

International Civil Aviation Organization



**THE NINTH MEETING OF AUTOMATIC
DEPENDENT SURVEILLANCE – BROADCAST
(ADS-B) STUDY AND IMPLEMENTATION TASK
FORCE (ADS-B SITF/9)**



Jakarta, Indonesia, 18 -19 August 2010

**Agenda Item 6: Review States' activities and interregional issues on trials and
implementation of ADS-B and multilateration**

**BRIEFING BY ITT CORPORATION ON CURRENT STATUS OF ADS-B
DEPLOYMENT FOR THE F.A.A. INTO N.A.S.**

(Presented by ITT Corporation)

SUMMARY

ITT will provide background, summary of the technical solution being implemented under its ADS-B contract with the Federal Aviation Administration and provide an updated status of the program.

REFERENCES

Federal Register/Vol. 75, No 103/Friday, May 28, 2010/Rules and Regulations

1. Background

1.1 FAA awards ITT Corporation contract through 2025 for ADS-B as a service for surveillance data into the National Airspace System (N.A.S).to increase operational safety into the world's busiest airspace in the world.

1.2 ITT will build and own an estimated 794 ground stations, four data control stations, two network operations centres to operate, monitor and provide redundancy to the solution. NetxGen data will be delivered by the solution to approximately 275 FAA ATC facilities.

1.3 FAA declares in-Service Decision (ISD) for ITT's deployment of ADS-B systems in southern Florida in December 17, 2008. Declaration of ISD recognizes the FAA's successful completion of validation of the the ADS-B essential services deployed by ITT, and confirms that the services meet all operational, functional and performance requirements, are safe and secure, and are supportable as part of the National Airspace System.

1.4 May 28, 2010, FAA publishes Final Rule on ADS-B Out Performance Requirements To Support Air Traffic Control Service. Ruling adds equipage requirements and performance standards to ADS-B Out and mandates equipage by January 1, 2020.

2. Discussion

2.1 Attachment A



ITT Corporation on Current Status of ADS-B Deployment for the F.A.A. into N.A.S.

