

Taking the ADS-B Plunge?

Here is what you should know before you jump in.



Adam White, Director of Government and Legislative Affairs

The 2020 Mandate and ALASKA



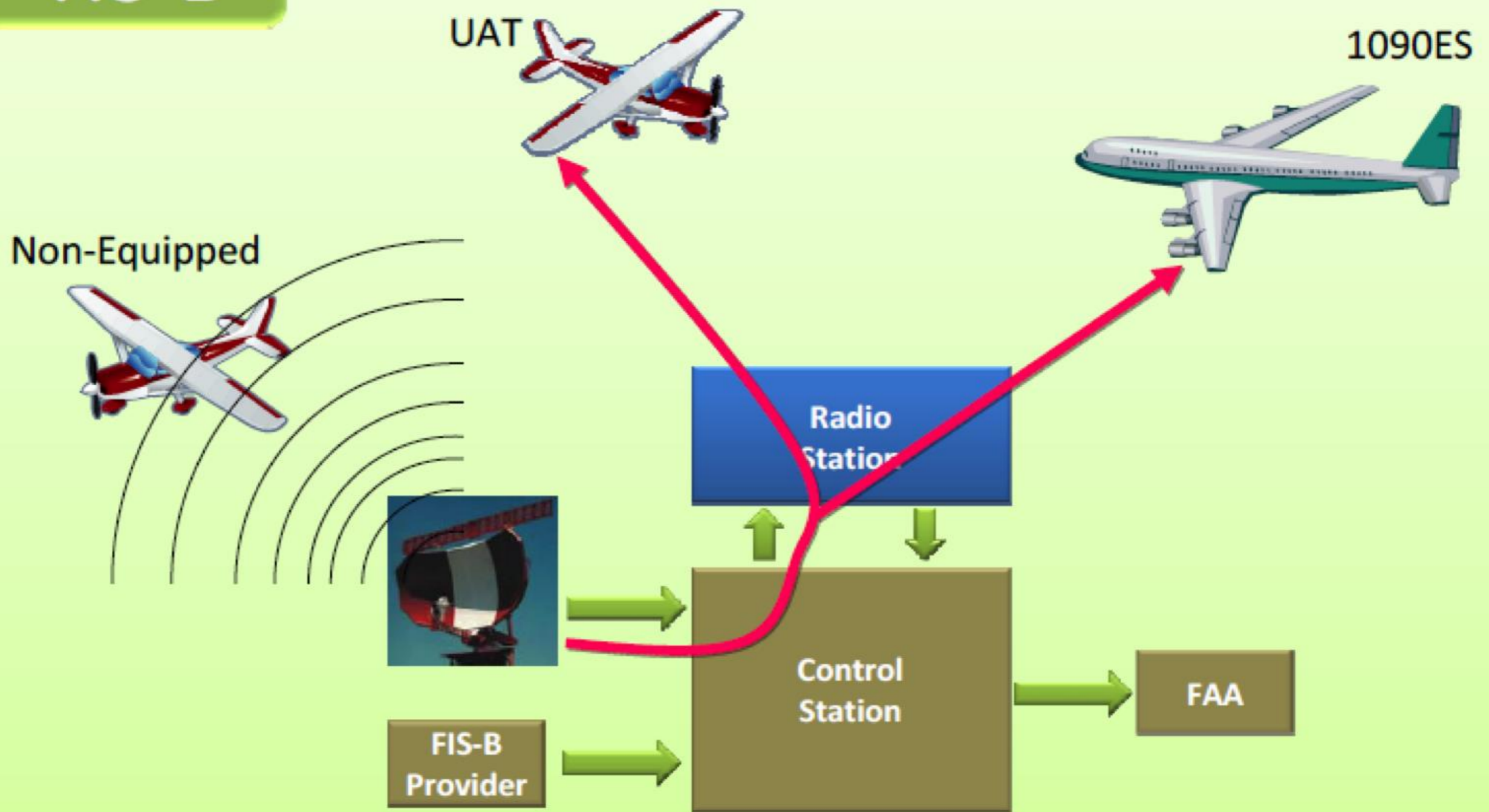
FL180 or higher
Anchorage Class C and above



ADS What?

