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: May 12, 2020



Agenda

- FAA-Industry Gulf of Mexico Agreement
- Old Business
 - FAA Infrastructure Status
 - AWOS/ADS-B/VHF Comm Coverage
 - Weather Deviation Area Expansion Project Status
- New Business

FAA-Industry Gulf of Mexico Agreement

Rana Obeid, Federal Lead

FAA-Industry Gulf of Mexico Agreement Background

MOA signed May 2006 → MOU signed Mar 2021

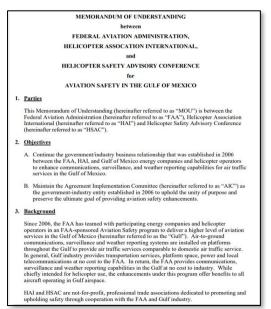
(up for 5-year renewal - May 2021)

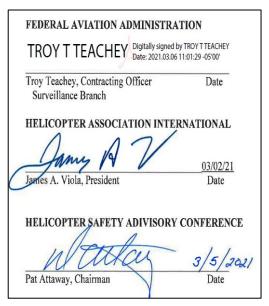
(has no expiration date)

- In May 2006, the FAA teamed with participating energy companies and helicopter operators through an FAA-industry Memorandum of Agreement to deliver a higher level of aviation safety and services in the Gulf of Mexico
- In October 2020, the FAA-industry Agreement Implementation Committee supported the goal of not renewing the original 2006 MOA based on many factors
- In January 2021, HAI and HSAC joined the FAA committed to upholding the FAA-industry's unity and commitment to continuously improve and uphold "Safety Through Cooperation"

Gulf Industry Aviation Safety Memorandum of Understanding

Gulf Industry Aviation Safety Memorandum of Understanding Executed March 6, 2021







By signing the MOU, the FAA continues this professional "Safety Through Cooperation" relationship with the energy industry, HAI and HSAC dedicated to delivering the highest level of aviation safety and services in the Gulf

Gulf Industry Aviation Safety Memorandum of Understanding

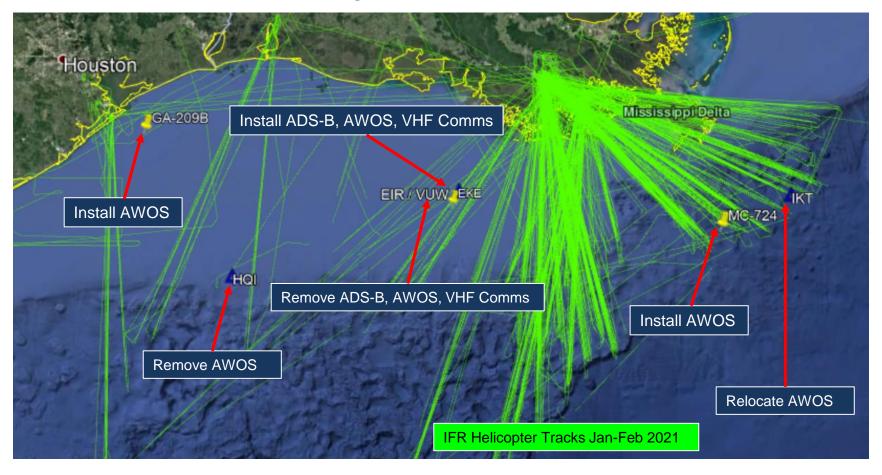
MOU Objectives

- Continue the government / industry business relationship that was established in 2006 between the FAA, HAI, and Gulf of Mexico energy companies and helicopter operators
- Maintain the Agreement Implementation Committee as the government-industry entity to uphold the unity of purpose and preserve the goal of providing aviation safety enhancements

