice of Professor Evans from MIT is fully carried out.

2. Except few model making tools (carpenter's tools), which are in use now to make ship models, propeller and anchor models for demonstration purposes, they did not receive any equipment yet.

3. After towing tank is built and completed, this department will be able to serve its unique model ship test for the first time in Korea.

Laboratory of Physics:

1. At the end of each lecture hour, about five minutes are spared for questions. Translated text book is used and monthly tests and problems of exercises are emphasized.

2. Almost entire equipment received are in use, since no equipment for physics were available before.

The major new laboratory works of physics are: Determination of "g" by Borda pendulum, measurement of Young's modulus by Ewing apparatus, measurement of linear expansion coefficients of solid, characteristics of triode tube, combination of simple harmonic motions by sand pendulum, etc.

Department of Textile Engineering:

1. Due to various conditions, this department has not been able to make any rapid change in its curriculum, but gradually. The suggestions given by Dr. Harris are being studied carefully to be carried out with the laboratories which will be equipped with the machineries to come.

2. The equipment already received are fully in use as follows: Fabric tests - pick counter, air permeability, analytical balance, etc.; Yarn test - yarn reel, analytical balance, tensile tester, conditioning oven, etc.; Fiber tests - microscope, analytical balance, etc.

Library:

Up to now very few books are received. By the suggestion of Professor Ostvold, the Dewey Decimal Classification System is adopted."

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

"1. For specifically designated department (including the Seoul National University Hospital) and courses.

a. The nature of improvements which have resulted primarily from the efforts of staff members who have returned from studies abroad under the project.

Dr. Chang, Shin Yo, Assistant Professor of Anatomy, who returned August 5, 1957 has made improvement in teaching anatomy, especially embryology and anthropology, especially as to biometry of body structure.

Dr. Nam, Kee Yong, Professor of Physiology became broad minded in viewing the field of physiology. He is particularly interested in absorption function of digestive organ. Improvement has been made in teaching practices and research works, particularly on body fluid.

Dr. Lee, Ki Young, Professor of Biochemistry feels great responsibilities for adoption to newer efficient system of teaching biochemistry and guiding experimental practitioners as well as performing the personal research works. His main subjects is on bacterial analysis of nucleic acid.

Dr. Lee, Zin Soon, Associate Professor of Biochemistry has improved to teach biochemistry, particularly as to isotope problems in this field.

Dr. Oh, Jin Sup, Professor of Pharmacology, who returned August 5, 1957 has begun the improvement of teaching and laboratory works for students, particularly in toxicology and pharmaceutical biochemistry.

Great improvements has been made by Dr. Lee, Chae Koo, Professor of Pathology. Ways of departmental administration and methods of training second year medical students and postgraduate students have been improved substantially in Western ways.

Dr. Park, Chin Yung, Associate Professor of Microbiology has begun the improvement of teaching the laboratory works, particularly as to tissue culture and virus.

Dr. Seo, Byong Seol, Assistant Professor of Parasitology pays attention to recognition of necessity of interdepartmental activities through seminar, club meeting, etc. and contact with American parasitologists through article interchange, literature checking, etc. He is particularly interested in clonorchis.

At the Department of Internal Medicine, by the efforts of Hahn, Shim Suk, Professor, Chun, Chong Hwee, Professor, Lee, Sung Ho, Associate Professor and Song, Ho Seung, Associate Professor who returned from studies abroad under this project, the system of training students and young doctors has been efficiently

changed. C.P.C. and Grand-round were newly introduced to the course of clinical education, and these gave the better chance of free discussion between teachers and students, and made it possible to acquire broader knowledge on each case presented to the meeting very impressively. The chance of bed-side teaching increased so that students might be able to approach many different cases. Specialization among the internal medicine has been established so that each special case might be more thoroughly studied.

At the Department of Surgery, reorganization of sections in this department has been done by Dr. Chin, Byong Ho, who has returned from the study abroad. For the purpose of efficient and specialized practice of surgery, this department has been divided into four sections, such as, general, neuro, - chest - and orthopedic sections. Prior to this reorganization, there were three sections, in which there were no specialized practice as we have now. Each section is headed by the staff member who was adequately trained in each specialty respectively.

