### Everything you wanted to know, but you were afraid to ask about IS-BAH<sup>TM</sup>

Dirk B. Vanderleest Aviation Director City of Concord Concord-Padgett Regional Airport





JQF-USA

### Airports and FBOs

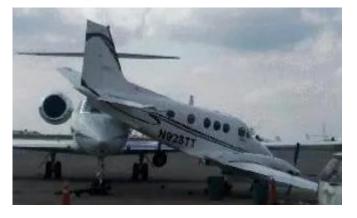
- 5,092 Public Use Airports
- 3,661 Total FBOs operating in US
- 3,233 Airports with at least one FBO
- 1,543 FBOs owned or operated by airport authorities, local governments...





## Warning – These pictures are harmful to your bottom line!

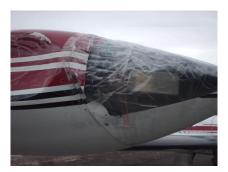


















### Most Common Types of Ground Accidents

- 1. Collisions with GSE
- 2. Collisions with other Aircraft
- 3. Collisions with Static Objects (trees, lamp post, Hangars)



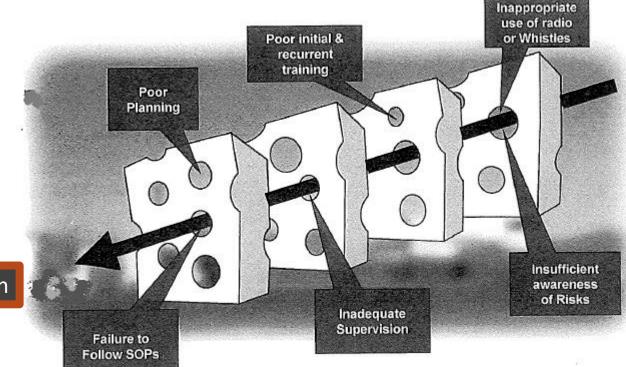
### Accident Summaries

- "While towing aircraft, the wing walker was simultaneously closing the hangar door, which struck the horizontal stabilizer"
- "The Falcon 7x was parked and no one was abord the airplane. The driver of the fuel truck was on his cell phone when he attempted to swerve and avoid hitting the aircraft."
- □ While aircraft was being towed, personnel in the cockpit stepped on the brake, causing the aircraft nose to rise and the tail struck the pavement"
- "LST parked refueler near the right trailing edge along the aft section of a Gulfstream, when opening the refueler door it struck the two upper static wicks on the right winglet breaking both."
- "Aircraft caught fire while being towed with parking break set."
- "Baggage door frame was damaged when the door was closed with the pins out."
- A fuel truck pulled away from the aircraft without disconnecting the bonding cable."
- "A protective rubber fuel mat was left laying on the wing of an aircraft. Upon initiating the take-off roll, the mat was ingested into the aircraft engine, causing significant damage."

### And now.... A Case Study

- Situation: Tow team pushes aircraft horizontal stabilizer into hangar wall.
- How could this happen in today's environment?
- What was missed?
- Is there a weak link?

Incursion



Data Collection and Analysis can help predict where and when.

### AGCS Report and NBAA Safety Committee Survey Findings

Aviation Risk 2020 Safety and the Nation Report – by AGCS reports 2018 the third safest year ever, yet at the same time trends continue to see high volume of claims and magnitude of insurance claims. **"Human Error is a Real Risk"** 

A 2016 NBAA Safety Committee survey found..."A total of 48 percent of respondents reported having **one to three ground-handling incidents** or close calls in the last three years, while 8 percent reported having

#### four to nine incidents or close calls"

Historical average for general aviation ground handling related claims. 2015 –\$105,000. **Highest related claim \$7.5 million**.

# Think about the last "Near Miss" at your operation....

- What it investigated?
- What was the immediate cause?
- What were the underlying causes?
- How could it have been prevented?
- What action did you take?

IF YOU TOOK NO ACTION, CAN YOU SAY WHY?

