

Surveillance and Broadcast Services

FAA Gulf of Mexico Sustainment Team Update

Presented to FAA-Industry Gulf of Mexico
Agreement Implementation Committee

By: FAA Gulf Team

Date: October 13, 2021



Federal Aviation
Administration



Agenda

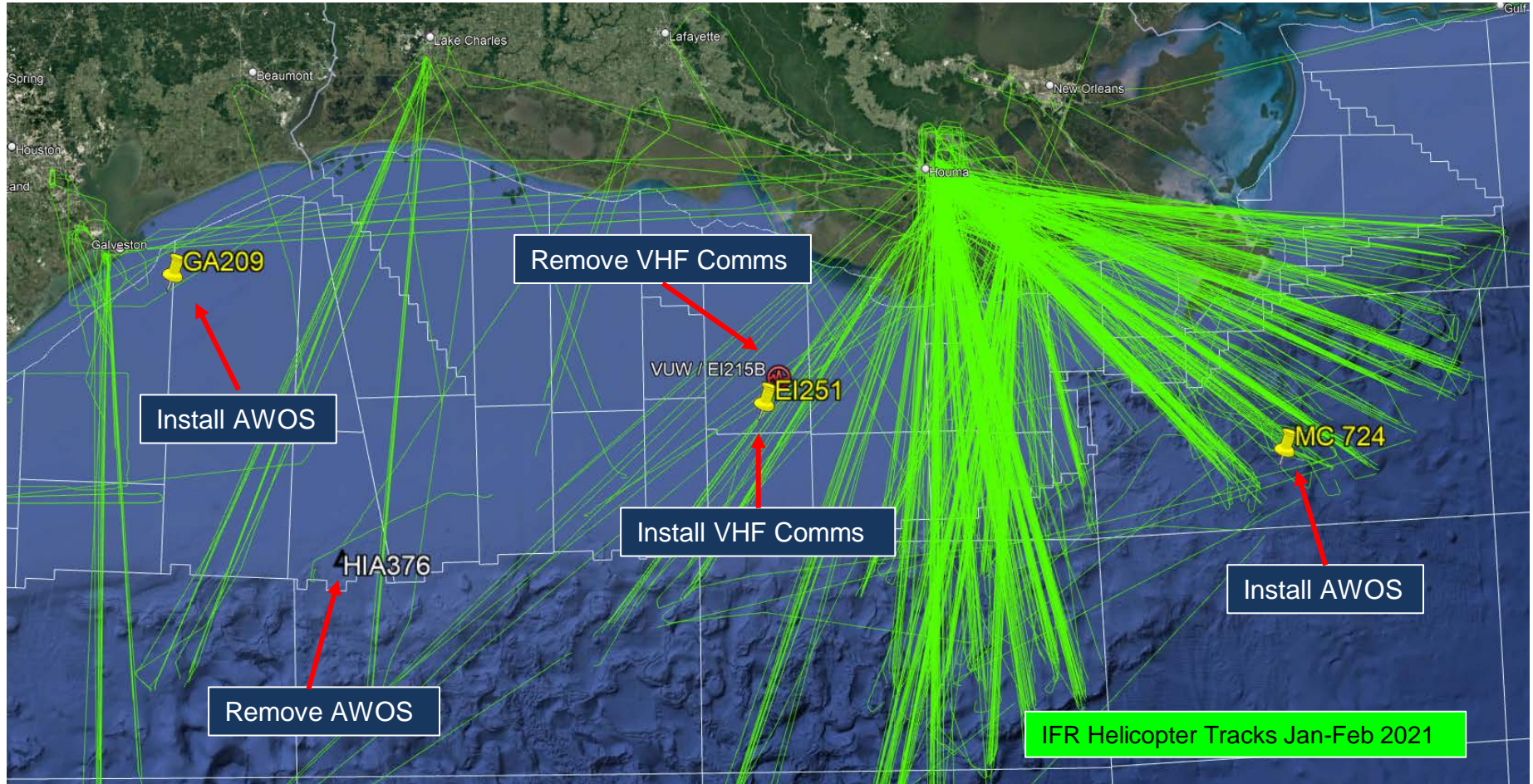
- Regular Business
 - FAA Infrastructure Status
 - ADS-B/VHF Comm Coverage
 - Weather Deviation Area Expansion Project Status
- New Business

FAA Infrastructure Status

Rana Obeid, Federal Lead



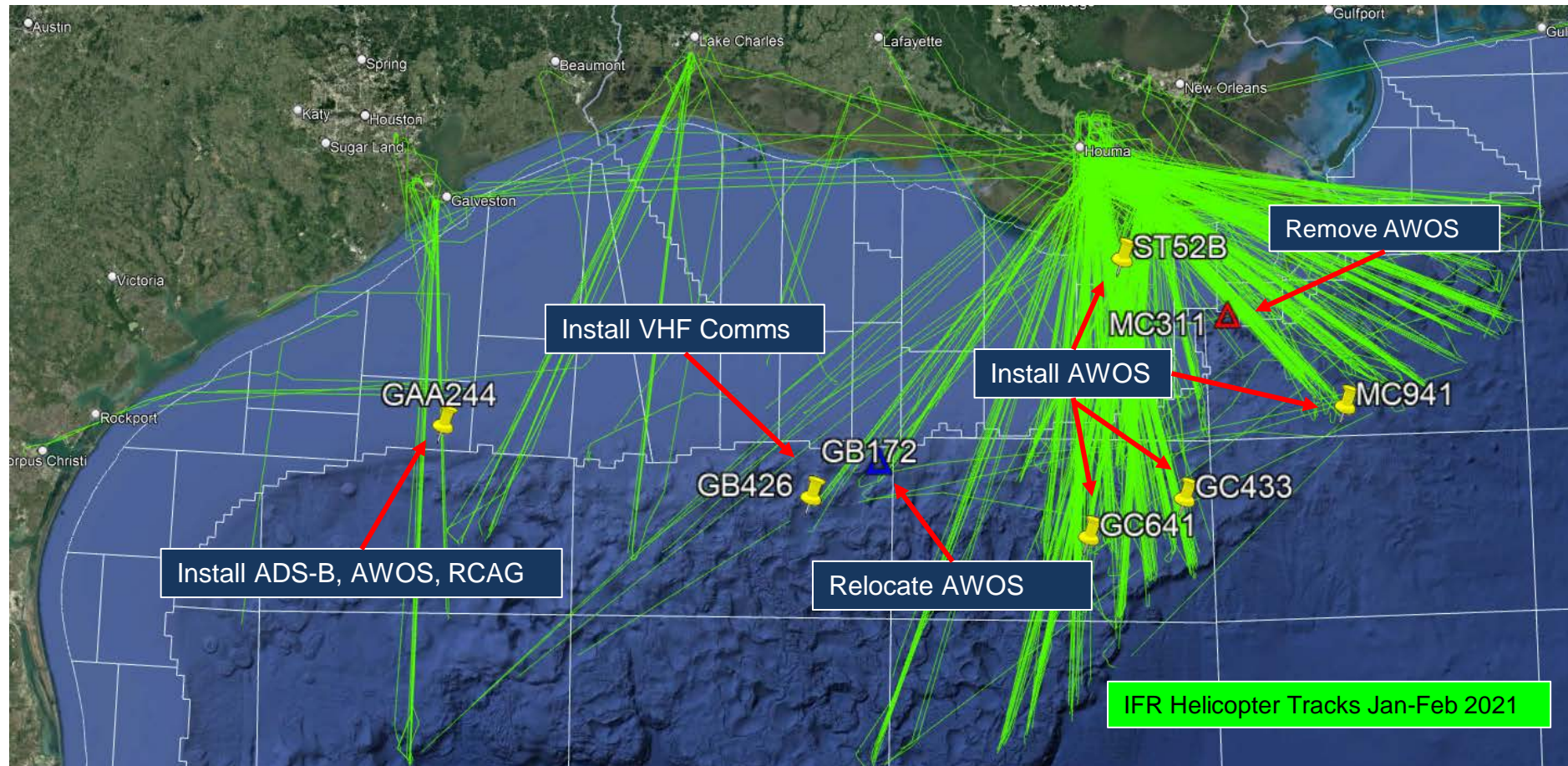
2021 Offshore Projects Remaining



Install AWOS GVW / Galveston 209B
Remove AWOS HQI / High Island A376B
Remove VHF Comms VUW / Eugene Island 215

