



**National  
Transportation  
Safety Board**

FRIENDS AND PARTNERS IN AVIATION WEATHER



**Friends & Partners**  
— IN AVIATION WEATHER —

# **Crowdsourcing Pireps**

**Bruce Landsberg – Vice Chairman, NTSB**

# The Secret behind Forecasts ....

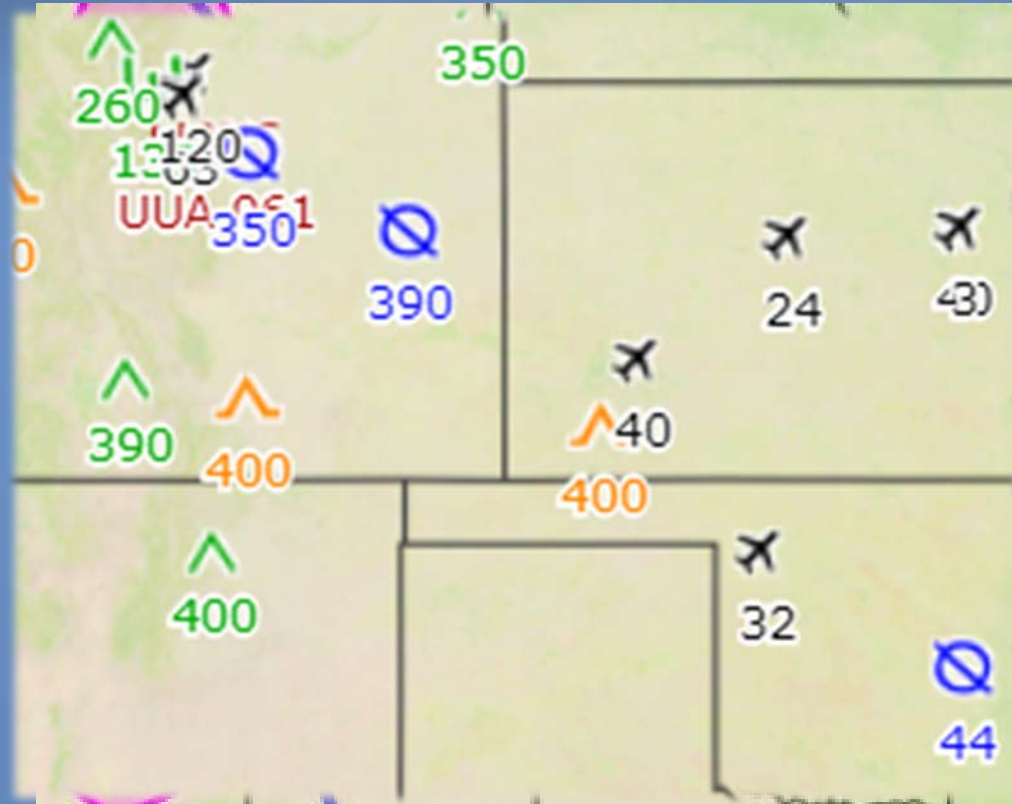