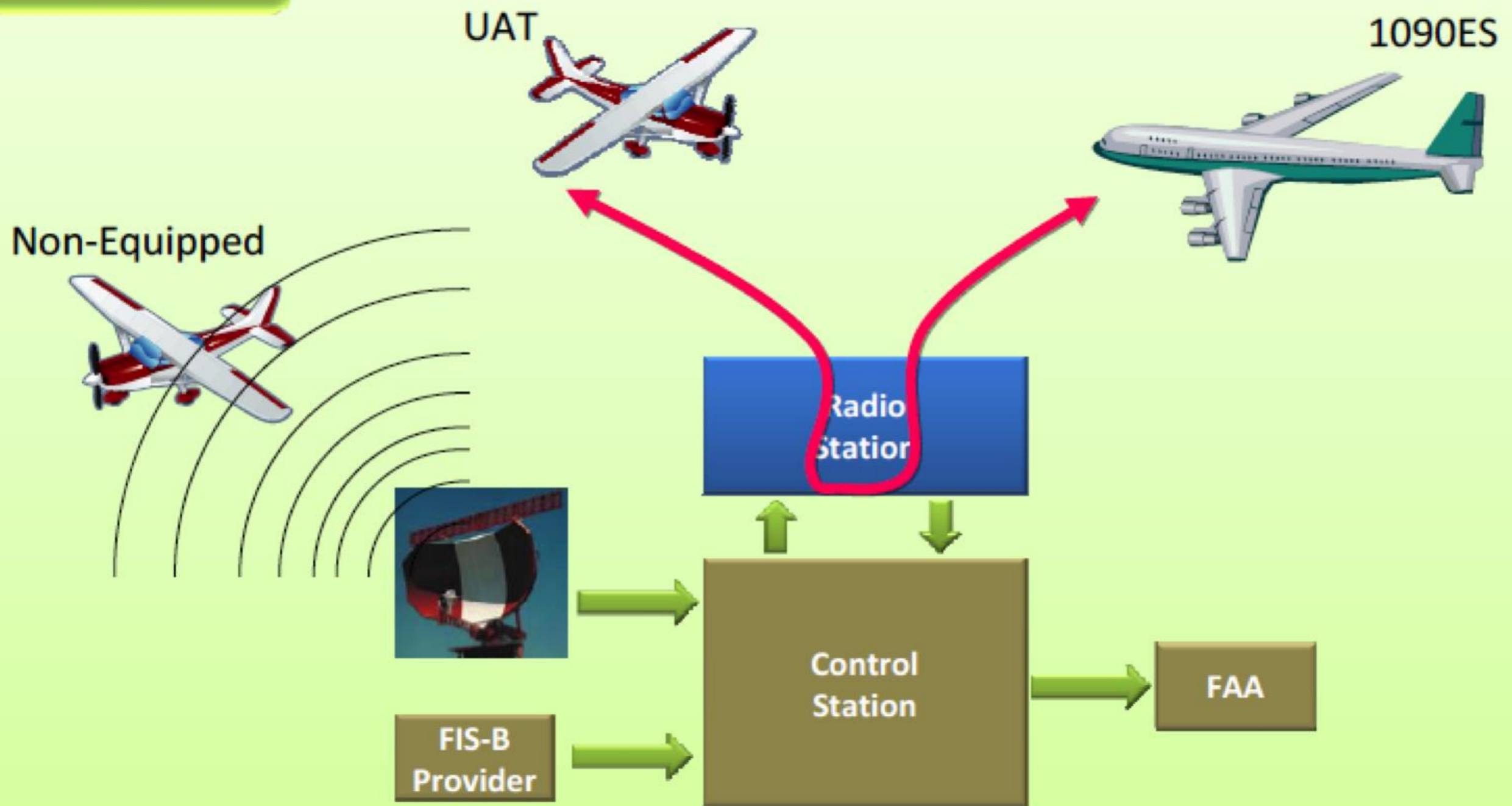
Out, In TIS-B, ADS-R, FIS-B, UAT,
1090ES, WAAS, Fixed, Portable

