Friends and Partners in Aviation Weather

July 24, 2013

Lisbeth Mack
Director - Policy and Performance
Safety and Technical Training_-_ATO

Steve Hansen
NATCA Safety Chair
VSRP Purpose

“VSRPs are a key component to the ATO Safety Management System (SMS), providing a method to identify and correct potential safety hazards.

These important programs encourage voluntarily submitted safety reports from employees involved in the delivery of air traffic services and are foundational to a healthy safety culture.”
VSRP Goals

• Move from compliance-based mode of error management to voluntary, participatory investigation programs
• Encourage reporting in order to gather as much data as possible
• Administer individual and systemic corrective action appropriately to serve the best interests of safety
Origin of VSRPs

- NASA Aviation Safety Reporting System (ASRS)
  - Established in 1976 in response to TWA 514 crash at Dulles International Airport (IAD).
  - Voluntary Participation
  - Confidentiality Protection through de-identification
  - Non-punitive

- Over 980,000 reports submitted through 2011
- Over 5,400 Safety Alert Messages issued
- Unless involving an accident, ATSAP reports may be automatically shared with ASRS
NAS Safety Challenges

• Complexity
  – Aircraft operations & types
  – Personnel & Facilities
  – Organizations
  – Multiple domains/SOPs

• Change
  – Training
  – Technology
Why VSRPs Work

• When organizations want to learn more about what happened, the best approach is to ask those involved.

• People are generally willing to share their knowledge if they are assured that their identities will remain protected and they will not be punished.
A properly constructed confidential, voluntary, non-punitive reporting system can be used by any person to safely share information.

Confidential reporting systems have the means to answer the question why - why a system failed, why a human erred.

Incident/event data are complementary to the data gathered by other monitoring systems.
ATSAP Overview

• MOU signed March 2008, training began July 2008, completed nationwide Sept. 2010
• Initially 1 ERC, now 3; one in each SA
• Three party program: ATO, NATCA, AOV
• Modeled after airline ASAPs
• Covers Controllers (including trainees) and FLMs
• Confidential Information Sharing Program (CISP) with airline partner ASAPs added in 2010
ATSAP Overview

- 68,000+ ReportsSubmitted
- Of 20,000+ eligible personnel, 16,000+ registered

ATSAP Reports Submitted Monthly
Corrective Action Request

• Written document sent to the ATO VP by the ERC.
• Request for action for an identified safety issue
  – Supported by documentation
• Not the fix to the identified problem
• Formally identifies issue and requests that a Corrective Action Plan be created in response
Weather Related ATSAP Corrective Action Requests (CARs)
CAR 2010-019
Cold Weather Altimeters

• Issued May 25, 2010

• Notes on this issue date back to 1992 without resolution.

• PROBLEM: Cold temperature correction for MVAs and final approach segments of instrument approach procedures.

• SOLUTION: Still in the works, slow progress. Controller training in development.
CAR 2010-031
Weather Deviations

• Issued August 23, 2011
• PROBLEM: ATSAP reports indicate that there is a misunderstanding of key elements regarding the application of weather deviation procedures.
  – Phraseology
  – Pilot/Controller expectations
  – Responsibilities
  – Ineffective training
• SOLUTION: DCPs in final coordination and Controller training in development.
CAR 2010-040
SUA and Weather

- Issued November 17, 2010

- PROBLEM: ATSAP reports indicate potential safety issues related to aircraft deviating through active Special Use Airspace (SUA) in an effort to avoid weather. “Insufficient planning or procedures to address real time weather events.”

- SOLUTION: ATO issued a two Notices (7110.65 & 7210.3) that created new facility requirements and clarified controller responsibilities. Notices published June 15, 2012, and associated training delivered.
CAR 2011-002
GPT Weather

• Issued 2/4/2011

• PROBLEM: GPT has an Automated Surface Observing System (ASOS) on the airport, but unlike other airports with part time towers, they do not have an ASOS/ATIS Interface Unit (AAIU) to allow them the capability to transmit real time ASOS observations to pilots over the ATIS frequency.

• SOLUTION: Install new phone line and AAIU at GPT. Scheduled August 2013
CAR 2011-014
Severe Weather

• Issued August 18, 2011

• PROBLEM: ATSAP received numerous reports on significant weather events, which have caused significant operational issues, including: lack of coordination, sector overload, and sector confusion.

• Best Practices Memo – issued

• Training – not developed
CAR 2011-023
ZMA – Access to Current Weather

• Issued December 14, 2011

• PROBLEM: Lack of weather radar within the airspace overlying the Caribbean area of Miami ARTCC.

• SOLUTION: Initially too costly, but currently researching the use of OSC (Off-Shore Convection Product) that will be a fraction of the cost of installing/maintaining new or existing radars.

• Tentative implementation: If all goes well - 2015.
CAR 2012-004
NEXRAD/WARP Settings

• Issued April 6, 2012

• PROBLEM: Inconsistencies in the display of Next Generation Weather Radar (NEXRAD) and Weather and Radar Processor (WARP) filtering system which may cause an erroneous indication of the precipitation intensity on the radar display. This could result in controllers providing pilots inaccurate weather information, or providing unnecessary reroutes which could impact the safety of the NAS by compressing traffic volumes into available airspace.

• Solution: Still a work in progress
CAR 2012-009
Tailwind/Crosswind Operations

• Issued May 31, 2012

• Reports described situations where the runways in use were not “the runways most nearly aligned with the wind.” (FAAO 7110.65, 3-5-1) Reports also describe situations where the METAR reported wind gusts were not being reported on the digital ATIS.

• Work in progress -- Workgroup continues to work on the rewrite of applicable FAA Orders.