Senior student in the surgical department have also been divided into each section according to their desires, while the junior residents have been assigned to each section under the rotating system.

As the result of this reorganization of the department in past six months, they have accomplished better works in teaching as well as in patient-care.

Following the reorganization of the department, the daily schedule of the department as a whole has been set up. The schedule consists of surgical anatomy conference, tumor clinic, surgical pathology conference, journal club, X-ray conference and case presentation. This schedule has been carried on regularly for past six months with the great interests among all members. It was found that discussions on various subjects which are common interest to all have inspired all to broaden the knowledges.

Dr. Sim, Bo Sung, Instructor of Surgery has begun the improvements of clinical teaching and clinical experience in neurosurgery.

Dr. Kim, Sung Hwan, Professor of Dermatology, has made in improvements in clinical teaching and experience. He is interested particularly in deep X-ray therapy.

Dr. Choo, Kun Weon, Associate Professor of Urology, has contributed to provide pre-operative care, operative procedures, post-operative care and manipulation of urologic instruments.

At the Department of Obstetrics and Gynecology, Dr. Kim, Suk Hwan, Professor, has opened new activities in, such as, presentation of the optional subjects by the undergraduates at C.P.C. and establishment of the definite diagnosis after examining the specimens under the microscope in the Department laboratory.

According to the efforts of Dr. Paik, Man Kee, Assistant Professor of E.N.T. conference is held more frequently than before, and improvements in laryngectomy and radical mastoidectomy have been accomplished. In addition to these, the diagnostic value of the endoscopic surgery are substantially recognized.

Dr. Kong, In Ho, Associate Professor of Ophthalmology is planning to change some of the systems similar to that of the University of Minnesota, especially the system of students' practice in clinic, examination of patients and postgraduate course.

Dr. Nam, Myung Suk, Associate Professor of Psychiatry has recently returned. Improvements in techniques of interviewing patients, clinical psychology, particular treatment and so on, will be successsibly made.

Mrs. Lee, Kwi Hyang, Principal of Nursing School, has improved teaching practices. The curriculum is being developed for a 4 year University program in Nursing. Plans have been completed and bids have been let for the School of Nursing building.

Miss Lee, Song Hi who returned August 16, 1957, has begun the improvements of clinical teaching and clinical experience for the students.

b. The degree to which it has been possible to carry out plans which Minnesota staff members who have served or are serving in Korea have, with their Seoul National University colleagues, been instrumental in developing.

Dr. Flink is serving at this department. He is devotedly engaged in every course of educational program. He participates every conference, ward-round and out-patient clinic, where his comment is always leading.

He is giving three lectures, each for students, graduate students and general staff members about endocrinology, of which we have no specialist until now. In short, by his superior knowledge and eagerness in activities and cooperative attitude, our educational program has been remarkably developed.

The Minnesota staff member directly concerning with the surgical department is Dr. Matthews. He has been most helpful to the department since his arrival in May, 1957. He has been anxious to find out what our problems are, and what we need for the improvement of the department. Free discussion with staff members at the meeting enabled him to appreciate most of our present situations.

His contribution to the newly established anesthesiology department in the hospital has been most magnificent. The technical assistances in the operating room facilitated our surgical procedures and other problems concerning surgical patient cares. As the result of his efforts, the establishment of recovery rooms is due in near future. The lectures given to the senior students by Dr. Matthews for past three months has been a great benefit for the students, in view of the fact that the majority of students have understood his lectures and expressed their appreciations for his sincere teaching. His time schedule for open discussion with staff is entirely welcome by all of us.

In addition to the above activities Dr. Matthews gave lectures on anesthesia at continuation meeting which was held last July. He also is planning to attend anesthesiologist meeting which will be held at Taegu Medical College on September 21.

Miss Low, Adviser to School of Nursing, suggested plans in teacher preparation, nursing administration and curriculum schedule. She attends various meetings. Beside her administrative activities, she gives lectures to head nurses at University Hospital from 3:30 - 5:00 p.m. every day and teaches clinical practice on patient care. The orthopedic ward has been chosen as a model ward for this purpose. She also gives classes in teaching methods to the staff. She helps the teaching supervisor in the hospital.