TIS-B



Uplink of Surveillance Data of Non-ADS-B equipped aircraft for Aircraft Situational Awareness

ADS-R



Cross-Linking of ADS-B data for Aircraft Situational Awareness

FIS-B

UAT



1090ES



Non-Equipped



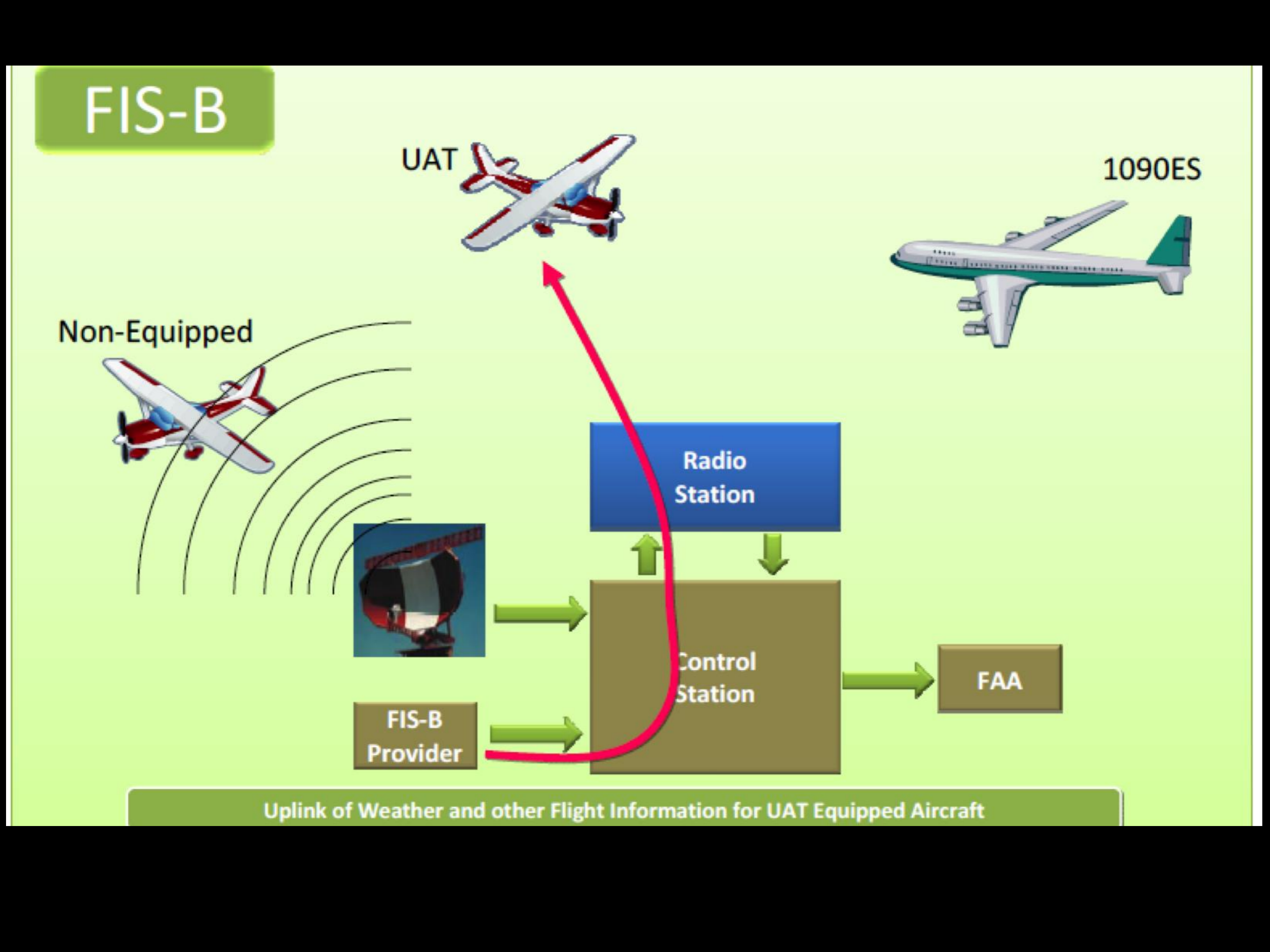
Radio Station

Control Station

FAA

FIS-B Provider

Uplink of Weather and other Flight Information for UAT Equipped Aircraft



