



# Briefings

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**Special Double Issue:** This issue of *AirTAP Briefings* features extended coverage of the AirTAP 2016 Fall Forum.

## Forum looks at airport funding, planning



The 2016 AirTAP Fall Forum was held October 13 and 14 in Buffalo, Minnesota. The first day of this event took place at Wild Marsh Golf Club and featured sessions on airport lighting, zoning, runway condition reporting, and long-term planning, among other topics. (Presentation slides from many of the sessions can be found at [airtap.umn.edu](http://airtap.umn.edu).) Jim Grothaus, AirTAP director, opened the forum by welcoming attendees from across the state and encouraging them to learn from each other and from the aviation experts presenting.

Kathy Vesely, assistant director of the Minnesota Department of Transportation (MnDOT) Office of Aeronautics, reported that the office was busy the past year registering drones as well as traditional aircraft—a process complicated by new Federal Aviation Administration (FAA) rules. The process affected the agency's safety and enforcement group, too, because many of these aircraft need a commercial operators license, she said.

"So if someone calls you saying they plan to fly within five miles of your airport, you might want to ask them some questions, including if they're registered in the state and have a commercial operators license, and if they say no, you can send them to us," she said.

The aeronautics office was also involved in introducing the Toward Zero Deaths program (which focuses on reducing roadway injuries and deaths) into Minnesota aviation, Vesely said. The initiative will use tactics from that program, such as digging into the data on causes and locations of aviation crashes, to try to reduce the general aviation (GA) accident rate.

The office has begun working on its budget request for fiscal year 2018–19. Currently, there's an approximately \$10 million surplus in the state aviation fund, Vesely noted. "We had asked the last legislature to appropriate it so we could use it on important projects at airports across the state, but they did not succeed in passing that—so we're asking again," she said. "We've also requested to recover the ability to spend state airport funds that are collected above our fund balance policy without a direct appropriation...[so] the commissioner will have some authority to do that if this is reincluded in the law." Vesely said that the actual number of the appropriation would be announced by the governor in January 2017 when he publishes the budget for the year.

Following Vesely, Tom Werner, executive director of Duluth International Airport and current chair of the Minnesota Council of Airports (MCOA), reminded attendees of the importance of Minnesota's small airports as economic drivers. GA has a \$12.2 billion economic impact on the state's economy through its network of 135 public airports. For every aviation dollar spent at the airport, more than \$1.52 comes back to the local economy, and more than two-thirds of all the hours flown by GA aircraft are for business purposes. And when people fly to a community's airport, they

often buy fuel, eat in local restaurants, rent cars, use local businesses, and participate in area entertainment. "So your airport is extremely important to your region [and] your community, and we need to tell that story. There may be people in your community who...undervalue the airport. We need to continue to be ambassadors and advocates," he said.

MCOA's mission is to ensure the safe operation and adequate funding of all Minnesota airports using the members' collective voices and the exchange of best practices, Werner said. "We have a mature



*Jim Grothaus introduced Buffalo airport manager Chris Fredrick.*

aviation system in Minnesota and one that we need to maintain in order to continue to provide that economic impact."

The organization's current initiatives include state airport zoning reform, an increase to MnDOT's appropriation, and the formation of an aviation caucus. "We have a basic story to tell and we're going to be doing a lot of that this year at the legislature," Werner said.

The fall forum was sponsored by Minnesota AirTAP (housed within the Center for Transportation Studies) and the MnDOT Office of Aeronautics, in cooperation with MCOA.

## Security, GA air service among issues facing new MAC director

This year the AirTAP Fall Forum welcomed new Metropolitan Airports Commission (MAC) executive director and CEO Brian Ryks, sharing thoughts on returning to Minnesota and the local aviation scene. Ryks took the helm in May 2016, succeeding Jeff Hamiel, who had been with the MAC for nearly 40 years.

As executive director, Ryks oversees day-to-day operations of one of the nation's largest airport systems, including Minneapolis-St. Paul International (MSP) and six general aviation (GA) reliever airports in the Twin Cities metropolitan area. Ryks was previously the executive director and CEO of Gerald R. Ford International Airport in Grand Rapids, Michigan. He began his aviation career at MSP in 1986 as a noise and operations technician after graduating from St. Cloud State University.

