Business Aviation Update

NBAA Runway Incursion Forum 2017
Sept. 20, 2017 | Washington, DC

Presented By: Alex Gertsen, C.M., Director, Airports & Ground Infrastructure, NBAA
NBAA 1947-2017
NBAA Membership
Over 11,000 Member Companies
NBAA Membership
Associate Membership
NBAA Membership

Airport Membership

Photo Courtesy of Morristown Airport (KMMU)
NBAA Safety Committee
2017 Top Safety Focus Areas

- Loss of Control - Inflight
- Runway Excursions
- Single Pilot Accident Rate
- Ground Handling Incidents
- Distractions
- Scenario / Risk Based Training
- Airspace Complexities
- Procedural Non-Compliance
Runway Excursions

- Most common type of accident in business aviation
- One of the 2017 Top Safety Focus Areas
- NBAA Safety Committee Guide 2016 “Reducing Business Aviation Runway Excursions”
- Takeoff and Landing Performance Assessment (TALPA)
Runway Incursions
Industry Collaborative Effort

- Runway Safety Council
- Airport Construction Advisory Council (ACAC)
- General Aviation Joint Steering Committee (GAJSC)

Participation
- Root Cause Analysis Team (RCAT)
- Runway Safety Risk Management Panels (SRM)

Continuous outreach and advocacy
Runway Status Lights (RWSL)

Runway Entrance Lights (RELs)
RELs mean **STOP!** The runway is unsafe to enter or cross.

Takeoff Hold Lights (THLs)
THLs mean **STOP!** The runway is unsafe for takeoff.

**NBAA Flight Plan Podcast - Aug. 22, 2016**

**NBAA News Article - Apr. 4, 2017**
Runway Safety Outreach

Working Collaboratively to Improve Runway Safety

Q: What is the most critical component of runway safety?

Collaboration. Often, solving runway safety problems requires action by the airport operator, pilots, and ATC, or even development of new technology. Collaboration takes place with key industry stakeholders—airport managers, aircraft operators and controllers, as well as within the FAA.

That kind of collaboration ensures that any changes we make to the physical layout of an airport, a procedure or technology are fully tested with and embraced by the stakeholders. Because the solution can involve so many pieces, runway safety also requires collaboration within the three business lines at the FAA—Office of Airports; Flight Standards and Air Traffic. All there are separately funded and tasked, but the runway safety program is common to all three.

Q: How do you manage collaborating with so many entities?

Our most important forum for collaboration is the Runway Safety Council, which is a quarterly stakeholder meeting of government and industry organizations, such as NBAA. Other entities represented on the council include the FAA, the NTSB, National Air Traffic Controllers Association and airport and airline groups. The council is

Q: Although all runway safety issues affect business aviation, what specific issues can business aircraft operators focus on?

We are working on two issues critical to business aviation. First, we are conducting industry outreach to increase awareness of runway safety lights. A recent incident occurred at McCormick International Airport, where an aircraft taxied onto the runway when the lights were illuminated, and then the aircraft proceeded to takeoff with the red lights. The red lights indicate another aircraft or vehicle might be on the runway. Upon taking a closer look at the incident, we think pilots could benefit from more training on the operation of runway status lights, which provide another layer of safety and operate independently of ATC. This led to development of an NBAA pilot network to refresh pilots on what the lights mean and how to respond to them.

Second, we are supporting the NBAA Safety Committee’s efforts to promote professionalism. Proper communication, both on the flight deck as well as between pilots and controllers, is a critical component of safe operations. Often, the simplest solution is to promote the use of standard and appropriate phraseology when responding to or reading back ATC instructions. For example, an pilot receives a landing clearance and
Business Aviation Runway Incursion Mitigation

Challenges

- Airports with diverse type mix
- Airports with complex geometry
- Different levels of airport infrastructure
  - Non-towered airports
    - Quincy, IL (KUIN) - Beech 1900 and King Air Collision in 1996
  - Non-certificated airports
    - Lack of enhanced taxiway centerline markings
    - Worn-out markings
    - Lighting, signs and visual aids
- Single-pilot operations
Business Aviation Runway Incursion Mitigation

Successes

- Training and professionalism
  - Two-pilot crews

- Advanced Avionics
  - Moving Map Displays and Synthetic Vision
    - Honeywell Runway Awareness and Advisory System (RAAS)
    - Portable Electronic Flight Bag (EFB) Devices

- RNAV approaches to more runways
Business Aviation Runway Incursion Mitigation
Advanced Avionics - Citation Latitude (680A)
Business Aviation Runway Incursion Mitigation
Advanced Avionics – King Air 350
Business Aviation Runway Incursion Mitigation
Advanced Avionics – Portable Devices
Business Aviation Runway Incursion Mitigation
Advanced Avionics – Portable Devices
Business Aviation Runway Incursion Mitigation
Advanced Avionics – Portable Devices
Business Aviation Runway Incursion Mitigation

More to be Done

- Continue collaboration and information exchange
  - FAA, NTSB, NATCA, ALPA, AOPA, AAAE, ACI-NA and others

- Enhance scenario based airfield familiarization training

- Fine tune the details
  - Procedures
  - Communication
  - Situational awareness

- Continue to learn and be vigilant
Contact

Alex Gertsen, C.M.
NBAA Director Airports and Ground Infrastructure
agertsen@nbaa.org
(202) 737-4477
DEDICATED TO HELPING BUSINESS ACHIEVE ITS HIGHEST GOALS.