

# ALASKA PILOT REPORT IMPROVEMENT INITIATIVE

## Making the System Work Better for Everyone

National Weather Service Aviation Weather Workshop  
February 2018



Federal Aviation  
Administration



# When and Why it Began

- 2014: Seeing A Downward Trend and One ‘Famous’ PIREP
- Possible Causes and Effects:
  - PIREP Solicitation
  - Dissemination
  - Overall Effectiveness of “The System”



# Organizing the Workgroup

## Internal Procedures

- Flight Service looking inward

## Getting More Input

- Bringing in all the Providers and all the Users
- Widening the Scope of the Inquiry

## Focus

- A systematic look at the decline in quality and quantity of PIREPs entering “The System” and
- The effectiveness of the dissemination of PIREPs

# Alaska Flight Service PIREP Improvement Work Group

## Members:

- National Air Traffic Controllers Association (NATCA)
- Anchorage Air Route Traffic Control Center (FAA)
- Alaska Terminal District (FAA)
- Alaska AOPA
- Alaska Airmen's Association
- Alaska Aviation Weather Unit (NWS - Alaska)
- Aviation Weather Center (NWS – Lower 49 States)
- Aviation Weather Cameras (FAA)
- Alaska Air Carriers Association
- Flight Standards Division (FAA)
- Alaska Department of Transportation & Public Facilities
- Alaska Aviation Safety Foundation
- University of Alaska
- U. S. Air Force
- U. S. Army



# Performance Issues Identified

## Reduction in numbers of PIREPs

- After 2009, the number of PIREPs filed by FSS's in Alaska declined by **35%** in a 3-year span

## Reduction in quality

- Pilot or Specialist? ...or BOTH...

## Training needed on both sides of the microphone

- Solicitation phraseology was generally ineffective  
**“Pilot reports appreciated”**

## Lack of specifically targeted PIREPs for forecasters

- A lack of PIREPs in areas of greatest need

# Technical Issues

## Filtered distribution

- Some systems were “stripping” PIREPs based on unreported or missing elements
- Poor input confuses automation

## Lack of standardized plotting

- PIREPs based on a Radial/DME were being plotted using True North versus Magnetic North
- Plotting from a Navaid versus the Airport with the same identifier
- Plotting the center of a line segment

# How to Fix the Problems

- Flight Service Metrics
- A Pilot Questionnaire
- Research the Dissemination of PIREPs
- Improve the technology

# Changing the Game

- **Training for “Smart PIREPs”**
- **Tracking Quantity**
- **Tracking Quality**
- **Tracking Dissemination**
- **PIREP “cheat sheets” for pilots**
- **Outreach!**
- **PIREPs where needed, when they’re needed**
- **“Empty PIREPs” don’t help!**
- **Getting the information Right**
- **Where is my PIREP?!**
- **A checklist for ease of submission**
- **Media, Trade Shows, Fly-ins, and more**



# Challenges

- **New sources:**
  - En Route Controllers
  - Terminal Controllers
  - Software Apps & Other Tools
- **New ways of displaying the information:**
  - Standardized reporting
  - Consistent plotting
  - The Bane of Information Technology: Security