August 18 & 19, 2010

Jakarta, Indonesia

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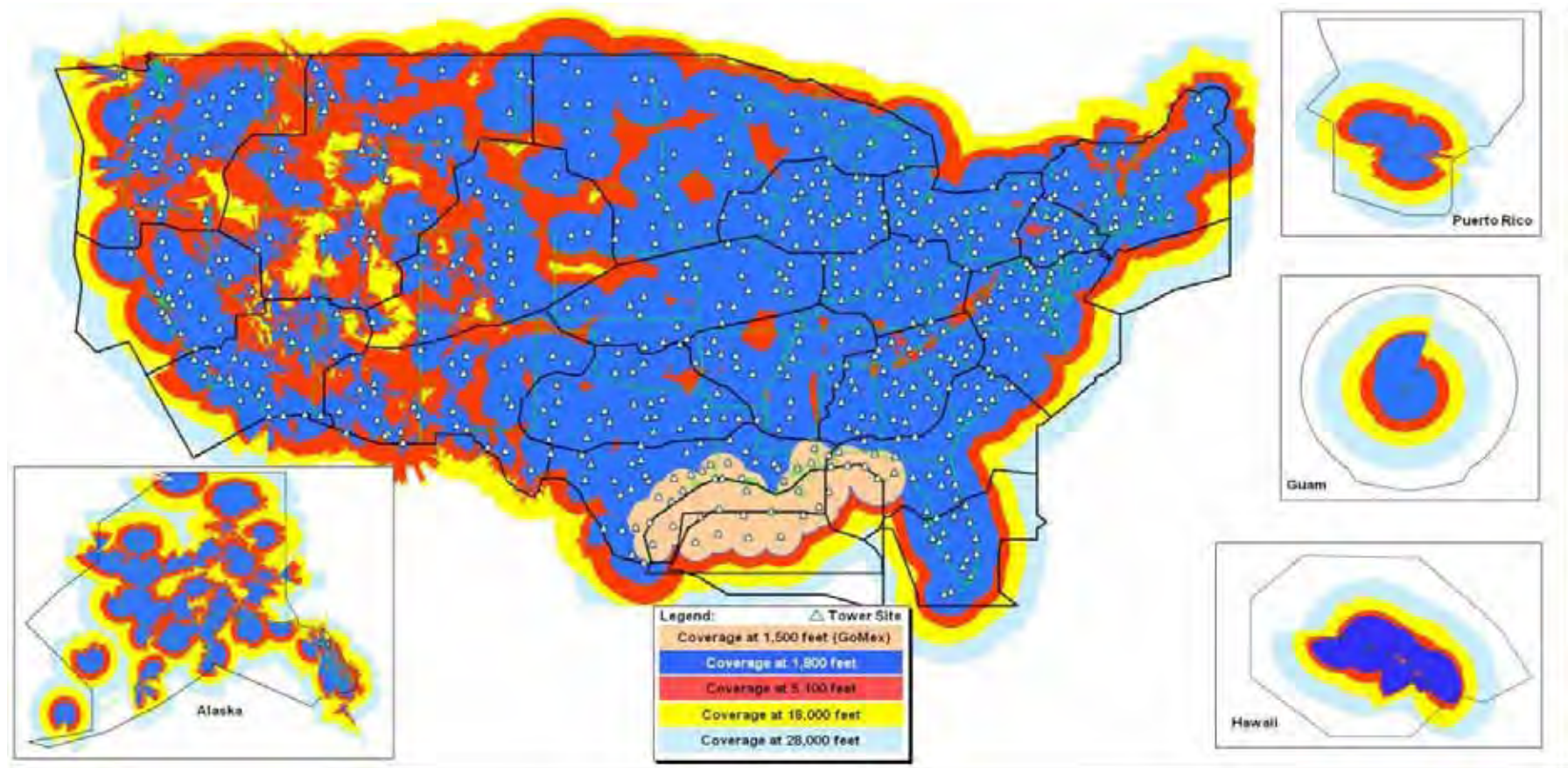
The Coverage Solution –794 Radio Sites

275 service delivery points (FAA facilities)