Install AWOS Mississippi Canyon 724 / Gulf Star 1
Install VHF Comms EKE / Eugene Island 251

2022 Predicted Offshore Projects



Remove AWOS MDJ / Mississippi Canyon 311 (Apr)
Relocate AWOS GHB / Garden Banks 172 (Apr)
Install VHF Comms Garden Banks 426 (May)
Install AWOS South Timbalier 52B (May)

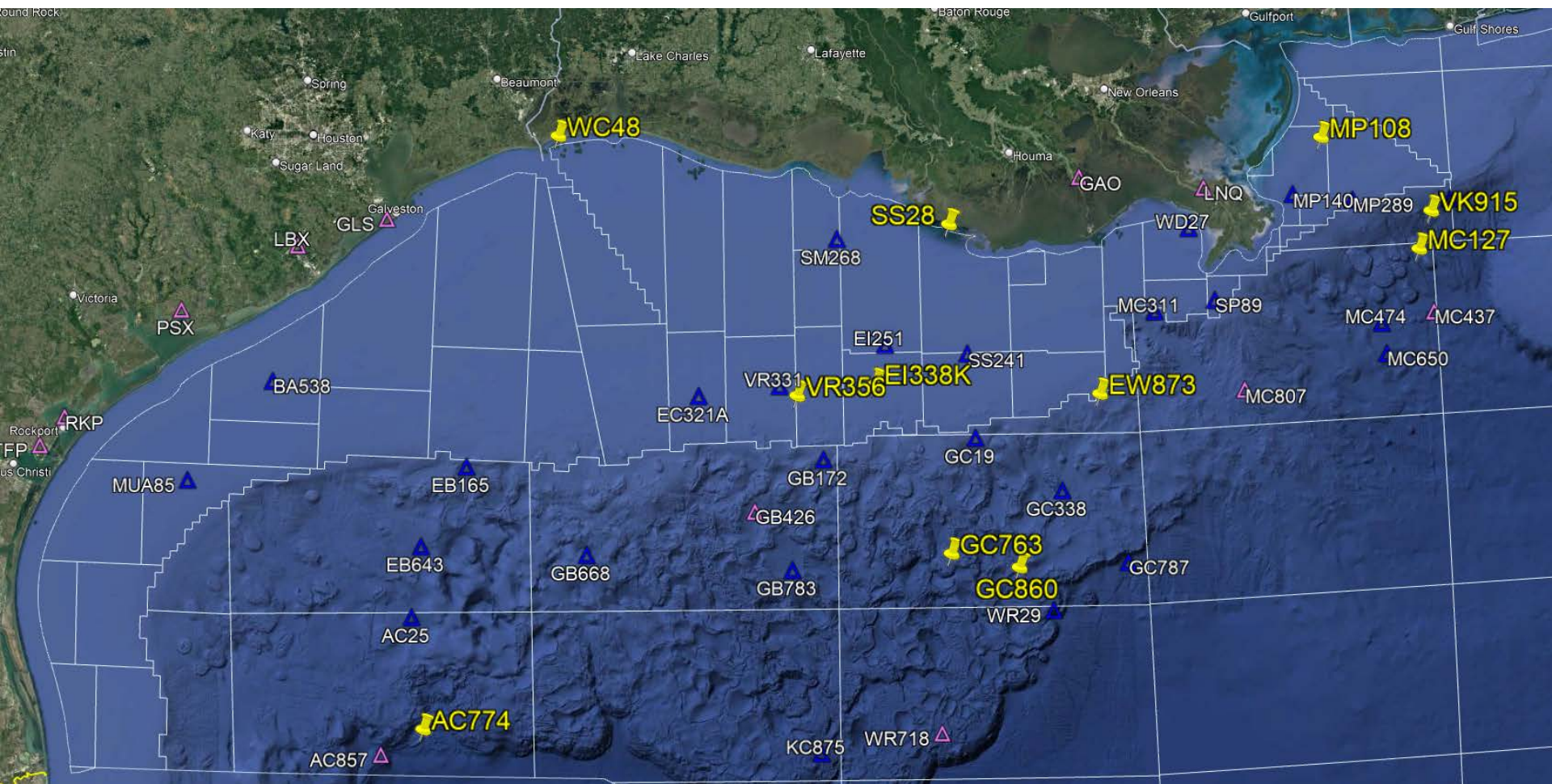
Install AWOS Mississippi Canyon 941 (Jun)
Install AWOS Green Canyon 433 (Jul)
Install AWOS Green Canyon 641 (Aug)
Install ADS-B, AWOS, VHF Comms Galveston A244A (Sep)

Projected AWOS Losses within Next Five (5) Years

1. Alaminos Canyon 25
2. East Breaks 165
3. East Breaks 643A
4. East Cameron 321A
5. Eugene Island 215B
6. **Garden Banks 668**
7. **Mississippi Canyon 311A**
8. **Mustang Island A85A**
9. South Marsh 268A
10. Vermilion 331A

- = No replacement identified, seeking replacement suggestions
- = Replacement not planned
- = Replacement identified