The necessity and efficiency of central control system was discussed among the staffs returned from study in Minnesota, and since the arrival of the advisers from Minnesota, Dr. Matthews and Mr. Mitchell, the plan has come to the stage of its realization. In July, the hospital superintendent asked Mr. Mitchell to make a plan for rearrangement of the rooms, which meets the principle of central control system. Mr. Mitchell's plan, which is significant of efficient utilization of the hospital area, and of having system of central control of equipment, patient rooms medical record, is being discussed by the Hospital Operating Committee every Wednesday for final approval, on which the hospital will take an immediate action to proceed the plan.

Studying the difficult financial condition of the hospital, and as a method of solving the problem and for providing better teaching to the students and care to patients, Dr. Matthews and Mr. Mitchell have introduced the system. Influenced by this suggestion, the leaders of the hospital administration are explaining to and convincing the high ranking government officials, for the establishment of the system is involved in amendment of laws. (The Law of Public Finance provides that all the incomes of the government institution - the hospital is a government institution - shall be returned to the government, and the Provision for Government Officials provides that any government official - the staffs here are government officials - shall engage in the business utilizing government facilities.)

Mr. Mitchell has suggested numerous things pertaining the hospital administration by either memoranda or oral indication, such as sweeping compound, fire and safety hazards, and measure against theft, etc.

Methods of hospital administration in the United States are being manifested by Mr. Mitchell to Dr. Kim. Recently Mr. Mitchell planned to visit each department of the administration to demonstrate and advise on various administrative problems.

In order to promote recognition of hospital administration, Mr. Mitchell, requested by the Department of Preventive Medicine and the Hospital Administration, gave a lecture on various problems of hospital administration in July.

2. The extent to which laboratory and classroom equipment received is in use for the purposes intended: a. What effect has this equipment had thus far on courses concerning which laboratory work is given?; b. As a result of this equipment what changes in laboratory offerings or requirements have been initiated thus far? What in addition are planned for the first semester of 1958?

To practice the audiovisual system in teaching, the instruments and equipment received have greatly contributed. The curriculum newly established basing on that in United States is under good condition as expected through the cooperative project. In general no changes are expected in curriculum.

As to the effect of equipments received, several departments are selected as samples as follows: Department of Anatomy: Binocular microscopes (3); lab, illuminator for microscope (1) and monocular microscopes (1) were received, and these have greatly contributed to raising histological research works and demonstrations for students. Microprojection (1) is used for seminar for graduate students and demonstration for medical students. Anatomical models (7) are effectively used for demonstration for medical students and nurses. Mocrotome, automatic spencer (1); microtome, spencer precision rotary (1); microtome knives (7); refrigerator (1); centrifuge (1); slide-warming table (1); distilling apparatus, electrically heated (1); sterilizers, electric (1), sharpeners, strip, microtomknife (2); and other glasswares have greatly improved in making microscopic slides for medical students and research works.

Department of Physiology: With photoelectric colorimeter the student became familiar with colorimetry; With microscopes blood cell counting became efficient; With classical kymographs etc., the temporal analysis of physiological recording became accurate; With clinical centrifuge, the students became familiar with such accidents as breaking of tubes, etc.; Mercury sphygmomanometer is being used as standard.

Department of Biochemistry: With the equipments supplied for this department laboratory, many research works and practical guidance for students have already been done. Centrifuge, spectrophotometer, microkjeldahl apparatus and glassware are now in full use.

During past several months, all chemical analysis of serum components of Koreans have been done. They are waiting for the arrival of refrigerating ultracentrifuge, PH meters and so on which are indispensable for carrying out the personal and graduate students' research works. Nutritional problems on Koreans will be dealt by the staff members.

Department of Pathology: Many optical instruments including microscopes, microprojector, projector for lantern slides, photomicrographic equipments are in their excellent conditions. These are contributing enormously and most efficiently to classroom lectures and laboratory works for under - and graduate-students. This audiovisual education multiplies by four the effects of every effort of staff in instruction of pathology. However, some equipments, e.g. autotechnicon, are not in use because of difficulties to get constant supply of electricity. Microtomes, paraffin-and freezing, are in excellent condition. A regular-sized centrifuge is not in use because of lacking heads and carriers. A refrigerator is in proper operation.