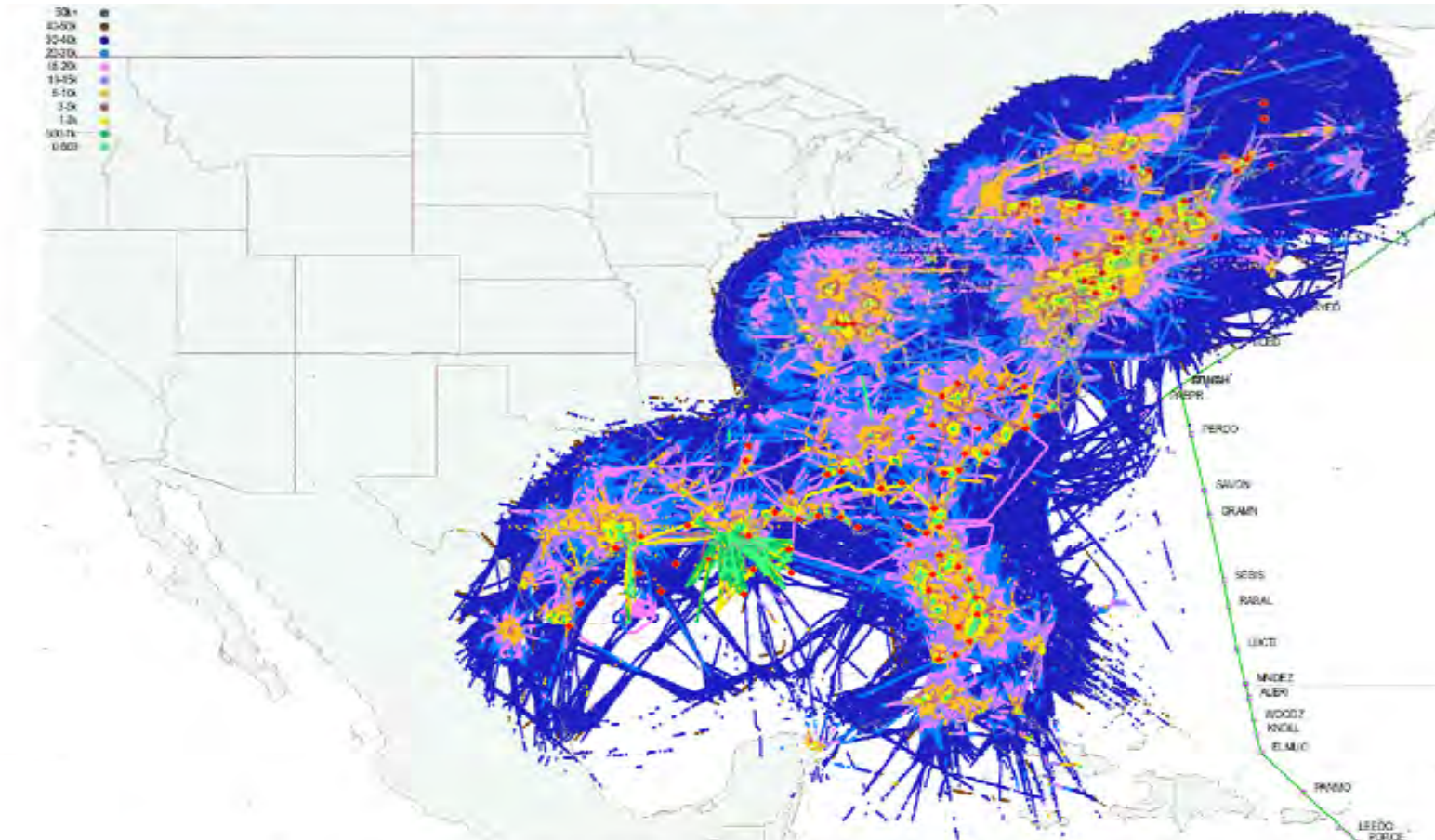
1100 network ports

4 data centers (master station/server)