Candidate Sites Identified for Possible AWOS Installation Within Next 2-3 Years



AWOS Coverage

Colleen Ahlers, Program Management



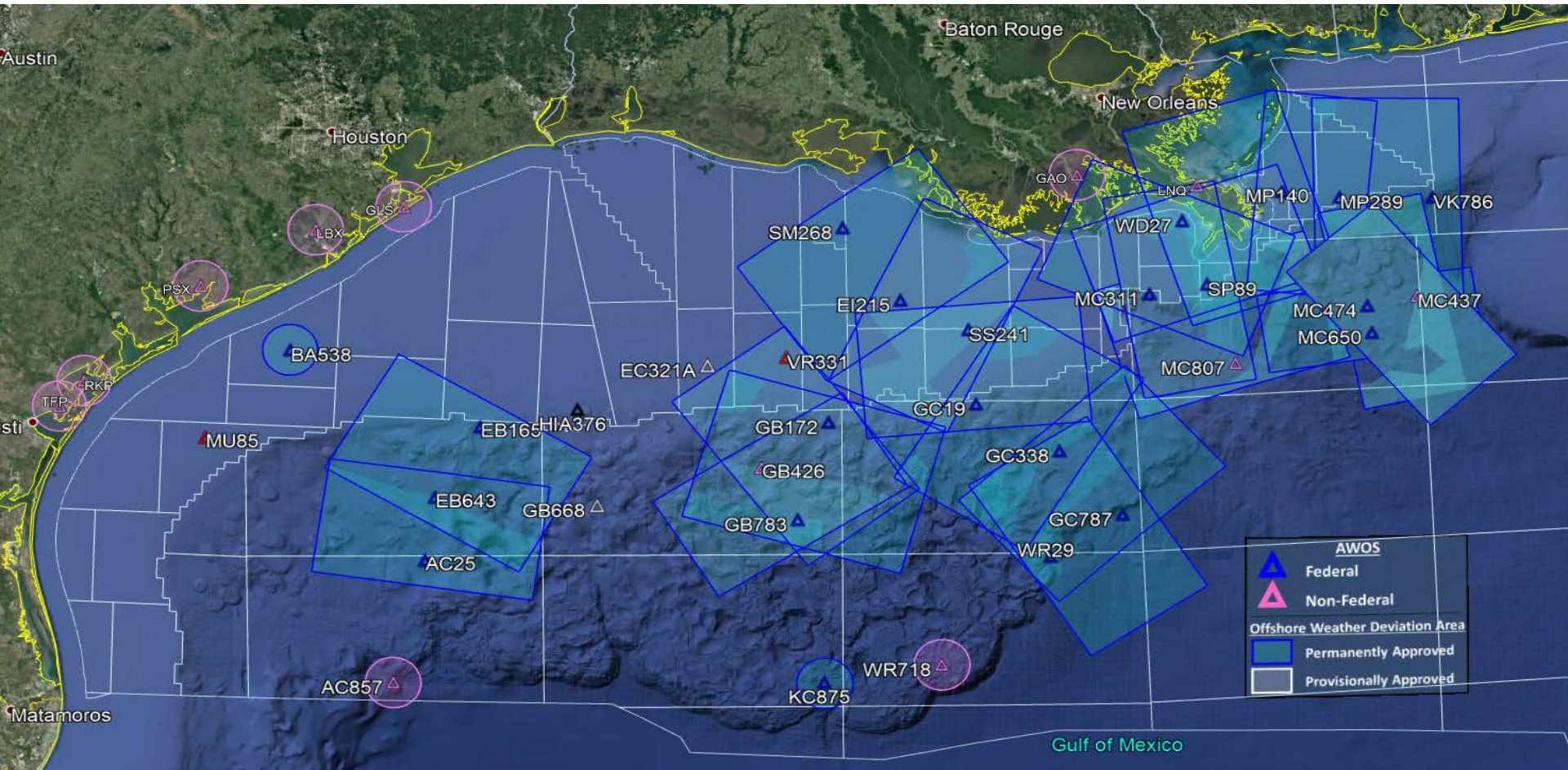
AWOS Coverage – Oct 7, 2020



▲ Out of service

Federal AWOS in Operation: 14

AWOS Coverage – May 4, 2021

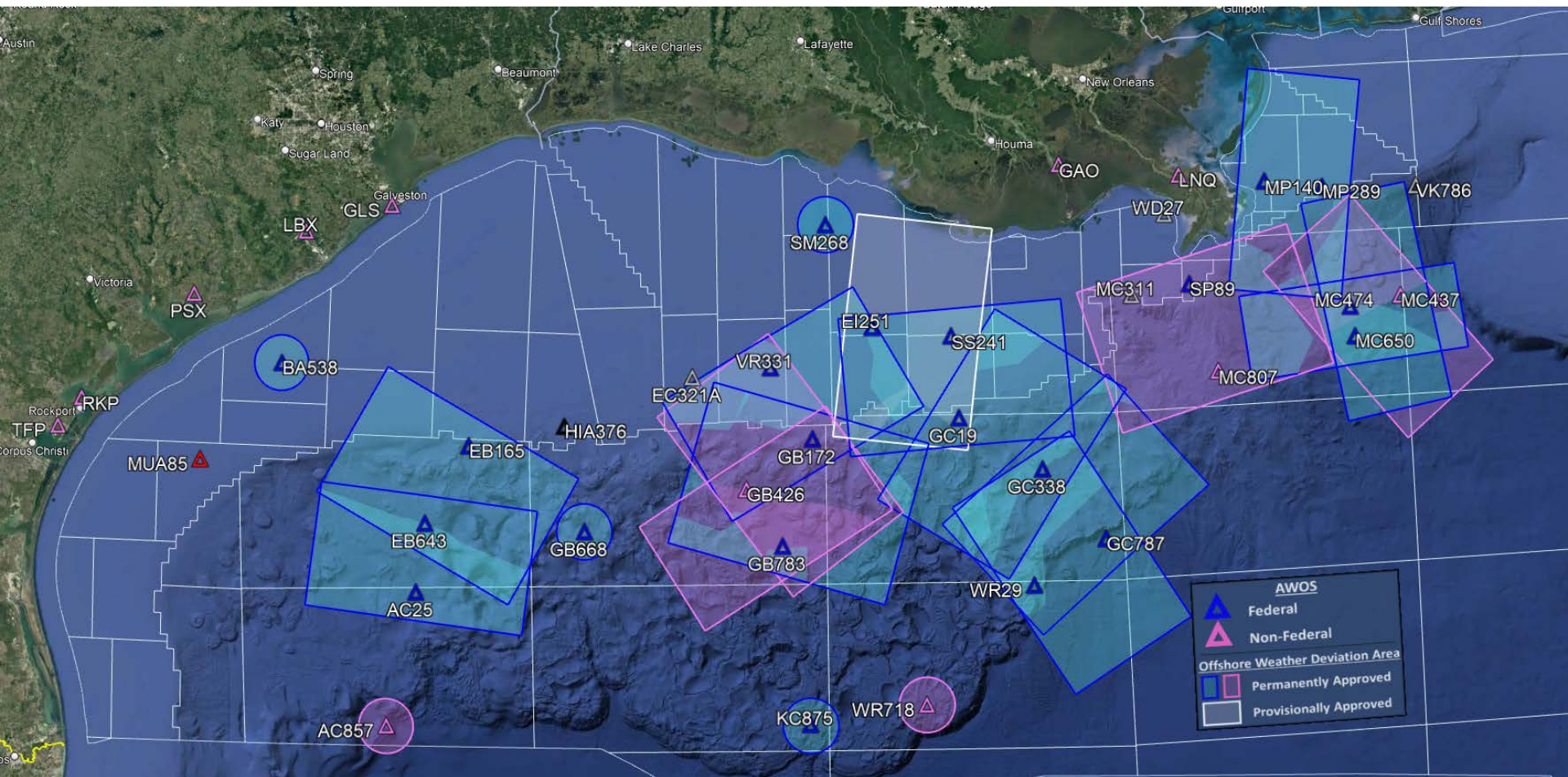


- ▲ Out of service due to decommissioning (HIA376)
- ▲ Out of service due to platform shut-in (MUA85 & VR331)
- ▲ Out of service due to hurricane damage (GB668 & EC321A)