Ryks said one of his goals coming into the MAC is to continue

to focus on aviation as a whole throughout Minnesota. "I remember how hard it is, working at those [small] airports, because everything is on your shoulders." He said he's interested in hearing from outstate airports to learn how the MAC can support them.

For 2016, the MAC is projecting net revenue of almost \$60 million to invest back into the airport system, Ryks said. The top revenue producer is concessions, with parking the largest contributor at about \$100 million annually.

The MAC invested \$8.2 million in the reliever airport system for capital improvements in 2016. "Relievers have often taken a back



*Brian Ryks*

**Ryks** continued on page 3

# New approach for assessing pavement conditions

As airport operators know, ice, slush, and snow on the runway can make for hazardous conditions that contribute to aircraft incidents. But these undesirable effects can be reduced. This winter, airport operators will have a new, less subjective, approach available to help. In this session, MnDOT aviation representative Chris Meyer described the new standards for runway condition reporting (which took effect in October 2016) aimed at improving safety at airports during inclement weather.



TALPA—takeoff and landing performance assessment—is an initiative launched by the FAA in the wake of an accident that occurred in December 2005 in which a Boeing 737 overran the runway at Chicago Midway Airport, killing one person on the ground and injuring others.

The National Transportation Safety Board recommended that the FAA develop and issue formal guidance regarding standards and guidelines for developing, delivering, and interpreting runway surface condition reports. As a result, the FAA formed the TALPA aviation rule-making panel, which brought together industry leaders, regulators, air carriers, and airport operators to develop standards for terminology, contaminants, depth, and temperature. The result was the runway condition assessment matrix (RCAM), a new tool for airport operators to report a runway surface assessment when contaminants (e.g., water, frost, slush, ice, snow, oil) are present on paved runway surfaces.

Meyer explained several key components of the matrix, such as the runway condition code, which represents the runway condition description based on defined terms and increments (applied when more than 25 percent overall runway length and width is affected). Mu values are no longer used; the runway condition code now supersedes the Mu values, he noted. “That said, the tools that you use to generate the Mu values can still be used for generating runway condition codes.”

Airports have several options for disseminating the runway condition codes, Meyer said. The preferred one is to use NOTAM Manager. This system allows the user to input the runway contaminants, along with their temperature and depth, and then automatically generates a NOTAM with the correct runway condition codes. “It makes it very easy for airport operators—it gives them a tool to promote real-time runway condition monitoring and get that informa-

tion out to pilots in a timely fashion,” he said.

For those without access to the Internet, the information can be called in to a flight service station, which will then issue the NOTAM, Meyer said. Additional options are to use the airport traffic control tower or the Common Traffic Advisory Frequency.

Downgrade assessment criteria should be used when data suggest that conditions are worse than indicated by the present contaminant. “For example, if the system gives you a code of 3, but your observations suggest it’s more likely a 2, the system gives you the option to downgrade conditions based on your discretion,” Meyer said. Those tools include the Mu value, vehicle directional control observations, or pilot-reported braking action. “I’d encourage you to err on the side of safety,” he said.

As an airport operator, you have a responsibility to educate yourself, Meyer said. Two resources he recommended were the FAA website (search “TALPA”), which contains links to related videos, and FAA Advisory Circular (AC) 150/5200-30D: *Airport Field Condition Assessments and Winter Operations Safety*.

## UAS: Coming soon to an airport near you

In June 2016, the FAA finalized the first operational rules for routine commercial use of small unmanned aircraft systems (UAS), or drones, in an effort toward fully integrating UAS into the national airspace. At the fall forum, MnDOT aviation representative Paul Peterson gave an overview of the rule—known as Federal Aviation Regulations (FAR) Part 107—and possible implications for Minnesota’s airport operators. His hope, he said, is to foster more positive, rather than antagonistic, relationships with the UAS community.

The FAA has determined that UAS are aircraft, and as such, those weighing over a half-pound must be registered, regardless of how they’re used, Peterson noted. The FAA website can help UAS owners walk through the registration process.

Unmanned aircraft can operate recreationally, commercially, or civilly (the latter includes law enforcement and EMS). According to FAR Part 101.41, hobby or recreational unmanned aircraft are those under 55 pounds that fly strictly for hobby or recreational use and follow community-based safety guidelines. They must not interfere with manned aircraft operations and, if flying within five miles of an airport, the operator must contact the airport or air traffic control.