### What's your Safety Culture?

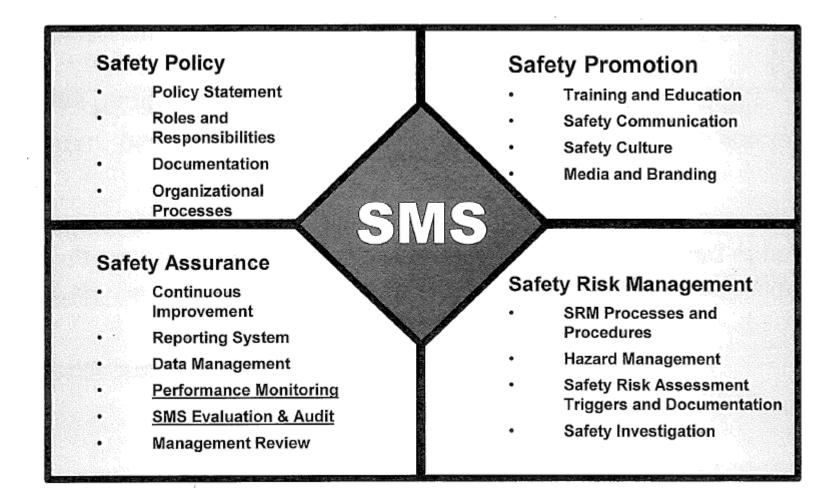
## We are all equal when it comes to safety responsibility







### The Four Basic Building Blocks of SMS



### Key Players

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• ICAO – International Civil Aviation Organization



IBAC – International Business Aviation Council



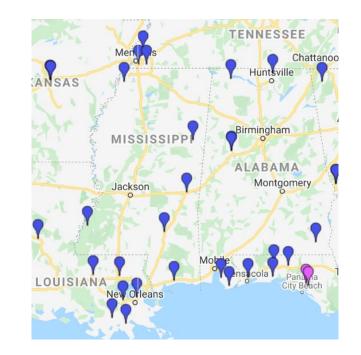
• NATA - National Air Transportation Association







MS has 6 Safety 1<sup>st</sup> NC has 9 Safety 1<sup>st/</sup>



### Why Consider IS-BAH ?

Customers expect a responsible and property risk managed approach to safety.

### Customers are leaving their asset in your care, custody, and control. DUTY OF CARE

Truly excellent organizations don't just get to zero; they know exactly how to duplicate and improve their success.

### International Standard For Business Aircraft Handling (IS-BAH)

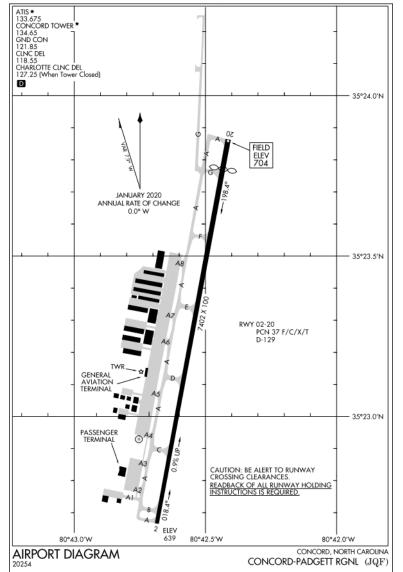
- The International Standard for Business Aircraft Handling (IS-BAH) is designed to promote use of industry best practices blended through a progressive Safety Management System (SMS) for Fixed Based Operations (FBO).
- The program centers on the Safety Management System (SMS) developed by ICAP and other operations-critical industries. It leads the operator from establishment of beginning principles to a sustainable SMS and operations program to a performance-based, risk averse culture for both large and small FBO/BAHA's. Audits conducted every two years ensure conformance with the standard and provide valuable feedback to the operator. The registration certificate issued upon successful completion of an audit serves as proof of compliance with several key ICAO standards, which are required for operations in a number of countries.





### Concord-Padgett Regional Airport (JQF)

- 7,400 foot runway!
- 25 acre aircraft parking ramp
- 12,500 SF General Aviation terminal building
- 25,000 SF two gate Airline terminal building
- 5 community hangars; 67 T-hangars
- 8 corporate or leased hangars
- 9 privately owned hangars
- Maintenance facility & fuel farm
- Open 24 / 7 / 365
- FAA Contract Control tower operational daily from 7 AM to 11 PM, 365 days a year
- Operate "Air Elite" Fixed Base Operation
- Worldfuel / Phillips Aviation Fuel Provider
- Concord City Council renamed airport in honor of long time mayor Scott Padgett in April 2018