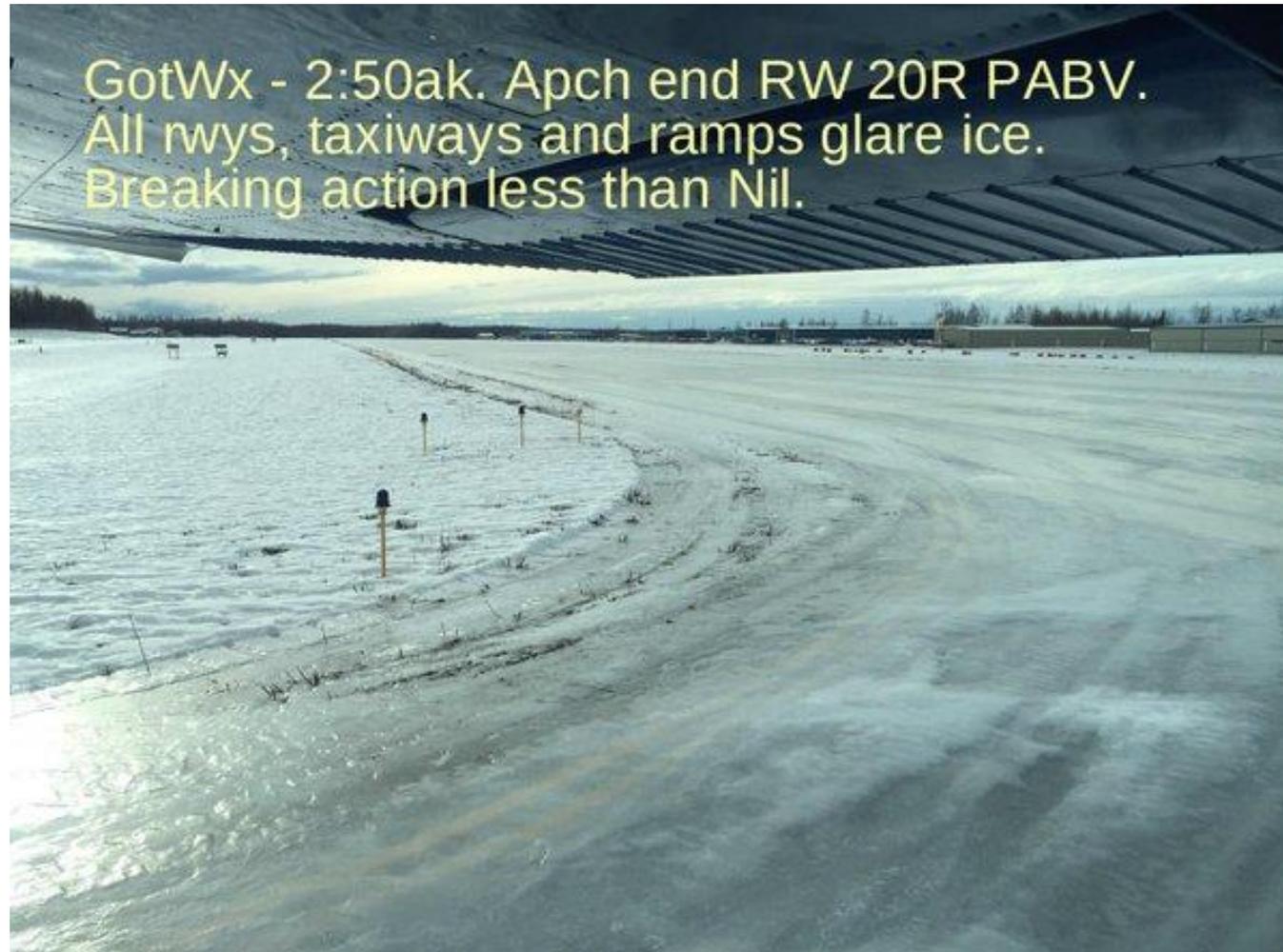
# Visual PIREPs (VREPs) – Work in Progress

- A Visual Pilot Report (electronic photo) taken either airborne or on the ground
- The “Mobile Weather Camera” concept – the usefulness of:
  - Reporting Weather
  - Airport Surface Conditions
  - Forest Fires
  - Emergency Response Locations
  - Volcanic Events
  - ...and more!
- The Future – the workgroup will continue testing the concept and leverage existing infrastructure.