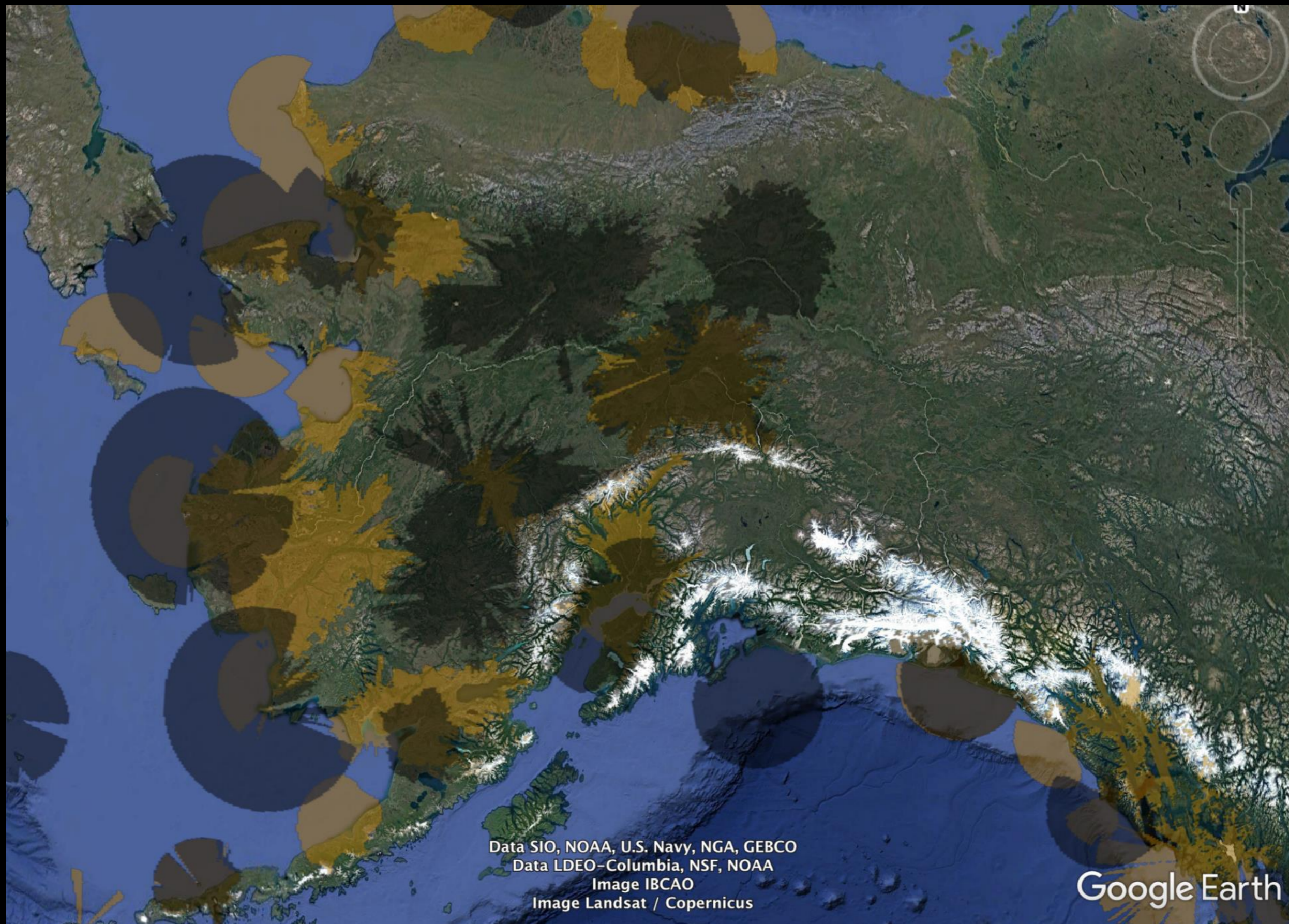
TBL 4-5-3

FIS-B Basic Product Update and Transmission Intervals

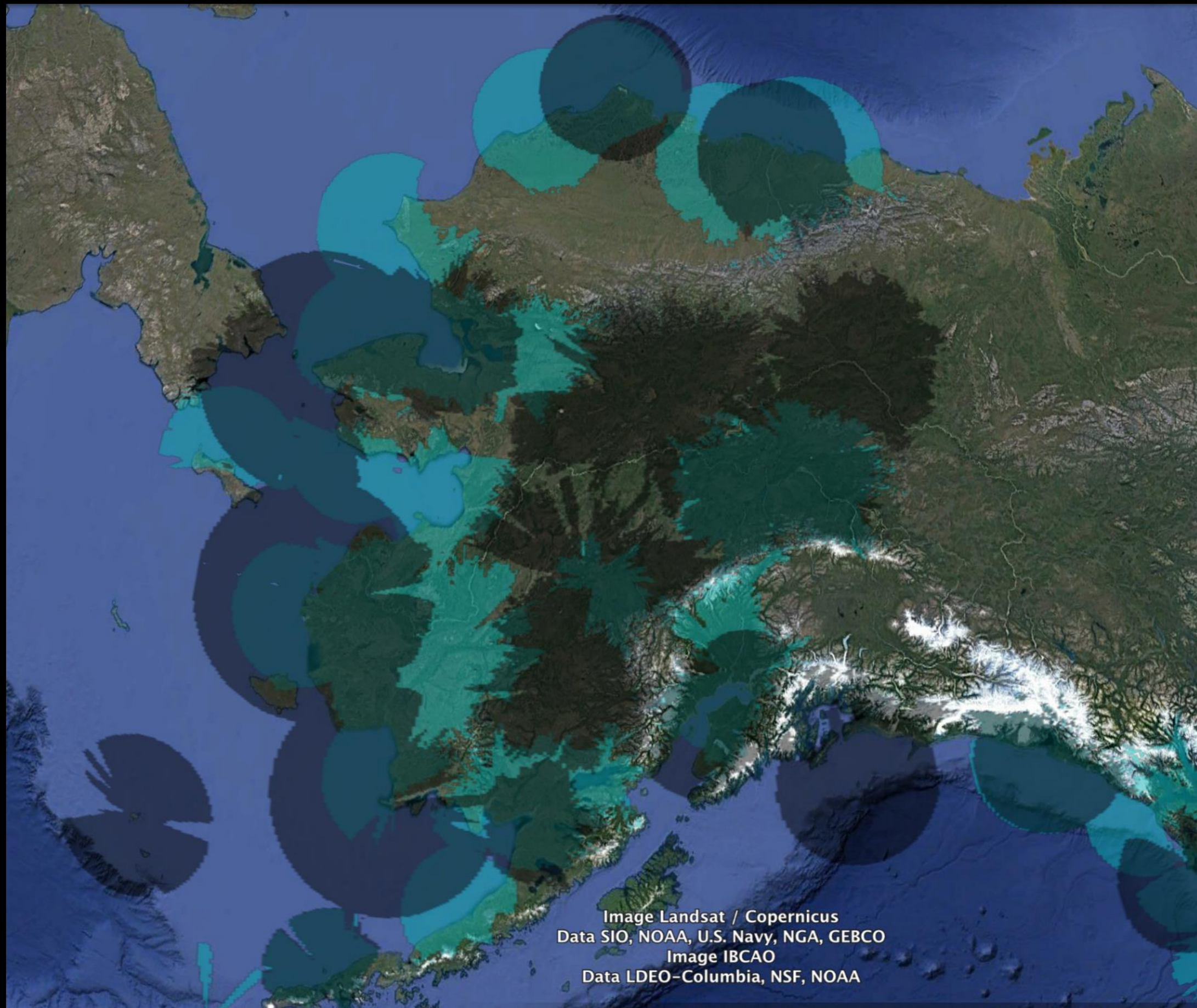
Product	FIS-B Service Update Interval¹	FIS-B Service Transmission Interval²
AIRMET	As available	5 minutes
Convective SIGMET	As available	5 minutes
METAR/SPECI	Hourly/as available	5 minutes
NEXRAD Reflectivity (CONUS)	5 minutes	15 minutes
NEXRAD Reflectivity (Regional)	5 minutes	2.5 minutes
NOTAM-D/FDC	As available	10 minutes
PIREP	As available	10 minutes
SIGMET	As available	5 minutes
SUA Status	As available	10 minutes
TAF/AMEND	8 hours/as available	10 minutes
Temperature Aloft	6 hours	10 minutes
Winds Aloft	6 hours	10 minutes

