Timing is Everything – Airport Construction

Nikolas A. Ippolito, P.E.

A construction project at an airport can be a confusing and stressful change from the normal “day-to-day” operations for managers and staff. Airport operators that are proactive and involve themselves, and their consultants, during the planning and construction improve the project’s potential for success. Being proactive allows airport operators to make informed decisions and to facilitate effective management of projects at their airfield. Paying attention to the following items can help achieve success:

**Timing of Project Work Items**: Project schedules are often prepared by the contractor and submitted to the engineer and airport operator for review and approval. An engineer can review the schedule with the airport operator, but ultimately, it is the airport operator’s knowledge of the ongoing activities at the airport, and how those activities will be affected, that will be most important. Operators can review the previous year’s monthly operations, and suggest revisions to the schedule to maintain safe operating conditions during periods of higher than average operations.

**Permit Requirements**: Well in advance of construction activities, the engineer will coordinate with permitting agencies having jurisdiction over the proposed work or land. These agencies may place restrictions on the work that the Airport will be required to comply with to obtain permit approvals. Airport operators should be aware of permit conditions, and request changes if applicable, well in advance of the permit being issued. Too often, permit constraints are not questioned until the actual work is happening, which may impact the ability to revise the requirements.

**Operational Impacts**: Airport operators should understand the operational impacts to their facility, to the users, FBOs, and vendors that frequently have uninhibited access to all areas of the airfield. Frequent coordination with these groups is critical to comply with safety requirements while operating on the premises.

**Time of Year**: Airport operators should always consider the time of year. On larger projects that require paving, most contractors prefer to start and complete a project in the same construction season.
This should be feasible; however, if delays during construction are encountered, the project may stretch into the colder months in northern climates. At that time, items like pavement, site stabilization, topsoil, and seeding may fail to meet the requirements of the contract specifications due to colder or inclement weather. If planned correctly, airport operators can schedule construction to start early to meet completion requirements. The project needs to include contract provisions for the contractor to stop work over the winter and re-start in the spring when temperatures permit a better finished product.

Considering these influencing factors when preparing for a construction project will help achieve the timely execution of work under safe operating conditions.

**Considerations for Users**

Airport operators should make information about their projects easily accessible for anyone who uses the facility. The information can be in the form of e-mails, public notices, bulletins, certified mailings, Facebook posts, the airport’s website, Twitter, public meetings, and visits with users. Combining several different methods is generally most effective. Once the airport operator has chosen their methods of communication, who receives this information is next. At a minimum, the information should reach the following:

**Airport Users:** Individuals using the airport as a base of operations for their aircraft, transient pilots landing at the facility, and individuals who move around the airport facilities and may be affected by the construction.

**Businesses:** Businesses, including flight schools, repair shops, pilot shops, charter jets, or persons and groups conducting business on an airport.

**Neighbors:** Keeping neighbors (abutters) informed of upcoming construction can be well worth the effort in cases when noise, dust, or vibrations could be a disturbance. If the abutters are well informed of the potential disturbances in advance, they may be less likely to react in a confrontational manner.

**Contractors:** Airport operators are responsible for enforcing the construction safety and phasing plan (C.S.P.P.). They should clearly communicate which areas of the airport are available for aircraft (and off limits to the contractor) and which areas are available for the contractor’s work (and closed for aircraft operations).

**Agencies:** The airport operator should maintain consistent communications with agencies (Federal, State or Local) that have jurisdiction over the work. Keeping these agencies updated on the status of the work, and work areas, will help to clear up delays, plan site visits, and provide the agencies with the knowledge that the airport is honest, transparent, and in compliance with applicable conditions.
For each construction project undertaken at an airport, the airport operator should compile a list of contacts for distribution. This list should be specific to each project and include any of the individuals or entities listed previously. The airport should also keep a master list of notification recipients which can be used to create a project specific list.

**Off-Airport Constraints**

Constraints on a project span beyond the construction and on-airport operations. Equipment needed for construction, including every light, cable, pipe or structure will need to be delivered to the site. Off-Airport impacts should be communicated to all parties as well. If a paving project will be undertaken during the summer months, careful coordination with airport abutters can literally save lives. Summer is not only the busiest construction season of the year, it is also the time of year that children play outside, pets are out, windows are open, etc. Paving an airport requires hauling hot mixed asphalt to the airport. During large paving projects, deliveries of asphalt can be as frequent as every 8 minutes for up to 12 hours per day. The increase in trucking traffic to airports nestled in suburban communities may turn quiet neighborhoods into loud, dangerous places with nauseating smells and rumbling ground conditions. These communities should always receive notification of upcoming work. Most airport abutters understand that living adjacent to an airfield may have some impact to their personal lives. However, changes to a person’s routine and environment can be extremely stressful should it occur without warning. Residents notified ahead of time are much less likely to file complaints when their daily routine is disrupted by construction projects.

**Managing Constraint**

Airport operators can manage construction impacts by having a complete understanding of the project. Review the construction schedule with the contractor and engineer, ask questions, make recommendations, and attend construction and design meetings. It is a standard practice during most airport construction projects to hold weekly progress meetings. At these meetings, the contractor will present the next 10 days’ work schedule. This schedule will include work items to be completed, work areas, safety plan requirements, changes to the overall project schedule, and additional work items to be added. These meetings not only provide a forum to voice concerns, but they also encourage all parties to be in agreement on the most practical way to move forward with the work. Armed with the information discussed at these meetings, airport operators are able to distribute weekly updates to the target audience.

**Conclusion**

Construction projects at airport facilities should be carefully reviewed by the airport operator with specific information in mind. How will this impact the airport? Who will be impacted by this work? Will this work require closures? Will the surrounding community be impacted? Will businesses on the airport be affected? Are there any accommodations that can be made to offset impacts to businesses on the airport? How should information about this project be presented to the target audience?

Having a complete understanding of the project, project work items, and the operational conditions at your airport will remove the guess work and allow operators to communicate critical information to all parties in a timely fashion. And, as the title of this article indicates, timing is everything!
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