### Major Tenants

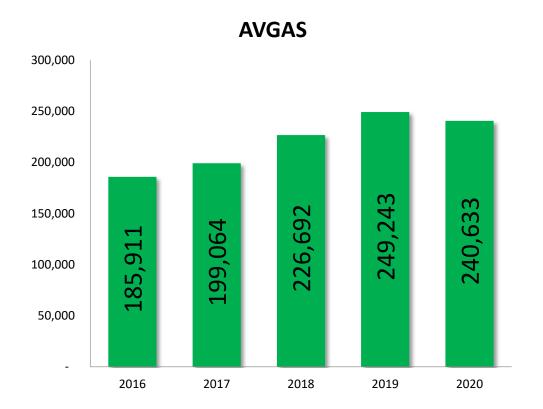
- MedCenter Air (Air Ambulance)
- Helivison (Aerial Photography, Film, and TV)
- Victory Lane (Aircraft Maintenance)
- Blanket Aero (Aircraft Management)
- Aerowood (Aircraft Management)



- NASCAR Race Teams:
- Flight Schools:

### Airport Fuel Sales (in gallons)

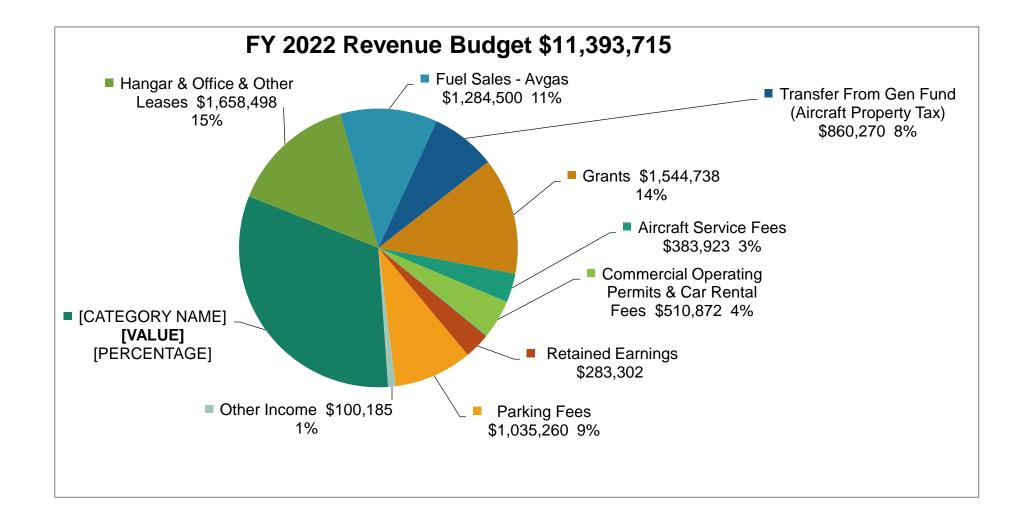
At JQF, Fuel Sales (below) and Operations set all time records in CY 2019 (before COVID-19)





JET A

### Where do airport revenues come from?



### Total Claims - Loss Ratio - Airport Operations

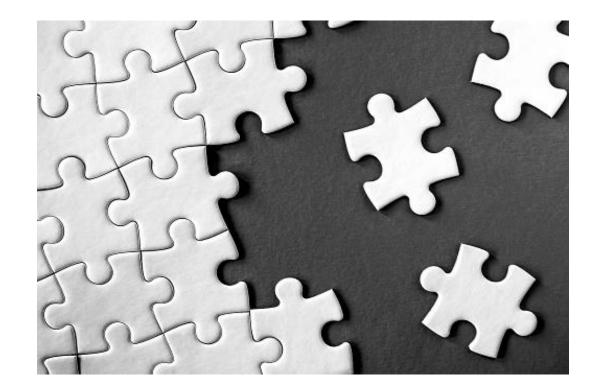
JQF – Claims FY16 -\$27,118 FY 17 -\$229,153 FY 19 - \$348,350 JQF - Loss RatioJQF - AirportSpecific ClaimsOperations- CRJFY 17 - 67,223- PhenomFY 19 -84,629- Nose GearFY 20 -70,546

# IS-BAH Is Steadily Becoming Standard for Ground Handlers

- Any FBO or Business aviation handling agent (BAHA) can become IS-BAH registered facility by following these initial steps:
  - 1. Purchase the IS-BAH Manuel, which contains the standards (13 chapters) and the IS-BAH implementation guide
  - 2. Conduct a gap analysis between your organization's standards and procedures and those of the IS-BAH program.
  - 3. Develop procedures to identify hazards and eliminate the quantified risk or reduce it to acceptable levels using guidance material provided with the standard.
  - 4. Integrate procedures into department systems, programs operating procedures and manuals, again using materials provided.
  - 5. Complete an IS-BAH audit by selecting an accredited IS-BAH auditor from the IBAC Website.