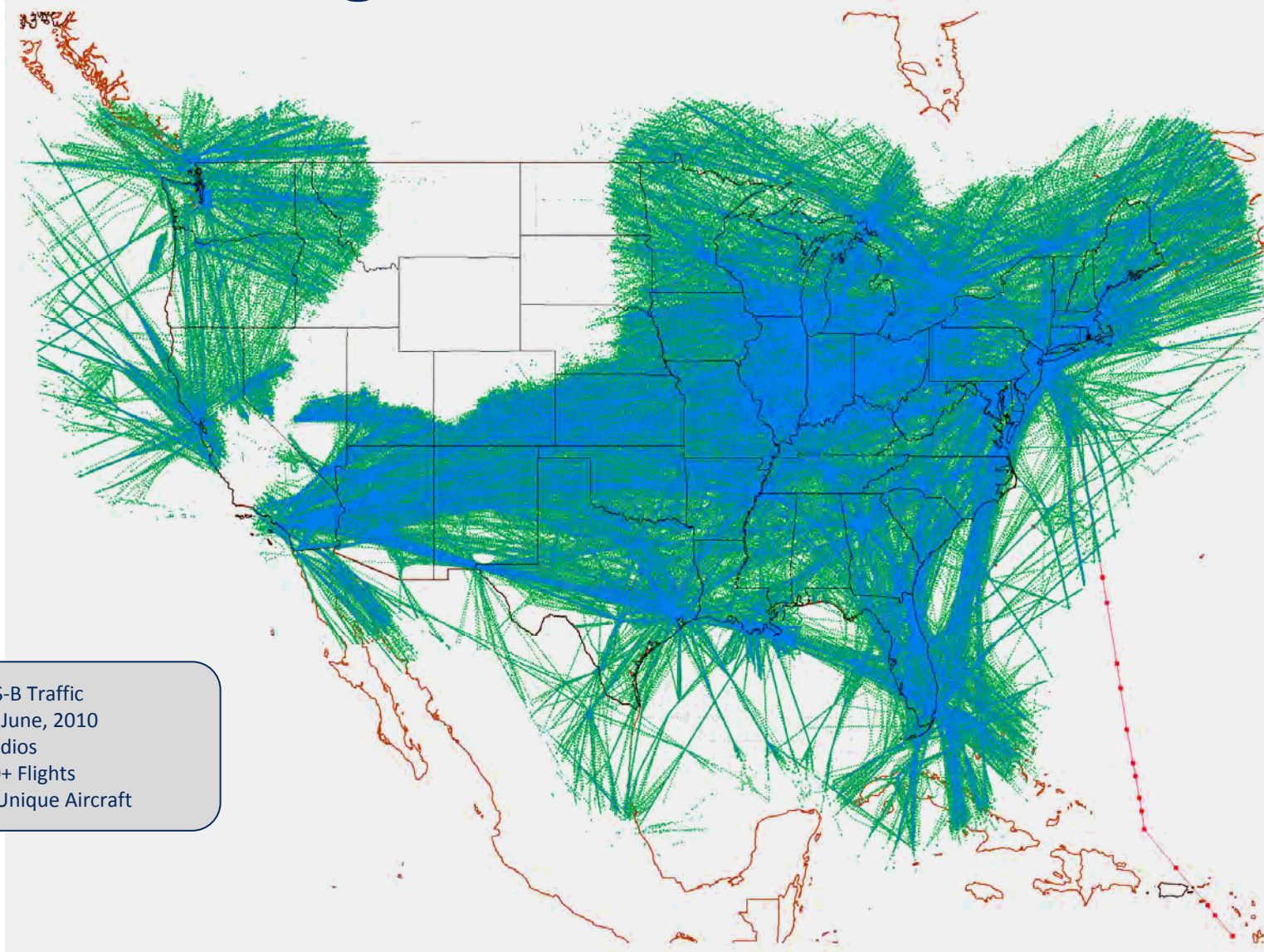
2 network operation centers (24 hours/day maintenance monitoring)