# Wolf ?

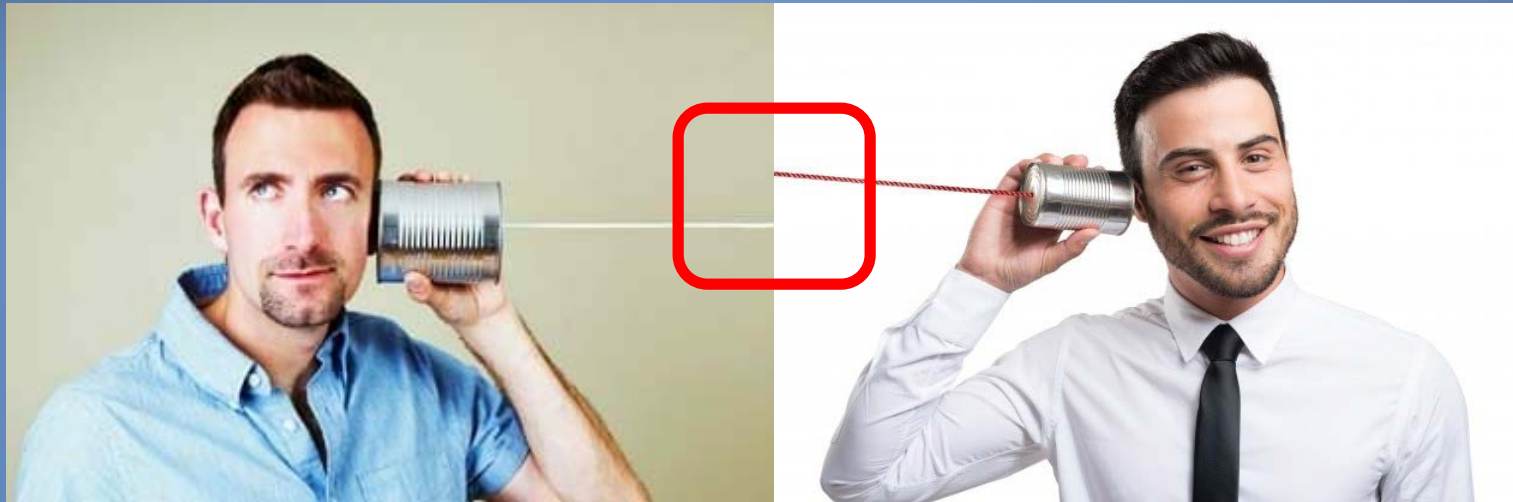




How could it possibly be better ??



# Message garbled – or not delivered !!!



**ATC or FSS**

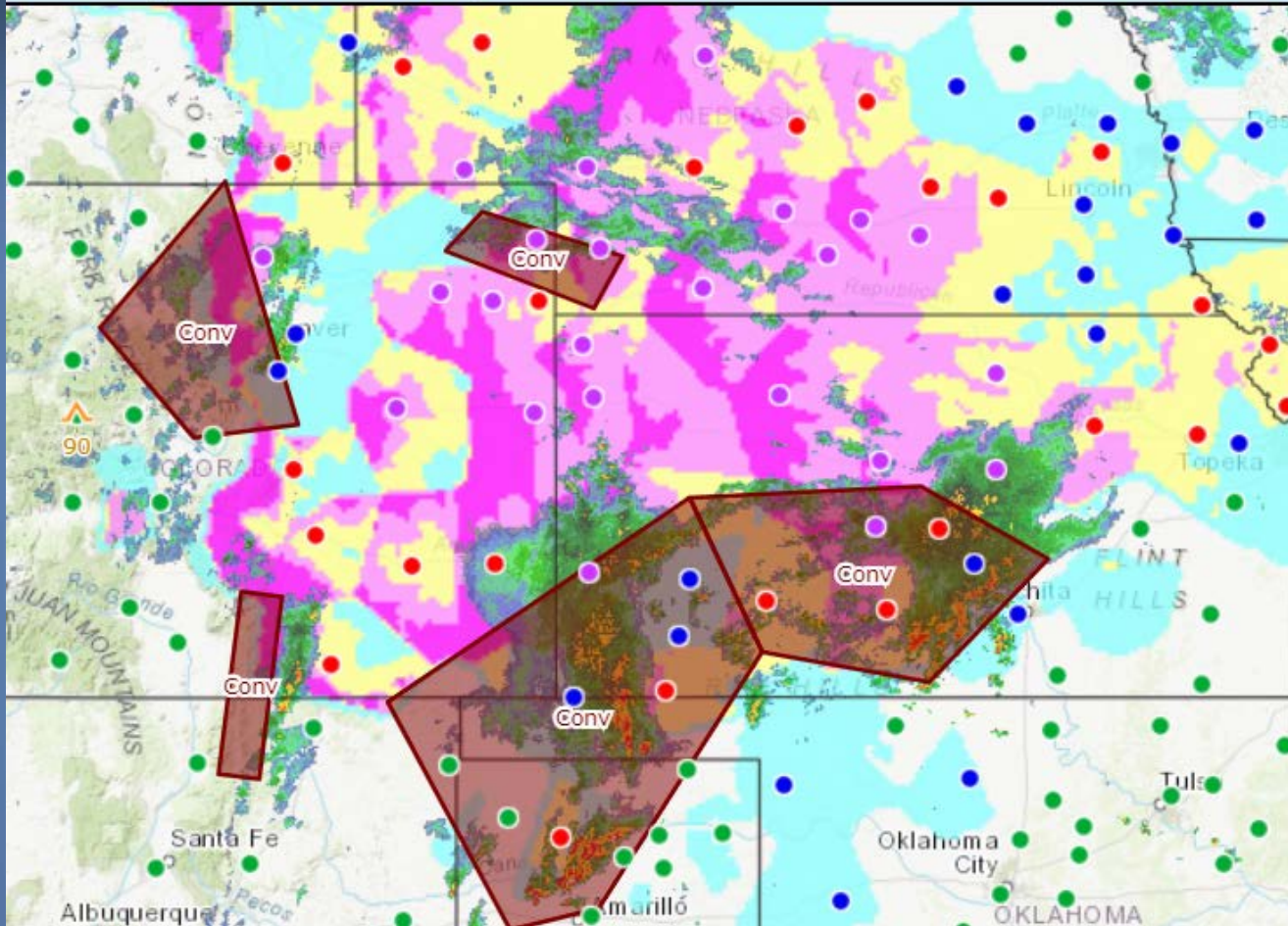
# Helicopter Emergency Medical Services Tool

