Airport community gears up for record crowds

After the players leave the field on Super Bowl Sunday, the Minnesota airport community will be gearing up for its own “big game” as it prepares to execute its single largest travel day ever. “Our current one-day high is more than 46,000, and the Monday following the Super Bowl we are forecasting more than 70,000 people in our terminals,” says Sara Freese, assistant director of Minneapolis–Saint Paul International Airport (MSP) operations. In addition to record-setting commercial travel, regional airports are expecting around 1,100 private planes and jets to arrive in town for the Super Bowl, which will be held February 4 at U.S. Bank Stadium.

Planning is in place
Super Bowl preparations began more than a year ago, with airports from around the state working together with coordinating agencies to ensure Super Bowl visitors have an “incredible” experience, according to Freese. At MSP, preparations have included visiting Houston’s airport to observe operations during last year’s Super Bowl, attending Disney customer service training, installing thousands of square yards of new carpet, planning for more than 1,500 volunteer shifts, ordering hundreds of new sleeping mats, preparing detailed de-icing and snow removal plans, coordinating with emergency response and law enforcement, and much more. In addition, major airport improvements such as the “vertical circulation project,” which includes the replacement of elevators, escalators, and stairs in Terminal 1, are scheduled for completion prior to the Super Bowl.

“It is our time to showcase our airports and our community,” Freese says. “There will be a lot of people, and the staff and the volunteers are what will make the event successful. Our mission is to boldly welcome Super Bowl LII to Minnesota, where people are surprisingly warm, the airport community world-class, and the experience unforgettable.”

Impacts will be widespread
The high demand for ramp space and capacity limits mean airports well beyond MSP will feel the impacts of the Super Bowl; this includes MSP reliever airports in St. Paul, Anoka, and Flying Cloud as well as airports in St. Cloud, Eau Claire, and even Duluth. The St. Cloud Regional Airport, for example, has been allotted 12 slots per hour—six arrivals and six departures—by the Federal Aviation Administration (FAA). “The FAA has told us to expect to see aircraft operators signing up for slots about a month prior to the game, with the majority signing up about two weeks prior,” says airport manager Bill Towle. “If snow is predicted, we will likely see more aircraft, because we have the snow removal equipment, de-icing capabilities, and operations and maintenance staff to handle 24-hour operations, while a smaller, closer airport might not.”

Nearly 140 miles southwest of Minneapolis, Fairmont Municipal Airport manager Lee Steinkamp is also anticipating possible Super Bowl arrivals. “The weather could play a big role in the level of traffic coming into our airport during the Super Bowl,” says Steinkamp. “We plan to fill the jet fuel tank to ensure we have plenty on hand in case planes do come.”

Challenges and opportunities
Like most Minnesotans, Steinkamp is hoping for warm temperatures during Super Bowl week but making plans in case the weather doesn’t cooperate. “The weather could be our biggest challenge—any sort of weather event could certainly cause problems and delays, and even if there is not a snow or ice event, there will most likely be frost and planes will need to be stored in a hangar or de-iced before takeoff,” says Steinkamp. “The good news is that by meeting these challenges, we’ll be showing people from out of state that our airports and the whole state of Minnesota are open for business, even in the middle of winter.”

Record Crowds continued on page 3
Maintaining airport construction safety

With winter here in Minnesota, airports are likely experiencing a decrease in flight operations. Unfortunately, winter also brings a corresponding uptick in snowplow operations! This may also be the time of year airports are at the height of planning for construction projects. If you or one of your staff have direct involvement, it’s not uncommon to feel somewhat overwhelmed with all of the considerations that go into these types of projects. Of course, the primary considerations should be those that promote and maintain operational safety on and around the airport. It’s important we keep both construction personnel and the flying public safe during what could be considered a high-risk period of time.

On December 13, 2017, the FAA issued the latest release to Advisory Circular (AC) 150/5370-2G titled Operational Safety on Airports During Construction. This document addresses many of the safety considerations airport operators need to keep in mind both during the planning stages and during construction itself.

As a pilot who flies year-round for the Minnesota Department of Transportation (MnDOT), I find Minnesota offers its fair share of diverse weather conditions. We may experience structural icing one day while dodging thunderstorms the next. In flying to all of the airports within the state, we also sometimes have to manage the conduct of the flight around construction activities within the confines of the airport. Usually, airports apply the appropriate construction safety protocols, but sometimes we discover that certain considerations are being overlooked.

One example of this occurred on a recent flight to an intermediate airport. Weather conditions required use of the airport’s instrument landing system (ILS). “Great!” I thought; I always look forward to being able perform an approach in instrument meteorological conditions! After executing a successful approach and landing, I began my lookout for a taxiway construction project that was appropriately addressed by a Notice to Airmen (NOTAM). In that instant, I saw something that gave me a pit in my stomach. Trucks with large steel side-dump trailers were driving on a construction access road that had been placed immediately in front of the localizer antenna. This was the same antenna responsible for broadcasting lateral guidance signals on the approach I had just used.

I consulted with the navigational aids office, which confirmed that the localizer does have a critical area that needs protection. Failure to do so may cause interference with the signal and jeopardize signal integrity. As a result, the ILS was subsequently shut down until the construction access road could be properly relocated outside the confines of the localizer’s critical area.