Federal AWOS in Operation*: 22

Additional Stations may be out of service due to regular maintenance

AWOS Coverage – Sept 29, 2021

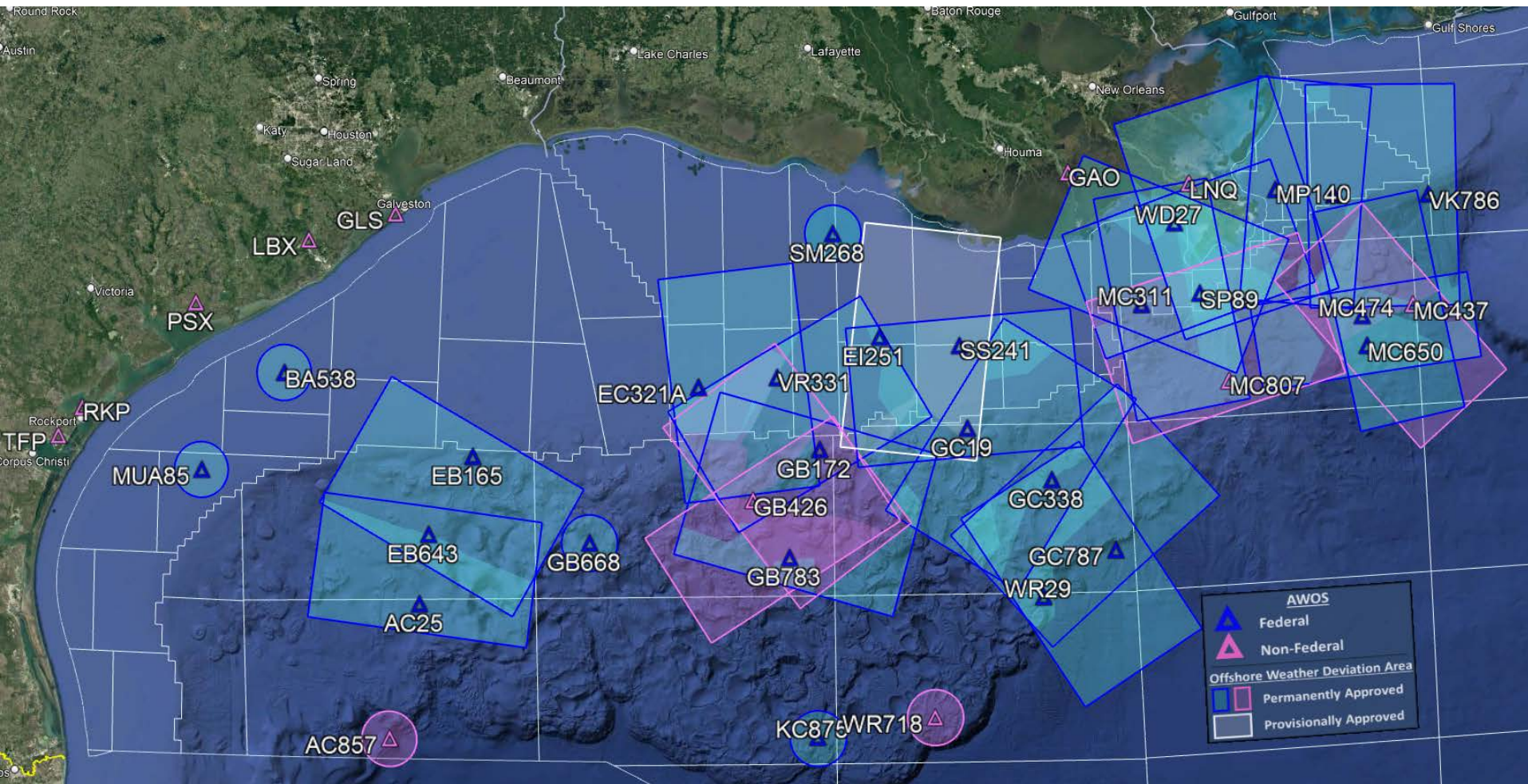


- ▲ Out of service due to decommissioning (HIA376)
- ▲ Out of service due to platform shut-in (MUA85)
- ▲ Out of service due to hurricane damage (EC321A, MC311, VK786, WD27)

Federal AWOS in Operation*: 20/26

*may be temporarily out of service due to maintenance

Max AWOS Coverage – Sept 29, 2021



Federal AWOS Stations: 26

Non-Fed AWOS Stations: 5

FAA Infrastructure Out of Service in 2021

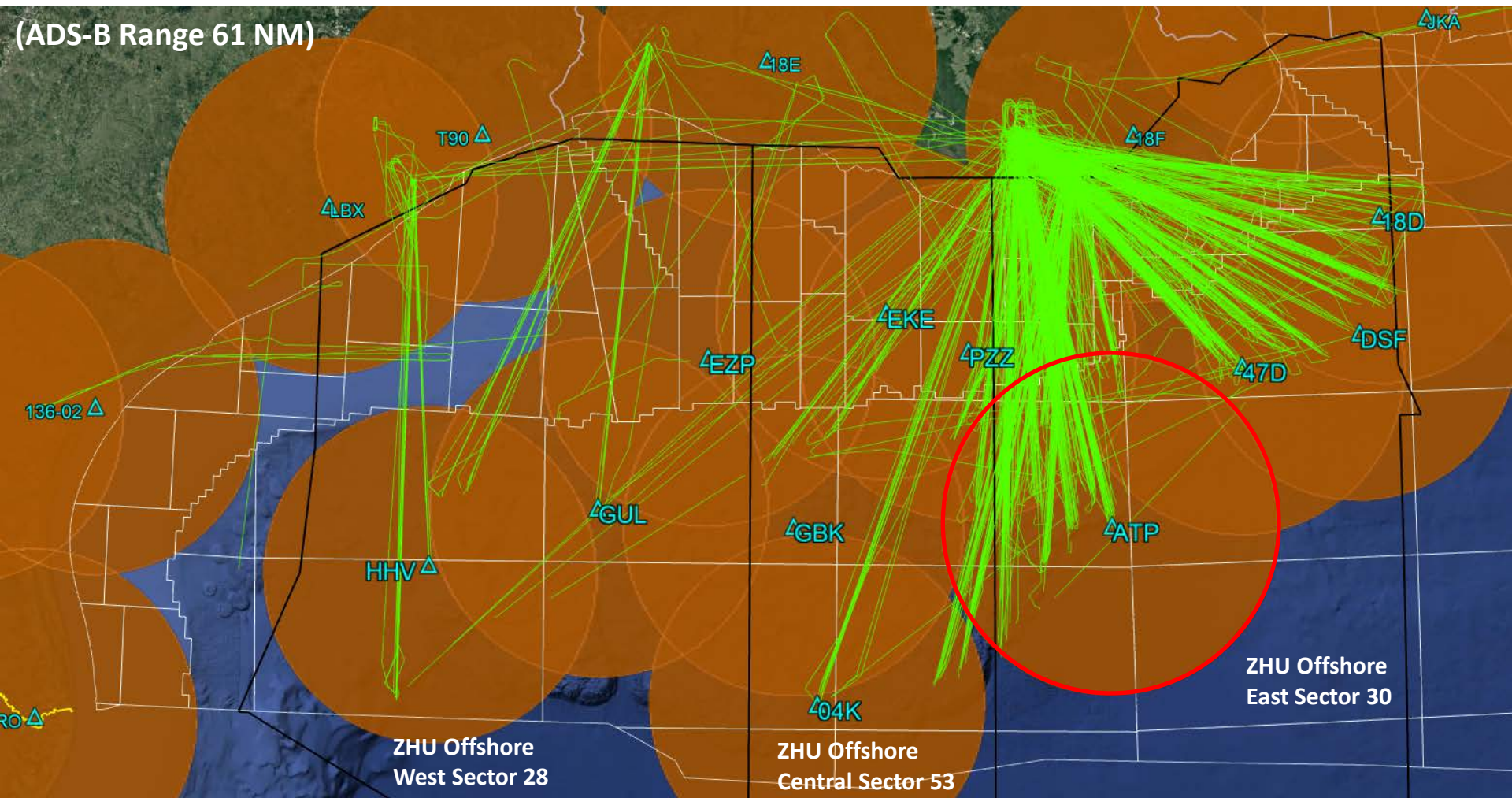
- **The following AWOS platforms are currently shut-in and have been identified for abandonment:**
 - High Island A376B (HQL)
- **The following AWOS' are on long-term shut-in platforms:**
 - Mustang Island A85A (MZG)
- **The Following AWOS's are out of service due to storm damage:**
 - East Cameron 321A (EZP)
 - Mississippi Canyon 311 (MDJ)
 - Viosca Knoll 786 (VOA)
 - West Delta 27 (DLP)