Overlays

View

Configure

1953





# We have uplink via FIS-B

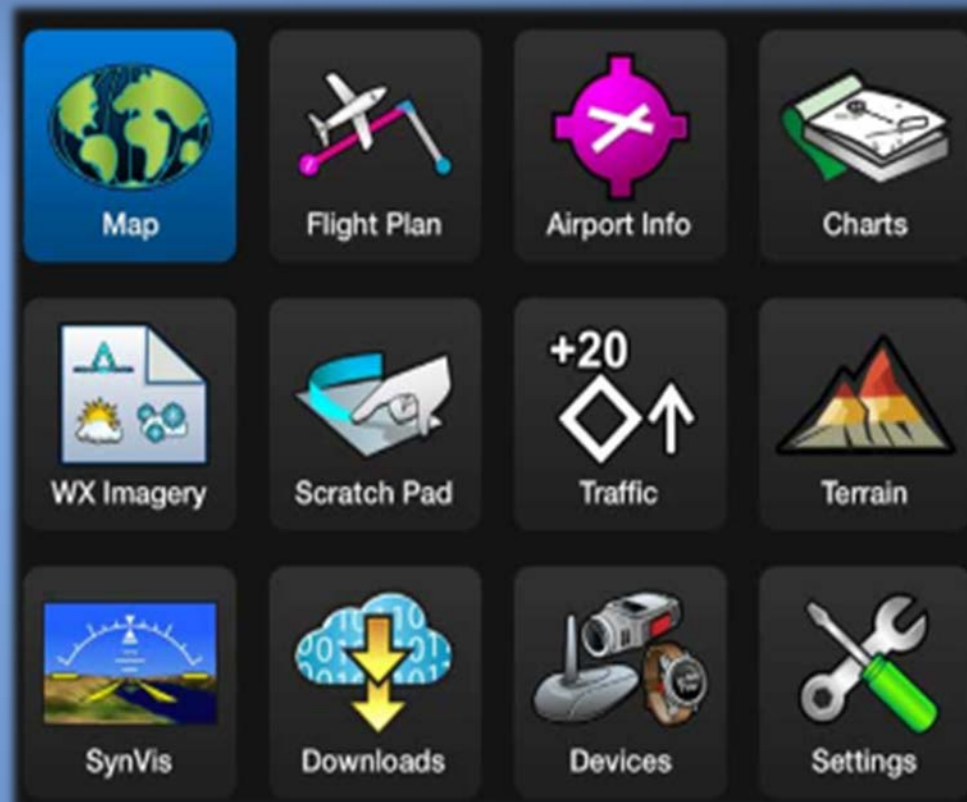
- **We need downlink:**
- UAT 278
- 1090 – Kinda full