Department of Parasitology: The supply of the microscopes for the use of each student has saved time and energy for students to study and for staff to teach.

Department of Pediatrics: Cooking room of this department is fairly prepared with refrigerator, milk sterilizer, milk bottle warmer, nipples, dietary scales etc. which are supplied by cooperative project.

Department of Obstetrics and Gynecology: The artificial pelvis of various kinds and obstetrical manikin are useful for teaching.

School of Nursing: Very little equipment for the nursing arts laboratory has arrived as yet, but it has made possible more effective teaching. No changes in course offerings.

The equipments which have made particular improvement in teaching and research works are as follows: Electrome miniature Nesbit modification 16 Fr.; Alcock modification of Lowenstein lithotrite; Blood pressure instrument calibration 400 mm Silverton finish; Lithotrite Alcock modification of the Lowenstein lithotrite; Van Bergen Respirator; RV3 Refrigomatic oxygen tent; Incubator; 3422 Regulator Flowmeter oxyet combination; SE-18-CSR Champagne Lights 115 volt 60 cycles; 110A American Freas Hot Air Sterilizer electric; Ophthalmoscope-otoscope combination set; Water Bath model 160; Portable Spotlights 110 volts #46; Water Stills Barnstead; Model 404A stand Kinet-O-meter; Autotechnicon, Complete, for A.C.; Polarimeter; Surface Tensiometer; Bed, Hospital; Viscometer including 6 sample cup; Mueller surgical aspirator; Cook County Hospital model aspirator; Stands - basin, double; Shaking apparatus; Rectal Sets, W. A. #318.

3. For specifically designated departments, the nature of progress made in research as result of the cooperative project.

Department of Physiology: Dr. Nam changed his interest of study to the problem of body fluid. His former interest was neuro-physiology.

Department of Pathology: Many progresses in research are foreseen in the future. At present time, there cannot be observed much appreciable results from it.

Department of Parasitology: The supply of refrigerator will be greatly helpful for the study of the trematode life cycle which is undertaking in the department.

Department of Obstetrics and Gynecology: Rh - factors of Koreans are being studied in the Blood Bank, being inactive due to difficulty of getting test - sera.

4. The nature of changes in administration attributable in whole or part to the cooperative project.

Remarkable changes in administration have been made through the cooperative project.

Specific attention has been paid to audiovisual educational methods. This methods is carried out well through using effective use of materials gained under the cooperative project. The principle of this method is thoroughly understood by faculty members and has improved effectiveness in teaching. The former curriculum was revised to Western way. More hours are allocated to laboratory works and practices. Total school hours have been decreased from about 1,200 to about 1,000 hours. The curriculum is mainly based on those of six famous medical schools in United States. Each department at this

school has been gradually sectionized and the good samples are shown at Department of Internal Medicine and Department of Surgery. This fact means that more recognition and improvement are made in specified field.

The clinical staff system has been established. This system will supplement the effectiveness of faculty members in teaching. Most of them are persons in specified field. The Seoul Electric Company Hospital has been chosen as a teaching hospital and about twenty medical students can be educated at that hospital. Same kind of contracts are expected to be made with other hospitals. Furthermore some progress has been made in contract with Army hospitals. Some of the faculty members of this school have been nominated as consultants to Army hospital.

Regular meeting is held every Tuesday morning. This meeting is composed of Dean, Superintendent of University Hospital, Principal of School of Nursing, Director of Nursing Service and all foreign advisers to school and hospital. Problems in administration, teaching, research, cooperative project and other important subjects are discussed. This meeting has greatly influenced the improvement of the school and hospital.

The Rehabilitation Committee is operated under good condition, this committee is composed of faculty members who are familiar with the cooperative project. One of the important subject of this committee is the allocation of business of materials and instruments. This was advised by the foreign advisors and has gradually been carried out well enough to achieve original purpose.

Concerning with University Hospital, important subjects are discussed at the Operation Committee. This committee is engaged in rearrangement of wards and rooms, allocation business and so on. Centralization system of wards and instruments is the base of this committee. Besides these subjects, many items have been decided by this committee and practiced effectively. Some of the items decided and practiced are as to interview hours for patients, regulation on relatives of patients, cleanliness of wards and so on.