ADS-B/VHF Comm Coverage

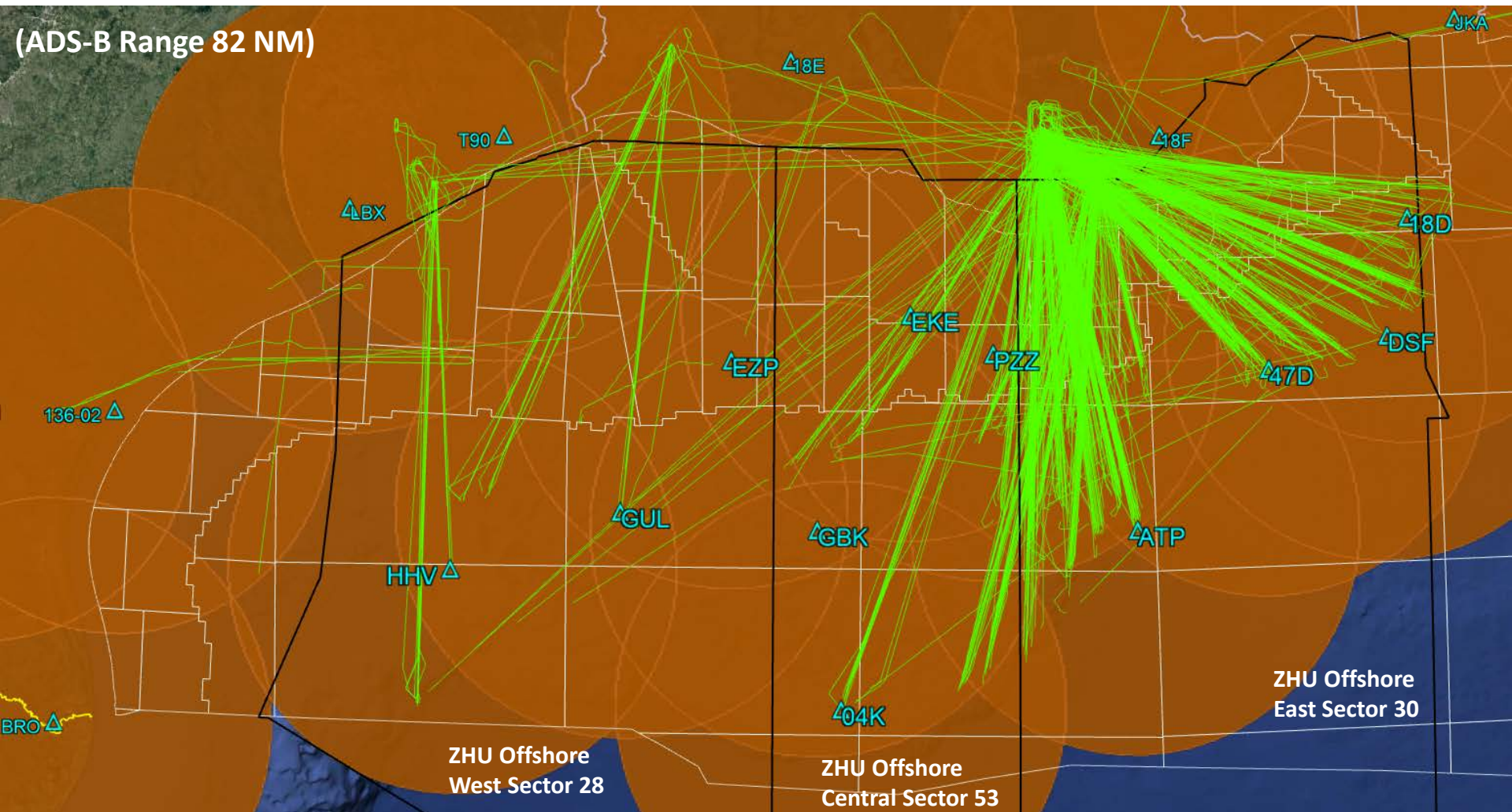
Billy Majeau, Program Management



Current ADS-B Coverage 1500' MSL



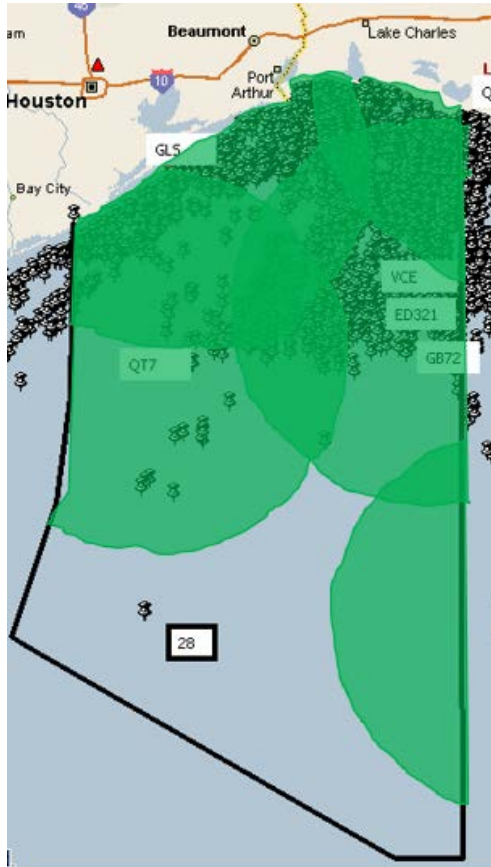
Current ADS-B Coverage 3000' MSL



VHF Comm Coverage 3,000' MSL

Offshore West / S28

GLS, QIC, QT7, EZP, 18H



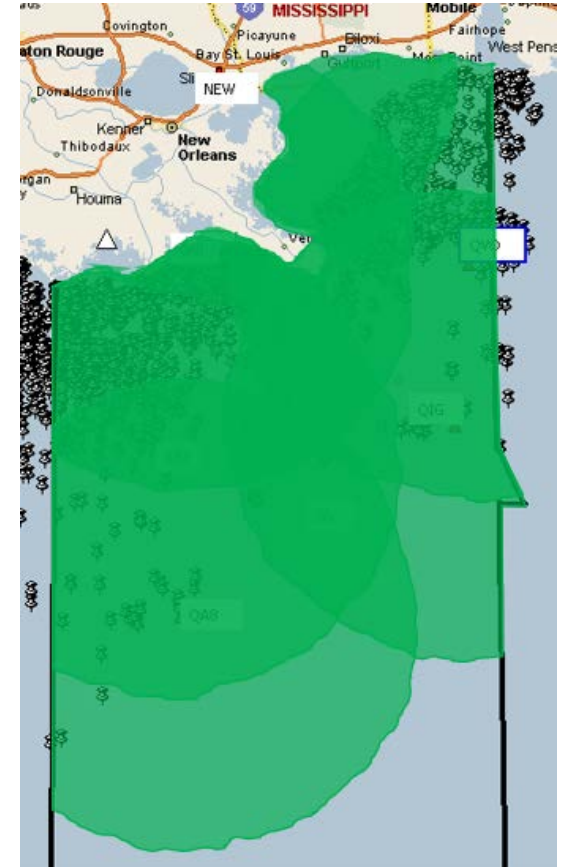
Offshore Central / S53

QIC, VUW, QA8, QBW, 18J



Offshore East / S30

GAO/GNI*, QA8, QVO, QIG, 18J



FAA Watch List

Billy Majeau, Program Management



AWOS Inspections

- **Last fall, the Gulf helicopter community assisted the FAA by supplying PIREPs on AWOS'**
 - This allowed the continued operation of the AWOS' despite not being formally inspected in 2020 because of the pandemic
- **In Jan 2021, the AIC suggested virtual inspections to mitigate the offshore inspection requirement**
- **The FAA re-started offshore inspections on May 7, 2021**
 - Thirteen (13) out of fourteen (14) offshore AWOS' have been inspected
 - One (1) commissioning inspection has been completed
 - Two (2) commissioning inspections are also planned

Green Canyon 787 FAA AC Outage

Outage Update

- The air conditioning units installed in the FAA building at GC-787 (Atlantis) have been out of service since last fall. Efforts to repair them have been hampered by the pandemic and other constraints.
- On September 28, 2021, the FAA executed a contract to allow the platform owner to start the cost estimate and perform a site survey to establish repair plans.