### The IS-BAH Puzzle

- 1. Safety Management System (SMS)
- 2. Emergency and Contingency Planning
- 3. Security Program
- 4. Documentation
- 5. Organization and Personnel Requirements
- 6. Training and Proficiency
- 7. Occupational Safety and Health
- 8. Environmental Management System (EMS)
- 9. Dangerous Goods
- 10. Airside Operations
- 11. Handling of Passengers, Baggage, & Non Hazardous Cargo
- 12. Ground Support Equipment
- 13. GSE Maintenance Requirements & Inspection



### Our IS-BAH Timeline at JQF

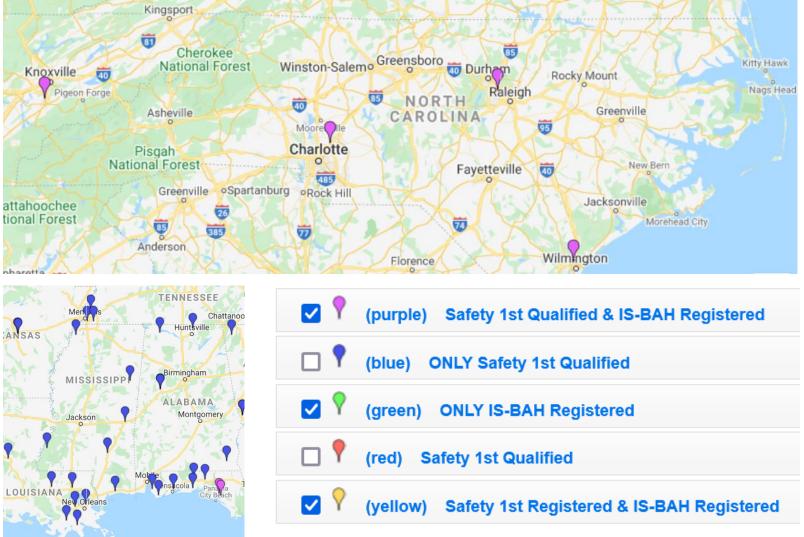
- <u>Stage One</u> confirms that the SMS infrastructure is established and that safety management activities are appropriately targeted. All supporting standards have been established.
- September 2018 met with a consultant to review the ISBAH program and provide a baseline assessment on Concord-Padgett Regional Airport
- January 2019 the initial ISBAH audit was conducted and discrepancies were identified that needed to be corrected prior to being certified as ISBAH Stage I compliant
- March 2019 Concord-Padgett received the ISBAH Stage I certification

- <u>Stage Two</u> ensures that safety management activities are appropriately targeted and that safety risks are being effectively managed.
- Setup and monitor a Safety Management Reporting System. This was accomplished by using the Incident Reporter system which allows users to report any safety issue anonymously as well logging any other incidents and safety concerns.
- Conduct monthly audits of the ramp and fuel trucks to try to identify any trends and safety hazards
- September 2020 met with a consultant to review the ISBAH Stage II protocols and provide a baseline assessment on Concord-Padgett Regional Airport
- January 2021 initial ISBAH Stage II audit
- March 2021 Airport completed Stage II certification

- <u>Stage Three</u> verifies that SMS and Safety Management are fully integrated into operators business and that a positive safety culture is being sustained.
- March 2021 Airport begin IS-BAH Stage III process.
- January 2023 anticipated Stage III IS-BAH audit
- March 2023 Concord-Padgett anticipated the ISBAH Stage III certification.

#### IS-BAH Registered FBO's Southeast





### Final Thoughts

Dirk B. Vanderleest, C.M. Aviation Director Concord-Padgett Regional Airport 9000 Aviation Blvd NW Concord, NC 28027 O: 704-920-5912 C: 601-238-6837





- Walk don't run
- Take a leap of faith
- Effective organizational culture is both top-down and bottom-up.