FAA Infrastructure Status

Rana Obeid, Federal Lead

2021 Offshore Projects

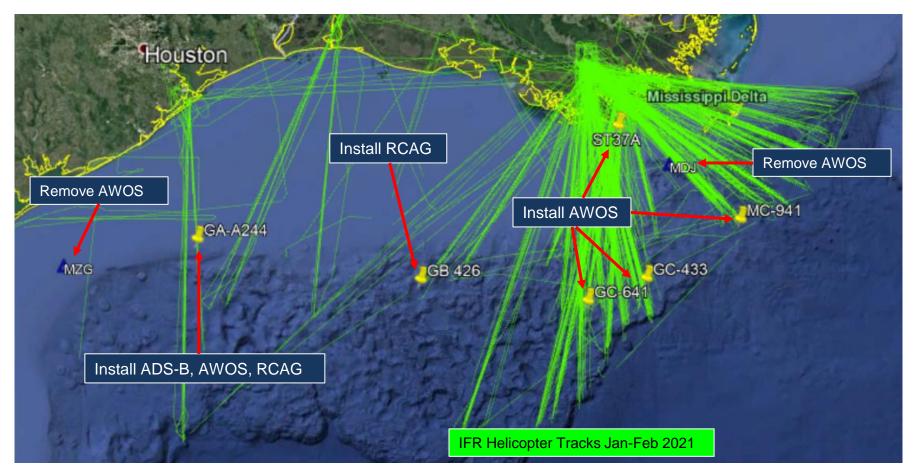


Removed AWOS BBF / Brazos 133B (Feb)
Remove AWOS HQI / High Island A376B (Jun)
Remove EIR / Eugene Island 215 ADS-B (Jun)
Install EKE / Eugene Island 251 ADS-B, AWOS, VHF (Jun)

Relocate AWOS IKT / MC474 / Na Kika (Jun)
Install AWOS GVW / GA209B (Sept)
Install AWOS MC724 / Gulfstar 1 (Sept)
Remove Eugene Island 215 AWOS and VHF EI215B (Sept)



2022 Predicted Offshore Projects



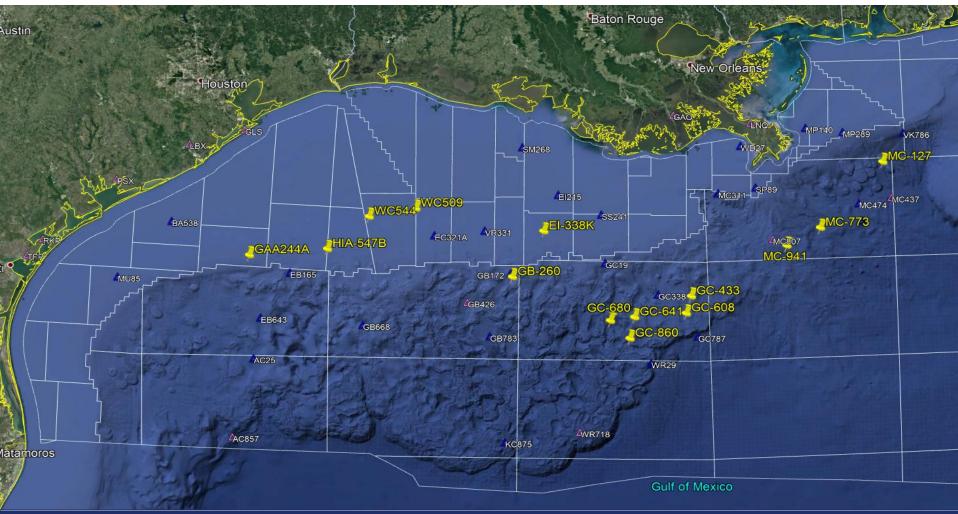
Remove AWOS MZG / Mustang Island 85 (Dec) Remove AWOS MDJ / Mississippi Canyon 311 (Apr) Install RCAG Garden Banks 426 (May) Install AWOS South Timbalier 37A * (May) Install AWOS Mississippi Canyon 941 (Jun)
Install AWOS Green Canyon 433 (Jul)
Install AWOS Green Canyon 641 (Aug)
Install ADS-B, AWOS, RCAG Galveston A 244A (Sep)



Projected AWOS Losses within Next Five (5) Years

- 1. Alaminos Canyon 25 (No replacement identified)
- 2. East Breaks 165
- 3. East Breaks 643A (No replacement identified)
- 4. East Cameron 321A
- 5. Eugene Island 215B
- 6. Garden Banks 668 (No replacement identified)
- 7. Mississippi Canyon 311A (No replacement identified)
- 8. Mustang Island A85A (No replacement identified)
- 9. South Marsh 268A
- 10. Vermilion 331A (No replacement identified)