How can airport managers know if drones are operating too close to their airport? Peterson said several tools on the market can help with this. MnDOT recommends AirMap, a free app that UAS operators and airport managers can use to check airspace. It also allows the user to send a notification

to airports when operating nearby. An airport can opt in to accept these notifications by e-mailing information to AirMap.

In addition to the FAA’s requirements, Minnesota has some of its own under Part 107, Peterson said. “If you’re going to use your drone for anything other than as a hobby or for recreation, you have to register it with MnDOT and insure it.” The operator may also be required to have a commercial operations license. However, “for everything that we require, there’s a way to step around it,” Peterson said. He described a process for operators to get relief from the regulations and the ability to operate in airspace through a 107 waiver from the FAA.

UAS may also operate under Section 333 of the FAA Modernization and Reform Act of 2012. UAS can operate under 107 or 333, but not both, Peterson noted.

As an airport manager, you may be approached by a UAS operator who wants to fly at your airport, Peterson said. Part 107 states that unless the flight is conducted within controlled airspace, no notification or authorization is necessary to operate at or near an airport.

“But that’s not the end of the story,” Peterson said. “People just can’t show up at your airport and go rogue. What we’re really hoping is that you’re able to work with them.”

“Some airports have great operating relationships with UAS and are already pursuing this, and some may not have had to deal with this yet,” Peterson said. Before you allow any UAS operation at your airport, consult with MnDOT Aeronautics, the FAA Airports District Office, or legal counsel.

Peterson advised airport managers to be proactive in planning for the inevitable. “Do some things to try to get out ahead of this so that when somebody [approaches you] you’re prepared and have an answer.”



Peterson also urged airport managers to develop best practices. One example is getting to know local law enforcement—before someone shows up at your airport and starts operating a UAS off the end of

your runway. “Not every law enforcement entity so far has been responsive about the possible downsides or safety aspects of drone response,” he said. “Have the conversation before you need to. Reach out and find out.”

When creating best practices, airport managers should determine the information they want from operators and consider listing this on the airport’s website, such as where and when the UAS will operate, at what altitudes, number of aircraft, and the name and contact info for the operator.

For additional help, the Airport Owners and Operators Association ([aopa.org](http://aopa.org)) website provides “one-stop shopping” for best practices and sample letters of agreement, Peterson concluded.

## Technical tours at the Buffalo airport



The second day of the forum took participants to Buffalo Municipal Airport, beginning with a demonstration on wildlife control methods led by John Ostrom (MAC), Alan Schumacher (Department of Agriculture), and several other MAC staff, during which participants could try out the various haz-



ing tools. After that, participants toured D'Shannon Aviation, a fixed-base operator and specialty aircraft customizer, with owner Scott Erickson. Buffalo airport manager Chris Fredrick then gave an overview



of the airport's equipment and maintenance systems, which was supplemented by a presentation on lighting specifics by MnDOT engineer John Schroeder. In addition, Terry Freeman and Scott Fish from Westmor Industries detailed how to install and maintain an automated fuel pump and credit card reader.

**Ryks** continued from page 1

seat," Ryks said. "During the Northwest years, Northwest did not want to see MAC flow any dollars to the reliever airport system." That changed after the merger with Delta, he continued. "About four or five years ago, a formula was put together to ensure that our reliever airports continue to get the funding they deserve. Some of these airports make money and some of them don't. And so that's the challenge."

Current trends around pilots and general aviation include pilots who are getting older and flying less in retirement, and pilot training moving off airports to colleges. There's also an ongoing pilot shortage. "That's a concern for not only small communities but also for us as a hub airport. We rely on traffic from small communities being fed into our facility."

Ryks described the recent formation of the Regional Air Service Alliance, an advocacy group for the continued strength and growth of small community air service in the United States. "States, not points, are analyzed by air service vulnerability... The idea is to do what we can to make sure Congress is aware that this issue is really going to start affecting not only small but eventually large communities," he said. "[Air service] is a critical issue for our industry."

In taking this position, Ryks said he's coming to an airport where "Jeff Hamiel has built a staff that is second to none and an airport that continues to get national accolades for how it performs." MSP served 36.5 million passengers in 2015, and is projecting a 3 to 3.5 percent growth clip for 2016, which could result in an all-time record. The airport is rated 16th in the country for number of passengers.