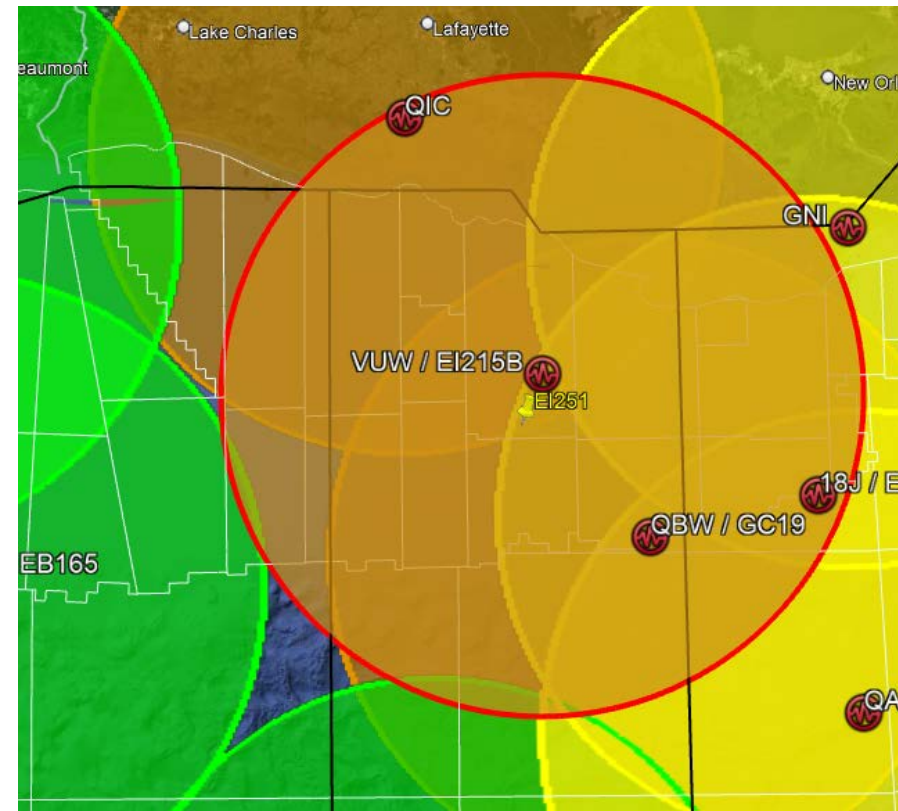
Impact to Operators

- Surveillance (ADS-B) radios were turned off during the summer when the maximum safe operating temperature for that equipment was exceeded.
- VHF Comm radios have a higher temp threshold and continue to operate.

EI251 VHF Comms to Replace EI215

VHF Comms will be installed at Eugene Island 251 (EKE) to replace Eugene Island 215 VHF Comms which are life-limited.

The VHF Comms at Eugene Island 215 will be shut down and decommissioned before the VHF Comms at Eugene Island are operational. We anticipate the shut down to occur on or about October 28.



Weather Deviation Area Expansion Project

Bob Herak, Operations and Strategic
Management Lead

Weather Deviation Area Expansion Project Process and Time-tables

- Contract Volpe to provide study, research and analysis:
October 2020-February 2021
- Discussions / Contributions from U.S. Government Agencies:
November 2020-February 2021
 - Houston ARTCC/Central Service Area
 - FAA/SBS Group Contracting Office
 - Flight Technologies and Procedures Division
 - FAA Flight Standards (AFS)
 - Flight Standards District Offices: Baton Rouge, Jackson, Houston (FSDO)
 - National Weather Service (NWS)

Stakeholders in the Gulf

➤ Discussions / Contributions from Stakeholders in the Gulf: November 2020-February 2021

- Helicopter Operators
- HAI
- HSAC members

Weather Deviation Area Expansion Project Timetable

- Volpe Analysis commencing: February 1, 2021
- Volpe Final Report Completed: July 15, 2021
- Volpe Final Report Briefing to SBS: July 29, 2021
- Volpe Final Report Release to AFS & NWS: September 7, 2021
- Volpe Final Report to Stakeholders: October 1, 2021
- Volpe briefing to Chief Pilots of HSAC: October 13, 2021
- Project Team Briefings to the AIC and HSAC members October 13-14, 2021

Weather Deviation Area Expansion *Next Steps*

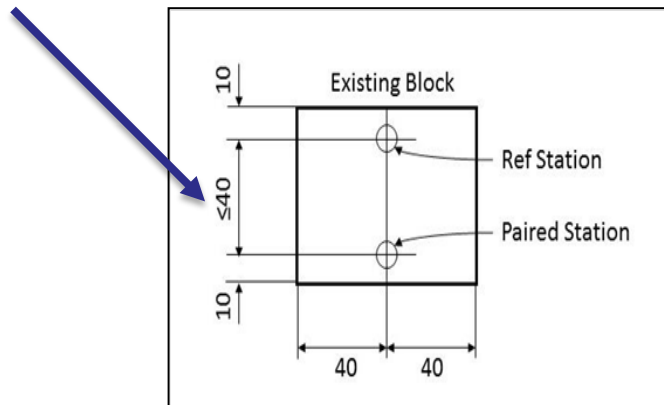
FAA Flight Standards and The National Weather Service have initiated the regulatory process; and are evaluating the results of the Weather Analysis; and will determine the effects on current policy, guidance, or authorizations.

Volpe Weather Analysis Study Findings And Recommendations:

1. The Analysis recommended that the existing 40NM between the reference and paired station can be extended to 80NM or less.
2. The analysis maintained the historical 40NM lateral width and centerline continuation of 10NM as defined in AC90-80C, and therefore supports that expanded and permanent Weather Deviation Area up to 100NMx80NM.

Existing Weather Deviation Area

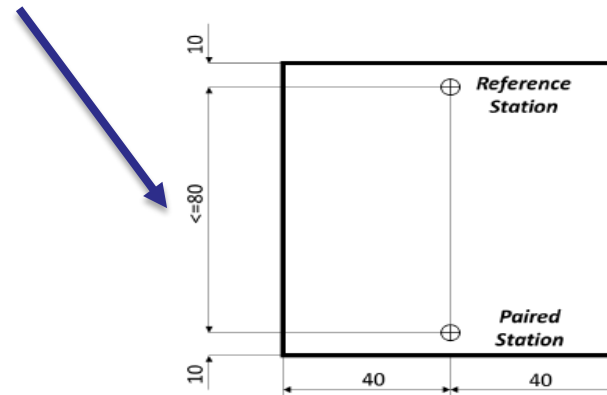
40 NM Max between Paired and Reference Station



60 X 80 NM Weather Box

2021 Recommended Weather Deviation Area

80 NM MAX Between Reference and Paired Station



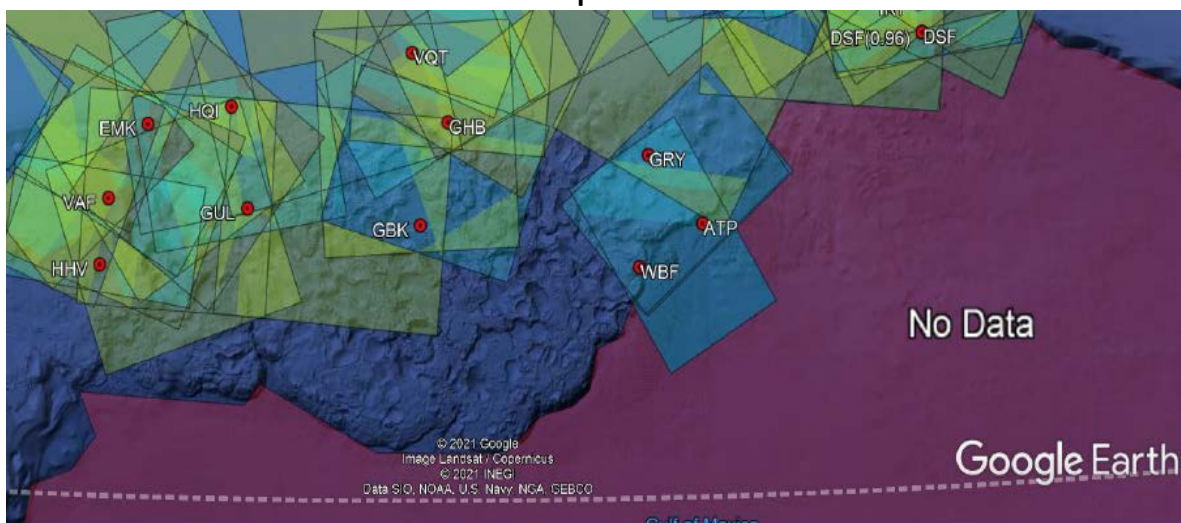
80 X 100 NM Weather Box

Volpe Weather Analysis Study Findings And Recommendations:

Restrictions:

- Data and analysis did not support Weather Deviation Area Expansion in two areas. In the deep-water area and Mississippi Delta area, the recommendation was to remain at 40NM.
- Further recommendation for the deep-water; A minimum of 1 year of AWOS data from stations deployed in this region would be necessary to make a recommendation on expanded Offshore Weather Deviation Areas.