The Administration Meeting composing of Superintendent of the University Hospital, Director of Nursing Service, Director and Subdirector of General Affairs and Director of Pharmacy is held every morning at the University Hospital. Main purpose of this meeting is concerning with the general affairs of the hospital.

Housekeeping-round is practiced frequently at the University Hospital. The purpose of this round is to improve and inspect the general situation of the hospital involving patient care, cleanliness of building, etc.

More cooperation between Nursing Service and the School of Nursing is practiced. Conferences are being held with the Seoul National University Academic Dean to facilitate further education of nursing instructors.

The discussions about private patients system have been done frequently to improve the general economic situation at the University Hospital. Although it is needed to practice this system to improve the poor economic conditions, this must be studied further because of the specific conditions and customs in Korea.

The number of unpaid-residents have been decided both at school and hospital according to the necessity and size of each department. Formerly the number of unpaid-residents was almost unlimited and this fact influenced the operation of school and hospital in irregular situation.

The establishment of the School of Public Health is planned. Although it is urgently needed to have this school, and frequent attempt has been made many obstacles and difficulties interrupted its establishment. The final decision on this subject will be made with the arrival of Dr. Bosch from University of Minnesota.

Free delivery room system has been operated at the Department of Obstetrics and Gynecology under the auspices of the cooperative project.

5. The nature and degree of completion of building and facilities rehabilitation and improvement work accomplished and materials provided through contract support funds.

Repairing of kitchen at the University Hospital was completed. This improved very much the food supplies for patients.

Repairing of Department of Psychiatry Building was completed. Patient care, teaching and research works became effective.

Obstetrics and Gynecology building and Eye Clinic building were completed. These buildings were neglected for ten years before the cooperative project had begun. Great improvements have been made in patient care, teaching and research works by the completion of these buildings.

Repairing of Biochemistry building was completed. Improvements have been made in teaching and research works.

Piping and sinks at laboratories were completed. Much improvements and effectiveness have been shown both in students' laboratory activities and research works.

At the school, water tank has been half-completed. It is beyond the discussion that the regular water supply is needed. When the water tank will be completed, laboratory works and research works will be improved greatly.

Roof - repairing of the school building was completed. This protects the building against rain.

Animal house is not completed yet. This is expected to be repaired under the auspices of the cooperative project.

Painting of the building was completed.

Pre- and post-operating rooms were completed. These rooms have improved not only the patient care but also teaching.

Bids have been let for the building for the School of Nursing. Ground-breaking Ceremonies will be held.

The Sanitation Committee composing of faculty members and graduate students of Public Health and Preventive Medicine, investigated the entire sanitary condition of the University Hospital and made comments for the rehabilitation program from the point of view of sanitation. This influences not only the rehabilitation but also practicing sanitation for students. This kind of work has real educational value.

6. What library and library practice improvements have occurred as a result of the cooperative project.

Owing to the recognition of importance, which mostly advised by Dr. Matthews, the Committee of Library has been established. Although there were rules for library these were not enforced well. Most of the books were kept by each Department and they were not shared well. New rules were made by the Committee and faculty meeting approved these. These are majorly based on Minnesota rules. The first policy on library which was established by the Committee was to build centralizing system. As of now this plan is relatively well carried out. It is, however, needed more time to practice the new rules completely because of the long-lasting inadequate custom.

The Committee pays particular attention to provide readings for students. Before the establishment of the Committee the readings were poorly provided for the students. There is only one full-time librarian at the College of Medicine library and he works at daytime. According to the shortage of budget students' self-governing body was organized for the purpose of supplement the librarian business after school hour, usually from 5 p.m. to 10 p.m. In order to correct this disadvantages, it was decided to employ one more librarian for night time.

Nursing books are catalogued in the Medical School library and students of nursing may use this library.

According to the necessity of trained medical librarian it is anticipated to have a medical librarian who is supposed to be trained at United States through Dr. McCoy of the China Medical Board.