In the area of origination and destination versus connecting passengers, Ryks said the airport is trending to more origination and destination traffic, likely a result

of growth of the low-cost carrier airlines. "That puts pressure on our landside facilities, so we're starting to make some pretty big investments in those facilities," he said.

Recent MSP improvements include an expanded Terminal 1 international arrivals area, the start up of a solar generation facility, and new auto rental facilities at Terminal 2. To improve the customer experience, the airport created an "Escape Lounge," installed automated passport control kiosks at Terminal 2, and began rollout of 50 new concessions. "The whole concessions program will be completely changed in the next three years," he said.

A 300-room intercontinental hotel, spa, and conference facility developed by Graves Hospitality is also in the works. And the airport is overhauling the ticketing and baggage claim areas at Terminal 1, expanding the areas and making the vertical circulation more intuitive so that people can move easily between the terminal, parking, and ground transportation with less congestion, Ryks said. The \$200 million renovation will take five years.

The airport is also adding a \$250 million, 5,000-vehicle parking ramp, to be bid in June 2017. "The challenge with a lot of this work is that it's all in the public spaces... So that's a good reason to continue to market flying out of your local airport and not having to deal with all this at Minneapolis," he said.

Among MSP's challenges is that of managing security and insider threats. Delta has started screening its employees, but not every other carrier has, he said. "That continues to be a concern nationwide—how best to deal with that issue."

When asked what keeps him up at night, Ryks replied that it's the security situation and terrorist activity around airports. Referring to the 2015 terrorist incident at the Brussels airport, Ryks quoted that air-

## Navigating aviation web resources

The amount of information available online is daunting, but Mike Hartell from MnDOT helped attendees narrow it down by sharing some of the sites he finds most useful.

One online resource is Flightaware.com, a free site for tracking flights and setting up alerts delivered to a user's cell phone or e-mail.

Hartell also urged airport operators to think about who might be looking at their own information online—and update it accordingly. That's especially important for information about fuel availability and pricing on sites such as 100LL.com (a site that gives pilots information about fuel, hotels, ground transportation, airport services, and more.) "Pilots need to know your systems are updated and what to expect." At a minimum, consider updating fuel prices weekly, he said. He cited as an example an airport that hadn't updated its online information since 2014. "Clean up the stuff that matters and determines whether a pilot stops at your airport."

Following are some selected resources; more are available at [www.airtap.umn.edu/events/forum/2016/documents/12\\_Hartell\\_handout.pdf](http://www.airtap.umn.edu/events/forum/2016/documents/12_Hartell_handout.pdf).

- Airport manager resources [dot.state.mn.us/aero/](http://dot.state.mn.us/aero/)
- Responsibilities of airport managers [airtap.umn.edu/guide/overview/responsibilities/index.html](http://airtap.umn.edu/guide/overview/responsibilities/index.html)
- NOTAMS <https://pilotweb.nas.faa.gov/PilotWeb/>
- National Based Aircraft <https://basedaircraft.com/Default.aspx?ReturnUrl=%2f>
- FAA-UAS information [faa.gov/uas/getting\\_started/](http://faa.gov/uas/getting_started/)
- Weather Information (AWOS) [dot.state.mn.us/aero/weather.html](http://dot.state.mn.us/aero/weather.html) [anyawos.com/](http://anyawos.com/)
- Marketing <http://flightaware.com/>
- Fuel pricing [airnav.com/](http://airnav.com/) <http://100ll.com/foreflight.com>

port's CEO, who said, "Once the terrorist gets to the airport, it's too late. I think we all know that, and we need to continue to focus on intelligence and highlight unusual situations." With the Brussels attack, a taxi driver had noticed something odd beforehand but didn't think to alert anyone, Ryks said. "It's all about being vigilant, and being proactive without limiting access to our airports."

In closing, Ryks urged small airports to take advantage of the resources offered by the MAC and MSP. "Whether it's maintenance or operation... we have a lot of expertise and are happy to help."

AirTAP was developed through the joint efforts of the Minnesota Department of Transportation (MnDOT), the Minnesota Council of Airports (MCOA), and the Center for Transportation Studies (CTS).

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# Tips for planning your airport's future (and getting free stuff!)