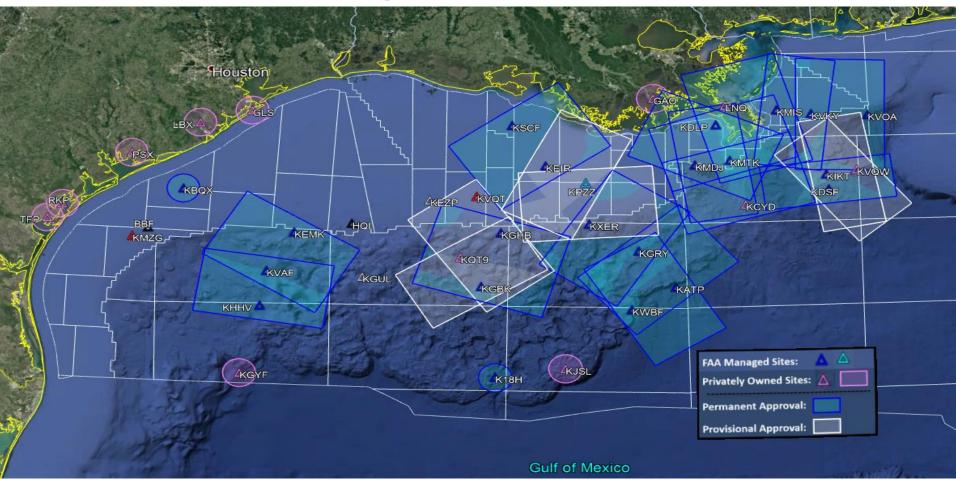
Candidate Sites Identified for Possible AWOS Installation Within Next 2-3 Years



AWOS, ADS-B, & VHF Comm Coverage

William Majeau, Project Management

AWOS Coverage – Jan 22, 2021



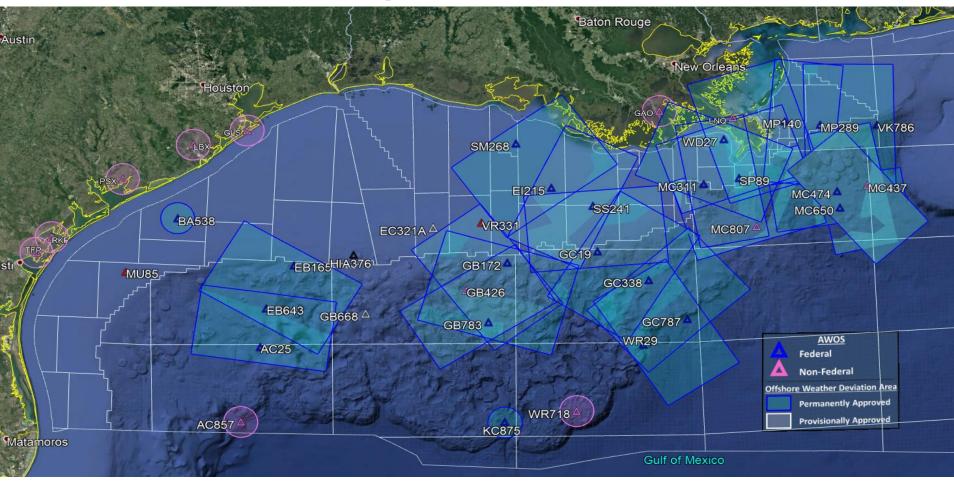
- ▲ Out of service due to decommissioning (BA133 & HIA376)
- ▲ Out of service due to platform shut-in (MU85 & VR331)
- ▲ Out of service due to hurricane damage (GB668 & EC321A)

Federal AWOS in Operation*: 22

*may be out of service due to maintenance



AWOS Coverage – May 4, 2021



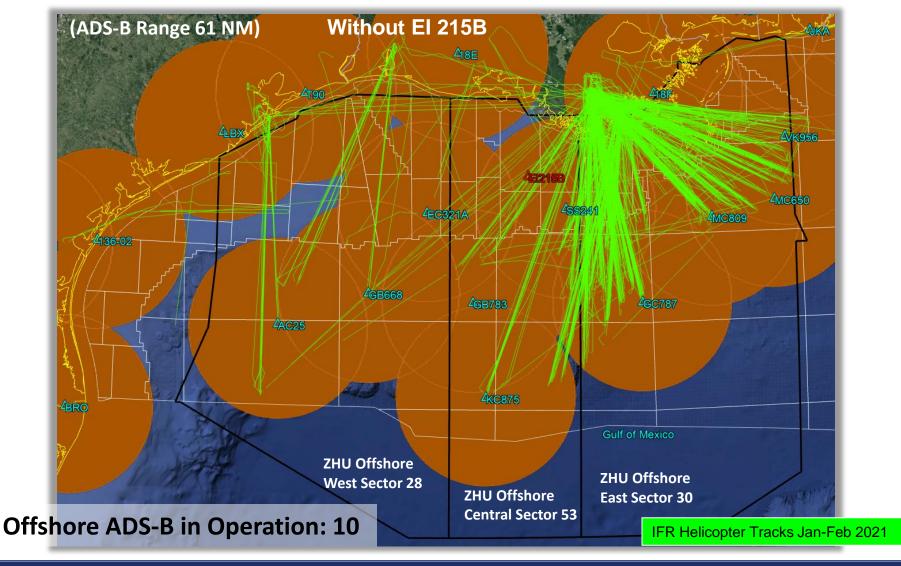
- ▲ Out of service due to decommissioning (HIA376)
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Federal AWOS in Operation*: 22