For the next year project, it has been planned to enlarge the reading room and other library sections at this school. The number of books and kinds of journals received through this cooperative project and other sources are as follows, and most of these are arranged for students. In addition to these some important magazines, e.g., Time, News Week, etc. are regularly purchased by PTA fund for students. Also specific attentions are paid to make up for back issues and lost volumes.

<u>Textbooks</u>	
Through the cooperative project	476 ea
Donated by University of Toronto Library	46
Donated by Mrs. Street	18
Donated by the French Embassy	34
Donated by the American-Korean Foundation	<u>252</u>
Total	826 ea

<u>Journals</u>	
Donated by University of Toronto Library (received)	26 kinds
Donated by Ministry of Education (received)	5 "
Donated by UNESCO (received)	31 "
Through the cooperative project (in receiving)	159 "
Donated by the Rockefeller Foundation (in receiving)	30 "
Donated by UNKRA (in receiving)	<u>22</u> "
 Total	 273 kinds"

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

"The questions as to how laboratory equipments for students and research facilities of the College of Veterinary Medicine could be rehabilitated and supplemented, how to bring the level of veterinary education to those of the advanced countries by giving the better and improved methods of instruction on the one hand and training the staff members to be better prepared for the instructions on the other, and how to increase and expand the number of classrooms and laboratory facilities for better instructions and researches, have been our supreme objectives to realize for a long time.

It was not considered possible, however, to accomplish the aforementioned objects in the immediate future, the problems being closely related with the insufficient budget, and they have always been great obstacles to the staff members. Fortunately, however, \$50,000 assistance for laboratory equipments and eight (8) years' training program for the staff members which enable us to rehabilitate this college for the benefits of all concerned, veterinary students and staff members alike, were allocated to this college in 1955.

The bulk of the equipments purchased with the financial assistance are expected to be received by this college, and the first shipment was already received last May 17th, 1957. It is no doubt that the equipments greatly encouraged the staff members in both spiritual and material ways.

The training program of staff members under the cooperative project was started in August 1956, and two professors have returned, two are currently in participation at present, and another four staff members are expected to study under the project. With the continuous arrival of laboratory equipments and the further training of staff members, it is convinced that they will be the immediate driving force for the rehabilitation of this college.

The nature of improvements and progresses resulting primarily from the efforts of staff members who have returned from the studies abroad and with the use of equipments received up to date under the project are specifically reported as following:

1. For specifically designated departments and courses

a. The nature of improvements which have resulted primarily from the efforts of staff members who have returned from studies abroad under the project.

The staff members returned from the studies are Dean Oh, Soon Sup and Associate Professor Rhee, Young So. Dean Oh has returned on January 30, 1957

upon completion of 6 months' training program. He studied on the advanced system and administration of veterinary education at the University of Minnesota and the colleges in other states, and acquired advanced knowledges and techniques in veterinary anatomy in which he majors.

Upon returning, Dean Oh has made every effort to change a part of the conventional curricula for the purpose of giving better and sufficient instructions to the students, and his efforts in the instruction of veterinary anatomy are particularly directed to the application of such advanced methods acquired from his study abroad as the fixation of vascular system and neuro-anatomy for the laboratory works of students.

Associate Professor of Veterinary physiology, Dr. Rhee has returned on August 10, 1957, upon completion of 1 year training program at the University of Minnesota. The overall change he is planning to put into effect in connection with the methods of instruction in lecture and laboratory works of students are: (1) To renew the contents of lecture in Veterinary physiology with the advanced knowledge and techniques obtained at the University of Minnesota; (2) To put an end to the conventional laboratory works in which the students have not been able actively to take part and permitted only to observe the demonstrations by the instructor due to the shortage of laboratory equipments, and enable each student to have a free access to the laboratory research facilities upon the arrival of new laboratory equipments; (3) To alleviate one of the difficulties confronting students, and effort and preparation are being made to import the text materials and to publish the Korean translation of textbook in veterinary physiology.

b. No staff members of the University of Minnesota have been sent until Dr. Willard L. Boyd arrived on September 9th, 1957. He is expected to help develop this college and give us invaluable advice and recommendation to bring the level of Veterinary education up to those of advanced countries.