This is a great example of how having a well-thought-out plan is essential for maintaining a safe, navigable environment. AC 150/5370-2G has specific language for addressing the situation I experienced—found under paragraph 2.8 titled “Navigation Aid (NAVAID) Protection.”

If your airport has an upcoming construction project, it’s important that the airport operator develop a construction safety and phasing plan (CSPP). Details for doing so are described early in AC 150/5370-2G.

To obtain a copy of the advisory circular, visit www.faa.gov, and type “AC 150/5370-2G” in the search bar.

—Chris Meyer, Aviation Representative, MnDOT Office of Aeronautics

Fall Fly-around highlights

Airport managers, maintenance staff, and others from around Minnesota gathered for AirTAP’s Fall Fly-Around events last October at the Morris, Eveleth, and Fairmont airports. It was a great way to learn about airport operations topics in a more casual, hands-on environment from MnDOT Aeronautics representatives. Thanks to all who participated—see you next year!

AirTAP was developed through the joint efforts of the Minnesota Department of Transportation, the Minnesota Council of Airports, and the Center for Transportation Studies (CTS). AirTAP is housed within CTS at:

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Airplane-turned-classroom aims to spark interest in aviation

Sitting on the tarmac at the St. Paul Downtown Airport, the 727 doesn’t look like a typical classroom. That’s the idea.

The Learning Jet, as it’s known, is a renovated Boeing cargo aircraft that serves as a unique classroom for K-12 students from across Minnesota. This learning environment gives students the chance to see a large aircraft up close, touch the landing gear, sit in the captain’s seat, move the throttles, and read the altimeter, among other tasks. Not only can they see how big a jet airplane’s tires are, they can literally kick them, too.

The cargo jet was retired and donated by FedEx to the Minnesota Association of Women in Aviation (MnAWA), which runs the Learning Jet program. The MnAWA is a nonprofit organization supporting activities that educate and inspire students in the STEM disciplines—science, technology, engineering, mathematics—with the additional subject of aviation/aerospace (“STEAM,” as the organization calls it). MnAWA president Darlene Dahlseide says their educational program currently focuses on aviation, although curriculum will be expanded to include railway, freight, waterway, and bike/pedestrian transportation modes later this year.

A typical field trip to the jet begins with a brief presentation inside, followed by age-appropriate curriculum and hands-on activities. Older kids, for example, might learn about the laws of motion by launching balloon rockets.

“The kids are just so excited about being in an airplane,” Dahlseide says. “Everyone who comes through gets to sit up front on the flight deck…We make it fun. We really want that ‘wow’ factor.”

In addition to getting kids interested in aviation, which could lead to a career in aviation, the organization hopes to spur kids—especially those underrepresented in STEM fields—to realize “that if they put their mind to something, they can do whatever they want to,” Dahlseide says.

Dahlseide estimates that the Learning Jet has hosted about 2,700 students from schools across the state since it opened in October 2014. Last summer, about 900 students participated; 31 of those were middle school students attending the National Summer Transportation Institute (sponsored by the Center for Transportation Studies, which houses AirTAP), who spent an afternoon field trip in the jet (see photos, right).

At the St. Paul airport, a 3,400-square-foot hangar near the Learning Jet is being renovated to serve as additional classroom space, with a planned opening this spring. Not only will the hangar accommodate more groups of students, but it will also allow classes to be held year-round (currently, classes are held March through October). Dahlseide noted that the hangar renovation project has received about $350,000 worth of in-kind donations of material and labor.
Plan to attend this year’s Minnesota Airports Conference April 18–20 in Duluth. The conference program will include technical and informative educational sessions, networking opportunities with peers and vendors, and a variety of activities unique to Duluth, including a tour of the CIRRUS Aviation facility on Wednesday morning. Sessions will cover topics such as public engagement and value, project justification, airport legal issues, NEPA, and overcoming adversity after a workplace tragedy.

The 2018 conference will also commemorate a significant anniversary for Minnesota, its airports, and the communities they serve. In 1943, the Minnesota Aeronautics Commission became the Minnesota Department of Aeronautics. In the same year, a constitutional amendment was proposed (and ultimately passed in 1944) that would allow the state to collect taxes and build airports. Please join us in celebrating the 75th anniversary of this historic change at the conference!

Attendees will also hear from featured speaker Dr. Margaret Rhea Seddon, who was one of the first six women to enter the Astronaut Program in 1978. She worked at NASA for 19 years, serving on three space shuttle flights and spending a total of 30 days in space. After leaving NASA in 1996, Seddon was the Assistant Chief Medical Officer of the Vanderbilt Medical Group in Nashville for 11 years, where she led an initiative aimed at improving safety, quality, and effectiveness with an aviation-based model of crew resource management. Now with LifeWings Partners, LLC, she teaches this concept to healthcare institutions across the United States.

Seddon is also the author of the 2015 autobiography Go for Orbit. She was inducted into the U.S. Astronaut Hall of Fame in 2015.

Visit the conference web page for more details: airtap.umn.edu/events/airportsconference/2018/.