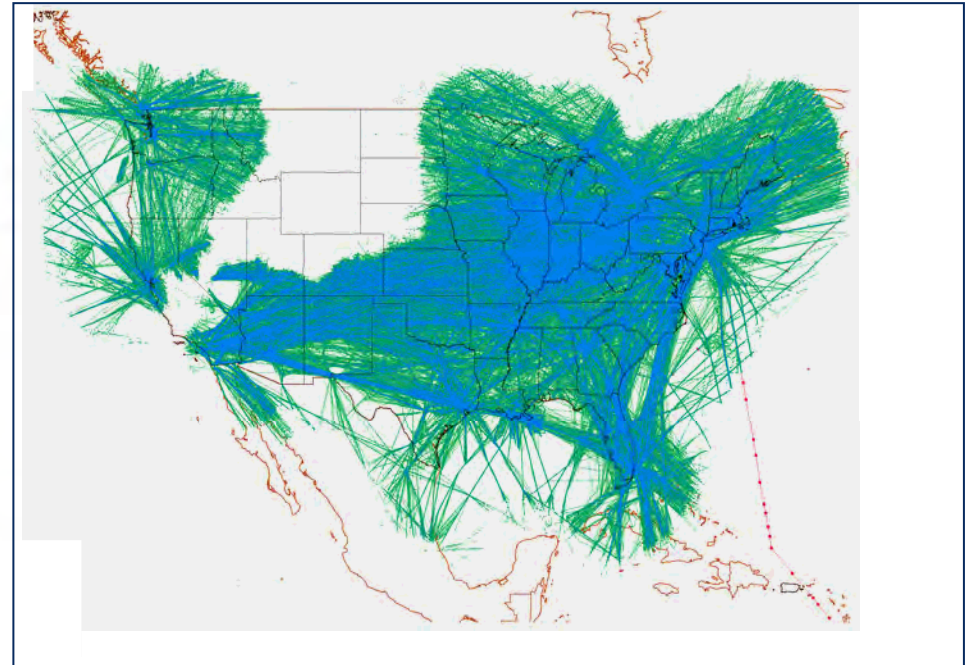
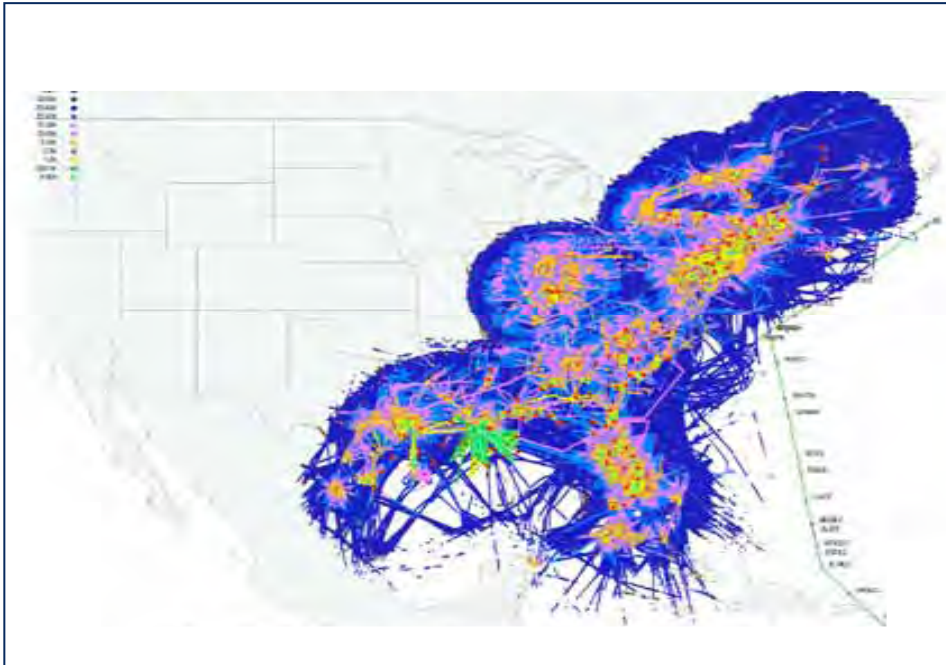
Collected Flight Tracks in February 2010



Collected Flight Tracks in June 2010



Comparison of Coverage February to June of 2010



High Level Program Schedule

	FY2008				FY2009				FY2010				FY2011				FY2012				FY2013			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
ESSENTIAL SERVICES																								
Key Site - Initial Operational Capability (IOC)				▲																				
In-Service Date (ISD)				▲																				
Segment 1 Continued Roll-Out																								
Segment 2 Roll-Out																								
CRITICAL SERVICES																								
Key Sites - Initial Operational Capability (IOC)																								
In-Service Date (ISD)																								
Segment 2 Roll-Out																								
WEATHER OBSERVATION																								
Gulf of Mexico Roll-Out																								
Alaska Roll-Out																								



Implementation Status – June 2010

- 322 radio sites planned by September 2010
- 259 radio sites constructed (249 in CONUS; 10 in AK)
- 225 radio sites tested locally and reporting on the network
- 40 radio sites currently operating for Key sites (ZMA, Gulf, SDF, PHL, JNU)



- ★ Tested Locally and Reporting on Network
- Construction and Installation Complete. Utilities and Telco Installed.
- Construction and Installation Complete. Utilities or Telco Pending.
- Construction in Process or Pending



Conclusion

- ADS-B technology is proven
- The ITT Team has successfully designed, developed, and integrated an exceptional ADS-B ground infrastructure solution
 - Flexible, scalable, safe, and secure
 - Excellent coverage
 - Capable of operating in the most benign to most stringent 1090 MHz spectrum environment
- Thank You - we are very pleased to have this opportunity to discuss our work