2. The extent to which laboratory and classroom equipment received is in use for the purposes intended.

a. The equipments received up to September 20th, 1957 are 61 items in all, the most of which are for the animal clinic use. However, the 31 items of them are accessories that they will not be used until the arrival of the rest of the equipments. The effect the use of the equipments have produced are following: (1) Animal Hospital: The movable operation table replaced the outmoded wooden table, and the inconveniences in surgery were removed; With the receipt of anesthetic equipment (which can not be purchased in Korea) the formal method of general inhalation anesthesia can be performed; With the increase of such equipments as Restraint equipments, knives, retractors, forceps, and syringes etc., the number of students who can participate in the laboratory works has increased from 10 to 20; With the use of new equipments, the unnecessary procedures in the treatment of patients were removed and the range of treatment extended; With the acquaintance of new equipments in their uses by the students, the further development in surgical techniques are expected.

(2) Department of Veterinary Physiology. The new model of mondrum and operating lamps were those which were most needed for the laboratory works in this department. With the introduction of the new equipments, consequently,

the number of students able to participate in the lab work has been increased from 8 to 16, and their uses are shared with the Department of Pharmacology.

(3) Department of Infectious Diseases. Minnesota Testing Box, Thybromal Test Unit are new and invaluable equipments for the diagnosis and laboratory works for the students. The use of these equipments will be of great help in the identification of Brucellosis, Pullorum disease, and bovine mastitis, and the new laboratory offerings which have been unable to carry out up to the present have been initiated.

b. Changes in laboratory offerings or requirements initiated thus far as a result of these equipments. What is planned for the first semester of 1958 in addition: (1) In view of the fact that the new equipments in use are small in number, no remarkable changes have been made and no particular requirements initiated thus far. However, as the equipments are received in succession, the laboratory rooms must be expanded the such facilities as water supply system, experimental tables, electric wiring and heating system will be necessary to be extended; (2) In the first semester of 1958, it is planned to extend the laboratory of chemistry (60 pyungs), Operation room (40 pyungs), X-ray room (20 pyungs), laboratory for bacteriology (60 pyungs) and their accompanying facilities.

3. The nature of progress made in research for specifically designated departments as a result of the cooperative project.

As mentioned previously, the equipments received are 61 items and two professors have returned from studies abroad under the cooperative project. For that reason, no outstanding progress has been made in the field of research so far as the staff members are concerned. However, it is considered possible that as the equipments are fully received and the more staff members are trained, the fuller and more remarkable improvements and progress could be made in the research field of specifically designated departments.

4. The nature of changes in administration attributable in whole or part to the cooperative project.

No specific change has been made in administration under the cooperative project.

5. The nature and degree of completion of building and facilities rehabilitation and improvement work accomplished and materials provided through contract support funds.

It is regretted that this college has not had any opportunity to take advantage of the fund for construction work and its materials. However, the works accomplished by the appropriation of Seoul National University budget are an operation room (30 pyungs) accomplished in December 1954, experimental tables, water supply system and electric wiring for the departments of Chemistry and Pharmacology in February 1955, and a classroom (60 pyungs) in June 1955. In addition, the reconstruction work on the new school site in Chung-yang Ri to

which this College is to move is underway with 35 million Hwan of the University budget. The rehabilitation of the first floor (265 pyungs) is expected to be accomplished at the end of October, 1957. The complete reconstruction works including the second and third floor of the original building is planned to be accomplished with the government during the fiscal year of 1958.

6. The improvements of the library and library practice occurred as a result of the cooperative project.

Though no direct assistance has been received, a librarian of this college participated in the work-shop in relation to the library practice given by Professor Harald Ostvold for 20 days from July 24 to August 1, 1956, and brought a remarkable improvement to the library of this college."

(Note: Three tables included in the report - on staff members returned from studies abroad, on staff members currently abroad, and on publications and translations, are not included here.)

These reports by Seoul National University Deans leave an impression of accomplishment under the project, point to areas in need of specific attention and, in the main, take an optimistic view of progress to date and expected.

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 initiating the program in Public Administration.
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 in helping to effect improvements in teaching, research, organization and administration.
5. Seoul National University authorities 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 Seoul National University staff members 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 University 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.