# VREP Example showing Off - Airport Conditions

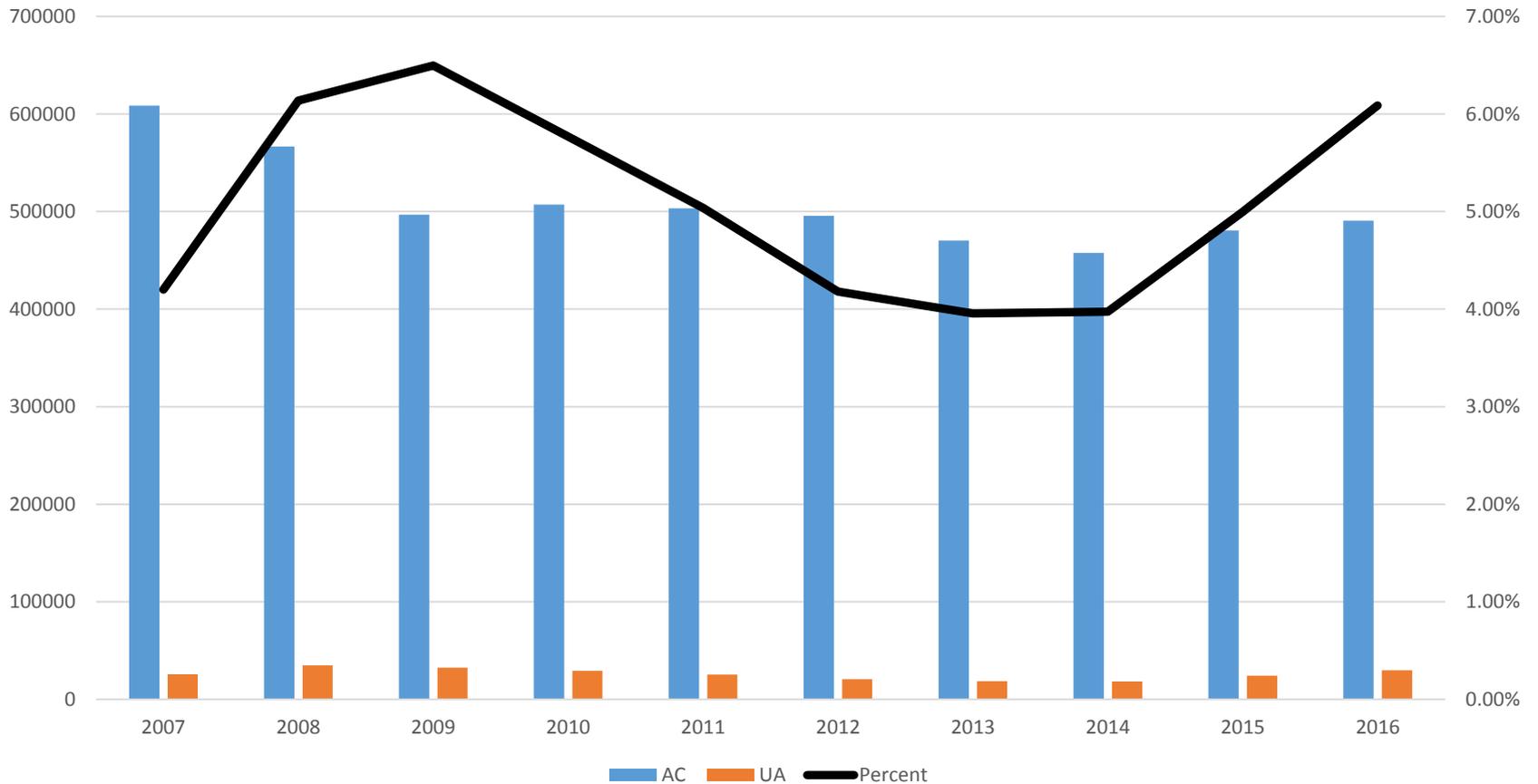


# VREP showing Airport Landing Conditions



# Taking the Long View - 2007-2016

## FSS Aircraft Contacts versus PIREPs





Questions, Comments or Ideas?

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