# Downlink concerns via ADS-B



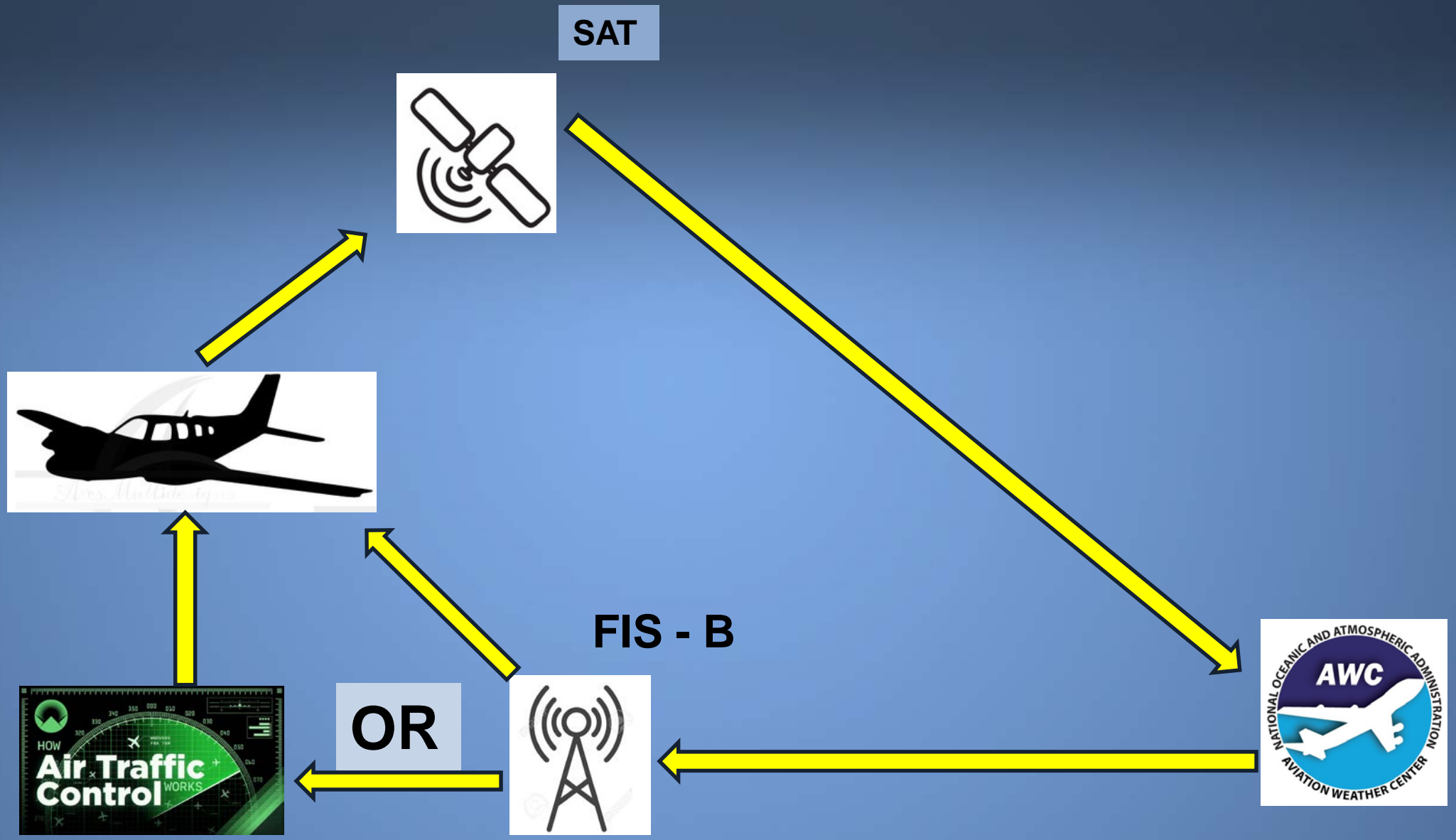


# Waze for Weather ....



# Another way to downlink ??







# Preloaded from EFB App

- Location & Altitude
- App could **ask** for Pirep



# Preloaded From EFB App

## Aircraft Model – turbulence & Icing



# Notional Entry Screen

Turb:     +

C/V:

Ice:     +

Alt:

Wx:



[https://www.nts.gov/safety/safety-alerts/Documents/SA\\_064.pdf](https://www.nts.gov/safety/safety-alerts/Documents/SA_064.pdf)



**NTSB**

***SAFETY ALERT***

National Transportation Safety Board



### **Pilot Weather Reports (PIREPs): Pay It Forward**



***More and better PIREPs enhance safety for all***

#### ***The problem***

- Sparse reporting and inaccurate or incomplete information adversely affect the usefulness of PIREPs (brief reports from pilots describing observed in-flight weather conditions) for improving weather forecasts and advisories and helping pilots avoid weather hazards.<sup>1</sup>
- Pilots submit relatively few PIREPs compared to overall traffic volume (see figure).
  - Pilots may be unaware that PIREPs of all weather conditions are important, including good or “as forecasted” weather.
  - Pilots may lack confidence in their ability to assess weather.
  - Pilots may not be proficient or comfortable with the various PIREP submission methods.
  - Pilots may think that their PIREPs will not be disseminated to others.



**NTSB**

<https://www.nts.gov/safety/safety-studies/Pages/SIR1702.aspx>

2012 – 2015

16 accidents/ incidents



# NTSB Rec– Pilot Reports !!!

- 18 recs to FAA, NWS, NATCA, industry.
- Benefits
  - Timely notification of change
  - Better models
  - Much better forecasts
  - **Better Wx Decisions by pilots & Dispatchers**



# Timeliness is *Everything* !!!



Courtesy: Non-Sequitur - Wiley

# Summary

- Problem is NOT new
- The perfect is the enemy of the GOOD
- “Big Bangs” don’t always go as planned
- Journey – NEVER a Destination

**Action Time !!!**

**What about you ?**





# National Transportation Safety Board

**Safety isn't everything --- It's the ONLY thing**