



NTSB National Transportation Safety Board

Office of Aviation Safety



Weather Data Collection in Alaska

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Photo by John Olafson
available at www.weather.net

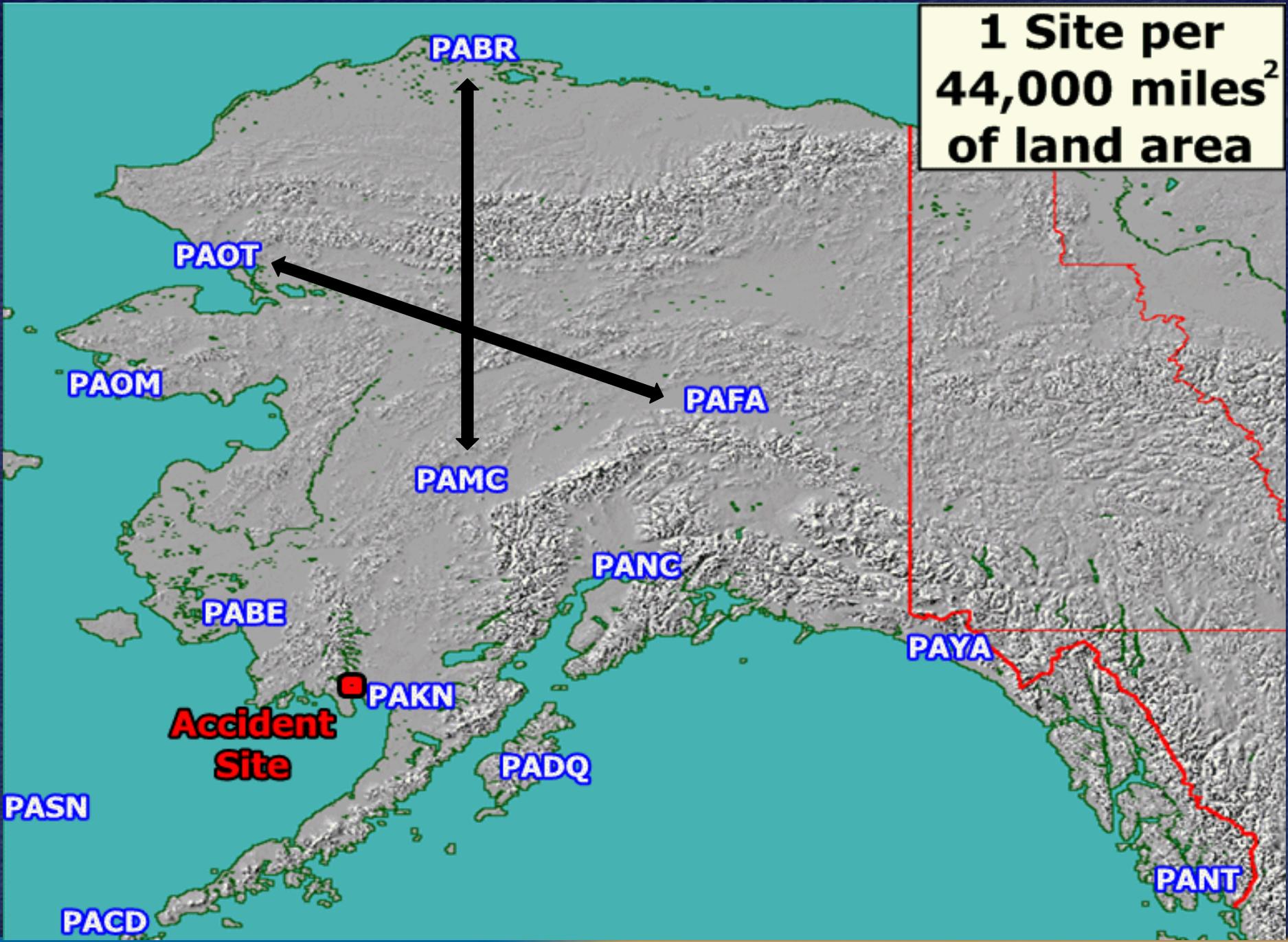
Current Alaska Observations

- Surface Observations (METARs)
 - Automated station reports
 - Human augmented reports
- Pilot Reports (PIREPs)
 - Provided at pilots' discretion
 - Can relay subjective values
 - Not provided consistently across state

Current Alaska Observations

- Weather cameras
 - Most are only useful during daytime
 - Do not provide quantitative information
- Weather balloons
 - Can be widely spaced
 - Twice per day per site at 00 and 12 UTC

1 Site per
44,000 miles²
of land area



Aircraft as a Collection Platform

- Optimal platform for increased data collection
- Has already proven very beneficial
- Observations include:
 - wind, temperature, humidity, pressure
 - *objective* icing and turbulence reports
- Aviation weather monitoring, forecasting can be greatly improved



Universal Access Transceiver

- Supports future robust network of data relay
- Developed via FAA Capstone Program
- Supports real-time aircraft-ground data transfer
- Data link that facilitates ADS-B



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