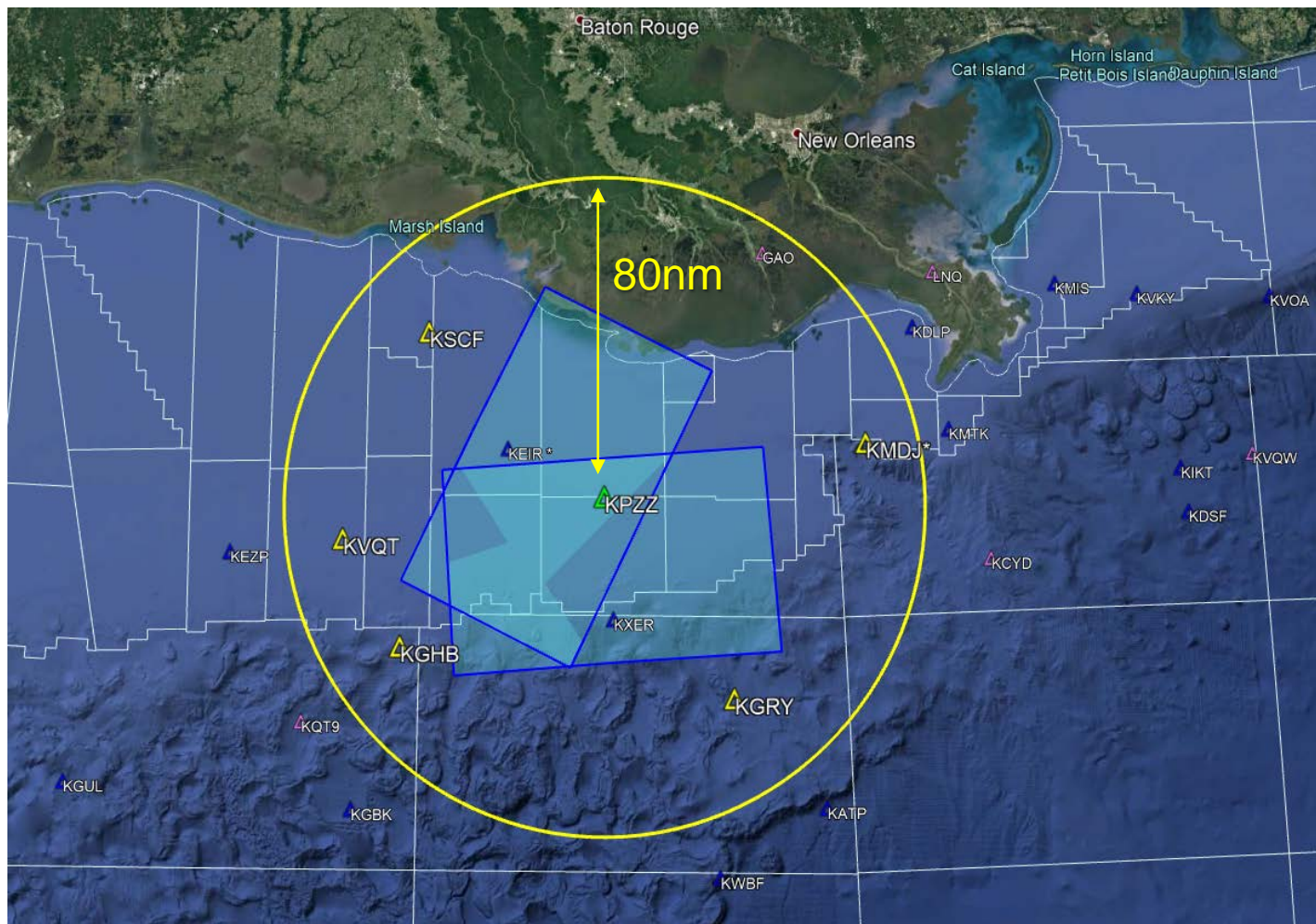
Deep Water



Mississippi Delta



AWOS stations within 80 NM radius of **PZZ** AWOS



Existing 40NM Weather Box

PZZ - EIR approved box
26 NM

PZZ – XER approved box
29 NM

Expanded 80 NM Weather Box

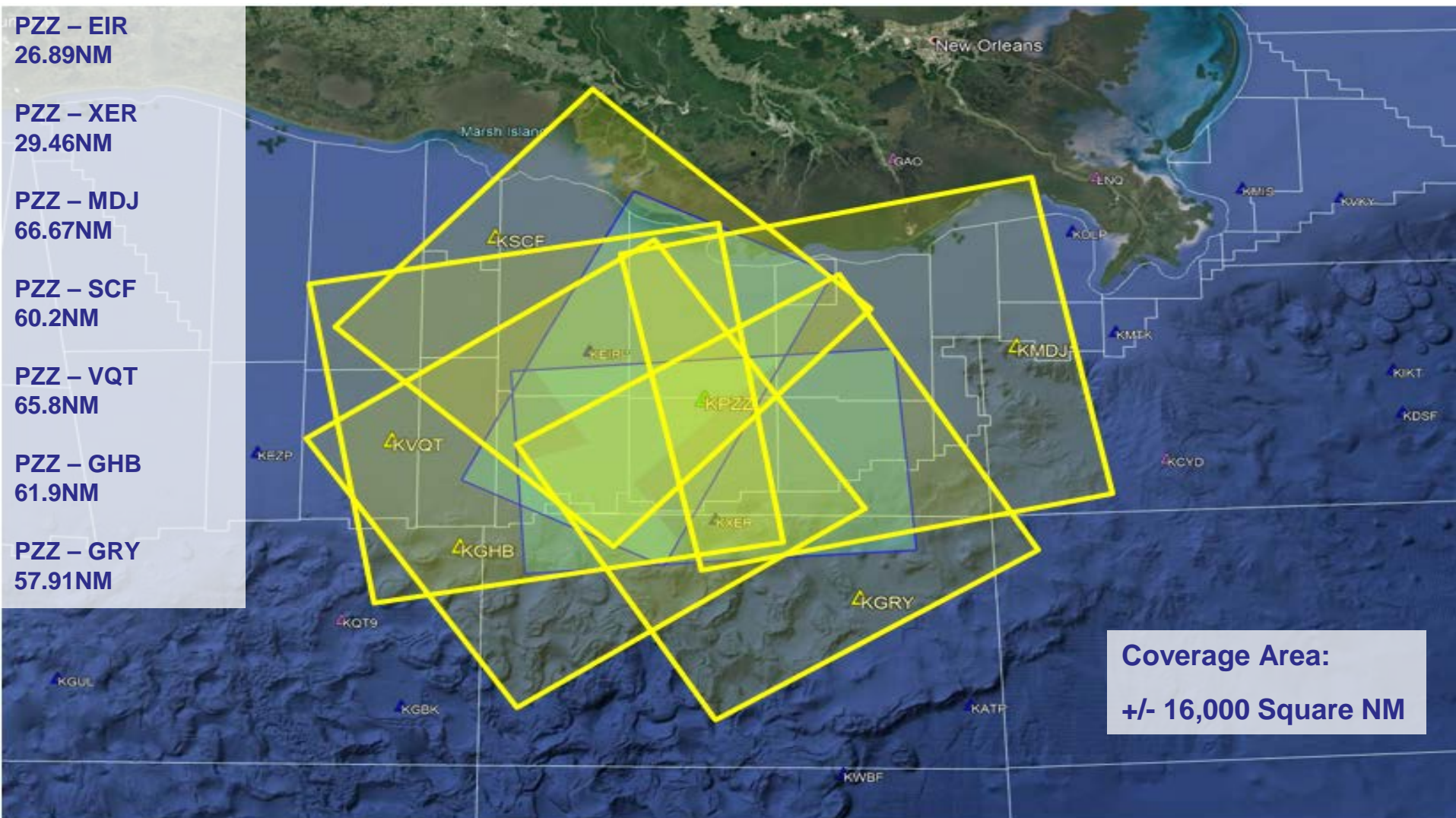
Five additional weather stations:

AWOS Distance to PZZ

- **MDJ 66.67 NM**
- **SCF 60.2 NM**
- **VQT 65.8 NM**
- **GHB 61.9 NM**
- **GRY 57.91 NM**

Map with AWOS Coverage with PZZ Using Expanded Weather Box Requirements

Green: Original Weather Boxes – PZZ – ERI – XER Yellow: Five additional Weather Boxes: MDJ – SCF – VQT – GHB - GRY



AIC Decisions / New Considerations

Roseanne Albrecht



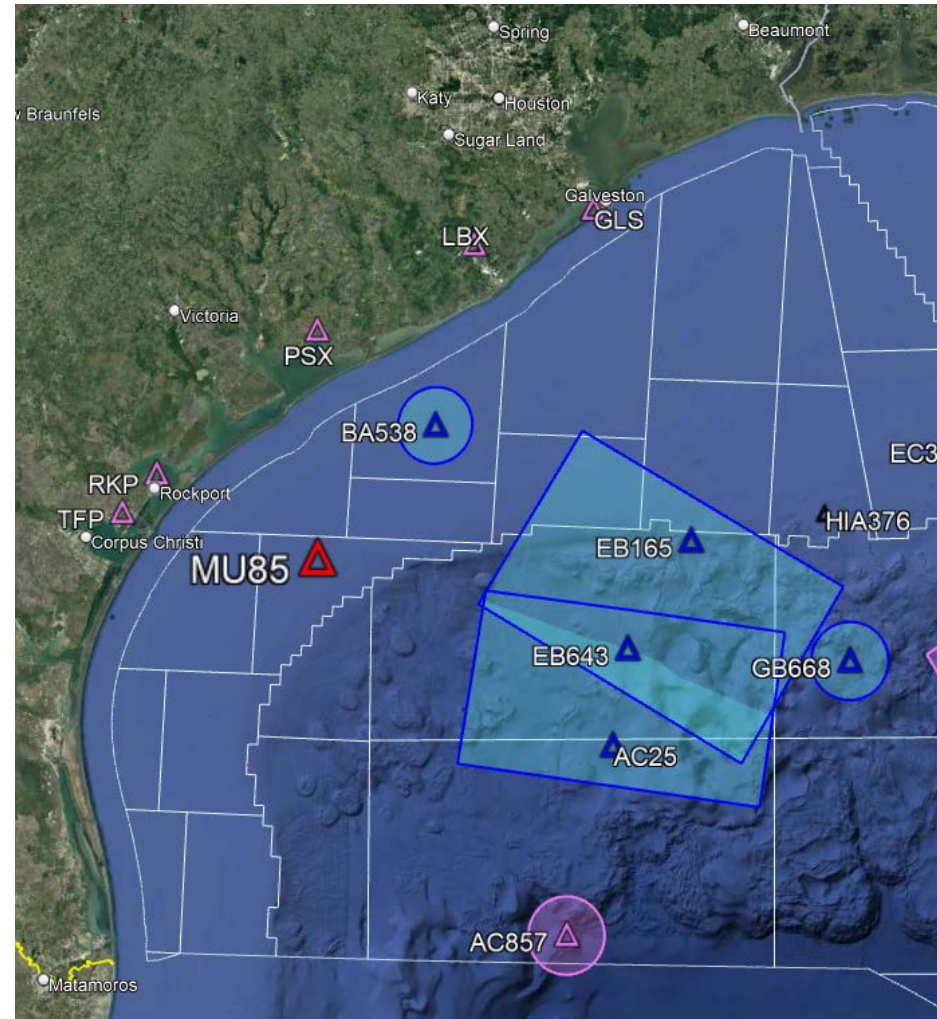
AIC Decision Status

- **At recent AIC meetings, FAA and industry Stakeholders made the following decisions about AWOS coverage:**
 - South Marsh 107 to replace South Marsh 268 – [investigating feasibility](#)
 - Hess proposed Garden Banks 260 platform as a candidate site for possible AWOS installation – [investigating feasibility](#)
 - Include Site Elevation and Wind sensor location in AWOS Status Update – [planning implementation](#)

AIC Decision 1

Remove AWOS at Mustang Island A85?

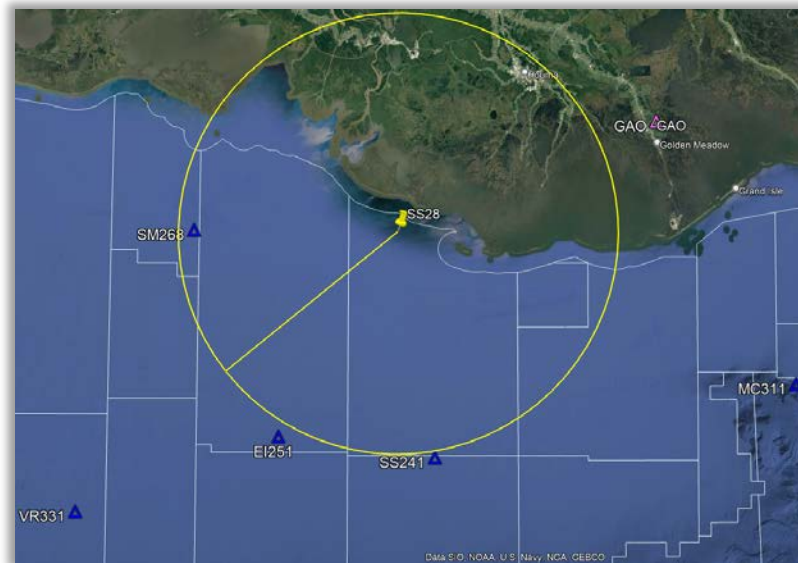
- Shut in during April 2020
- Return to service date is unknown



AIC New Considerations

Potential AWOS Candidates

1. Ship Shoal 28P



2. Tank Battery west of Cameron, LA



Community Awareness

Rana Obeid, Federal Lead



Grand Isle, LA VHF Comms Update

The VHF Comm station at Grand Isle, LA (GNI) was destroyed by Hurricane Ida on August 29, 2021

- ➔ The VHF Comm Station at Galliano Airport (GAO) was expanded to include offshore frequencies and became operational on September 14, 2021
- ➔ Coverage has been good (antennas are farther north, but also on a taller tower)
- ➔ The VHF Comms will continue to be provided at the GAO location until further notice



Summary

Rana Obeid, Federal Lead



Summary

- **FAA Infrastructure Status**

- 2022 will be a busy installation year, with the following totals:
 - 32 AWOS sites
 - 12 ADS-B sites
 - 11 VHF Comm sites

- **Weather Deviation Area Study**

- The study is complete and in the hands of the regulators

- **Industry Feedback and Support**

- Explore all possibilities as an opportunity to increase safety in the Gulf of Mexico

FAA Gulf of Mexico Sustainment Team

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