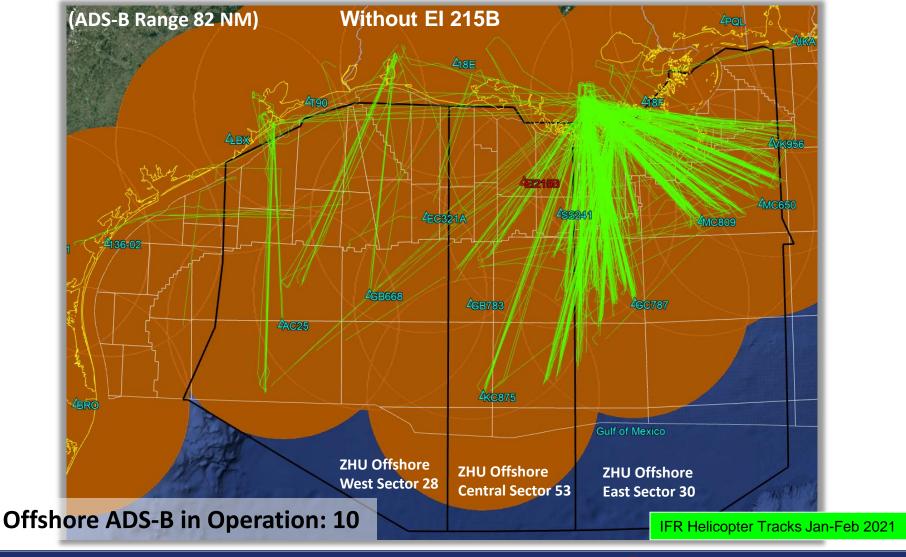
*may be out of service due to maintenance



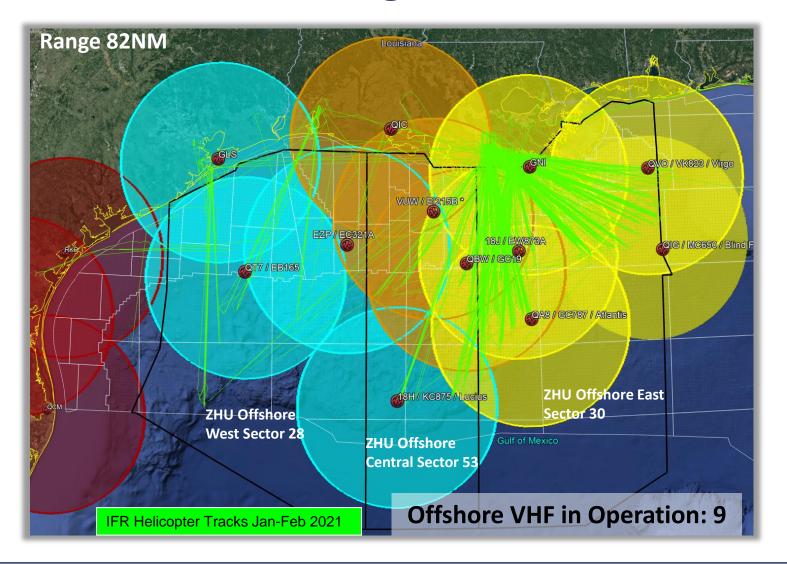
Current ADS-B Coverage 1500' MSL



Current ADS-B Coverage 3000' MSL



VHF Comm Coverage 3,000' MSL



FAA Watch List

William Majeau, Project 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 is not prepared to implement virtual inspections
- The FAA has yet to re-start offshore inspections
 - The number of offshore AWOS' needing inspection is 14
 - Three (3) commissioning inspections are also planned
- Depending on how the rest of the year unfolds, may need to call on the Gulf operators to assist again