Product Parameters for Low/Medium/High Altitude Tier Radios

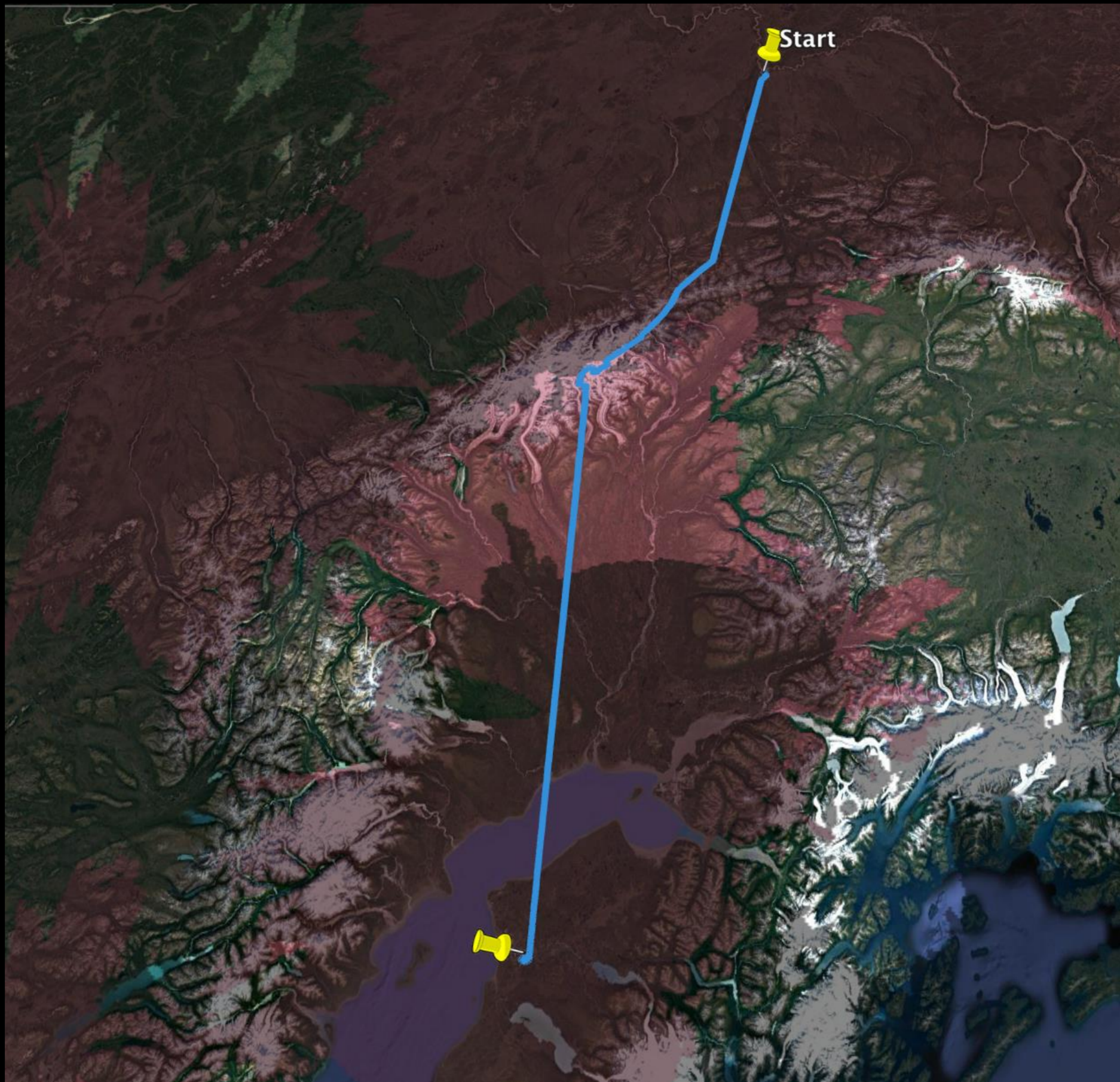
Product	Surface Radios	Low Altitude Tier	Medium Altitude Tier	High Altitude Tier
CONUS NEXRAD	N/A	CONUS NEXRAD not provided	CONUS NEXRAD imagery	CONUS NEXRAD imagery
Winds & Temps Aloft	500 NM look-ahead range	500 NM look-ahead range	750 NM look-ahead range	1,000 NM look-ahead range
METAR	100 NM look-ahead range	250 NM look-ahead range	375 NM look-ahead range	CONUS: CONUS Class B & C airport METARs and 500 NM look-ahead range Outside of CONUS: 500 NM look-ahead range
TAF	100 NM look-ahead range	250 NM look-ahead range	375 NM look-ahead range	CONUS: CONUS Class B & C airport TAFs and 500 NM look-ahead range Outside of CONUS: 500 NM look-ahead range
AIRMET, SIGMET, PIREP, and SUA/SAA	100 NM look-ahead range. PIREP/SUA/SAA is N/A.	250 NM look-ahead range	375 NM look-ahead range	500 NM look-ahead range
Regional NEXRAD	150 NM look-ahead range	150 NM look-ahead range	200 NM look-ahead range	250 NM look-ahead range
NOTAMs D, FDC, and TFR	100 NM look-ahead range	100 NM look-ahead range	100 NM look-ahead range	100 NM look-ahead range



RADAR & ADS-B Coverage at 1500' AGL



Radar & ADS-B Coverage at 3,000' AGL



Radar & ADS-B Coverage at 5,000' AGL

What Are Most Folks In Alaska Doing?

- Most installs are rolled into other avionics work
- Most folks are getting ADS-B In too
- 75% include using an iPad
- Foreflight followed by Garmin Pilot
- 90+% are getting 1090ES out
- Transponder Swap is most common
- Average cost of installs running between \$5.5K to \$8.5K (\$2K of that is labor/ shop incidentals)
- Prices are not really coming down but there are a few new options coming out that might be cheaper.



Questions?