In a session titled “Shaping your Airport’s Future,” MnDOT’s Kathy Vesely and the FAA’s Lindsay Butler shared information about planning for projects and various types of grants.

Butler, deputy manager for the FAA’s Dakota–Minnesota Airports District Office (ADO), said fiscal year 2016 was a record year in terms of grants issued. The Great Lakes region issued \$574 million in grants—the most of any region. The Dakota–Minnesota ADO received \$150.7 million, which represents 26 percent of the total funding for all grants issued. The ADO initiated 126 new grants and closed 174 grants, she reported.

Minnesota received \$55.7 million of the total funding; of that, \$22.6 million was discretionary. “That’s a huge amount of money for the state of Minnesota for discretionary dollars. Also, \$33.1 million of that was entitlement dollars—that’s really you guys putting that money to work,” she said.

Butler gave an overview of planning considerations and timelines for airports, starting four, three, two, and one year out from construction. And she reminded attendees that the ADO can help airports with planning alternatives, development opportunities, coordinating with other federal agencies, establishing project timelines, balancing funding needs, sharing other project pitfalls, and building tribal relationships, among other things.

Another way the FAA can help is through a program that gives away equipment. Butler said that when she visits airports around the state she often hears, “How can we get property? How can we get equipment? How can we get stuff?” The answer, she said, is the Federal Surplus Personal Property Program for Public Use Airports. This free program allows public airports to request authorized surplus personal property through the GSAXcess system administered by the General Services Administration (GSA). It gives public-use airports free property or equipment; shipping or transport is the

only cost. Federal agencies get first priority, followed by state and local applicants. Some examples of property include mowers, trucks, nav aids, beacons, and concrete mixers.

“It’s an amazing program,” Butler said. “It’s really a great thing for airports struggling to find any piece of equipment.”

To participate, airports need to ask their program manager for, and complete, a screener application form; certifications, agreements, and assurances; a GSAXcess access request form; and a digital picture for the identification card.

More details are available on the AirTAP website ([airtap.umn.edu/events/forum/2016/documents/03\\_Butler\\_hand-out.pdf](http://airtap.umn.edu/events/forum/2016/documents/03_Butler_hand-out.pdf)) and in FAA AC 150/5150-2C.

Vesely, assistant director of MnDOT’s Office of Aeronautics, followed Butler with a discussion

of the state airport fund (SAF), various grant programs, the grant application process and what types of projects are eligible, the selection process and resulting obligations, and the importance of planning.

The money in the SAF is a result of user fees such as aircraft registrations and fuel taxes. That money then goes out for construction grants, navigations systems, maintenance grants, operations, and administration, Vesely explained.

“We partner with FAA to deliver the

federal program. Minnesota is a channeling state, and so, by state law, airports who want access to federal funds have to work through the state and follow the state standards as well, which may be different than the federal standards—and in fact are,” Vesely said.

The types of grant programs available in Minnesota include air service marketing grants, the hangar loan program, and maintenance and operational (M&O) grants. Minnesota is one of the only states that has an M&O program, which helps airports pay for their daily operations. “We have a lot of snow, and we’re interested in safe operations and an excellent system. And the focus of our commitment is moving toward sustaining, rather than expanding. So this is one of the ways we do that,” she said.

Vesely walked attendees through the process of requesting and completing a state project. And she emphasized the importance of planning 20 years out, as challenging as that might be. To help with that process, she suggested that airports start thinking about the things they do routinely and to read the pavement management report that comes out every three years, which gives airports the life expectancy of their pavements.

When Congress looks at airport needs to determine funding, if it’s using incomplete data it won’t get an accurate picture of the airport system’s future needs, Vesely said. “So please help us with this next State Aviation System Plan by filling out those CIPs with real needs for the next 20 years.”

**The Federal Surplus Personal Property Program allows public airports to request free authorized surplus personal property or equipment; shipping or transport is the only cost.**

## Plan to attend the 2017 MN Airports Conference in Mankato!

The 2017 Minnesota Airports Conference will be held April 12–14 at the Verizon Wireless (Civic) Center in Mankato, Minn. Don't miss this chance to learn from aviation experts and network with colleagues and conference exhibitors.

More information and registration is available online at [www.airtap.umn.edu/events](http://www.airtap.umn.edu/events). The conference brochure will be mailed in early March.



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