Green Canyon 787 FAA AC Outage

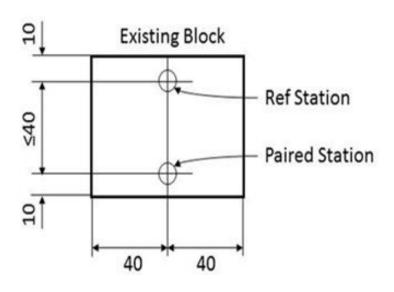
- The air conditioning units installed in the FAA building at GC-787 have been out of service since last fall efforts to repair them have been hampered by the pandemic
- The near-term, get-well plan is to remove the units in June, repair on shore, and reinstall at GC-787 as soon as possible
- Loss of VHF comm and surveillance should be expected when building temperature reaches maximum operating temperature for the equipment

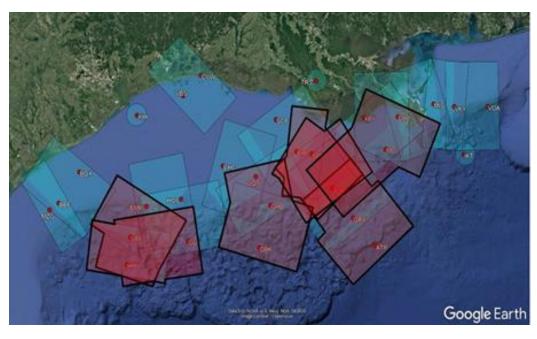
Weather Deviation Area Expansion Project Status

Bob Herak, Operations and Strategic Management Lead

Offshore Weather Deviation Area Expansion

The Weather Deviations Area Expansion Project is meeting all schedule requirements.





Completion of the report from the Department of Transportation – Volpe, is scheduled for August 1, 2021.

New Business

Colleen Ahlers, Project Management

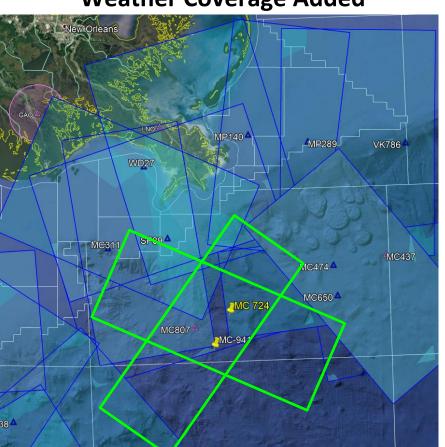
AIC Decisions

Colleen Ahlers, Project Management

AIC Decision 1 of 2

AWOS Installation at Titan Platform, Mississippi Canyon 941

Weather Coverage Added



Location with IFR Traffic Overlay

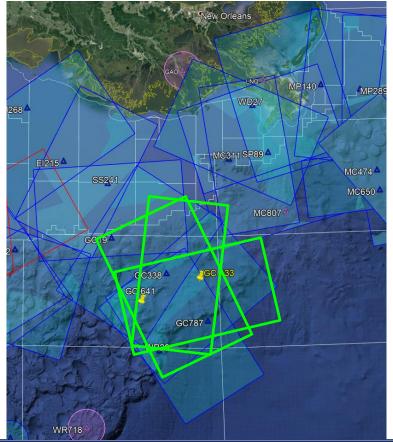


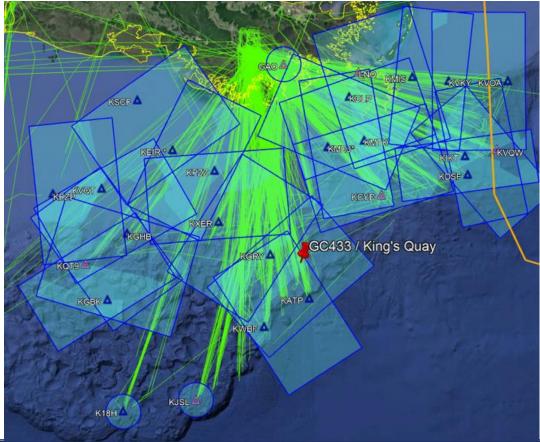
AIC Decision 2 of 2

AWOS Installation at King's Quay Platform, Green Canyon 433

Weather Coverage Added

Location with IFR Traffic Overlay





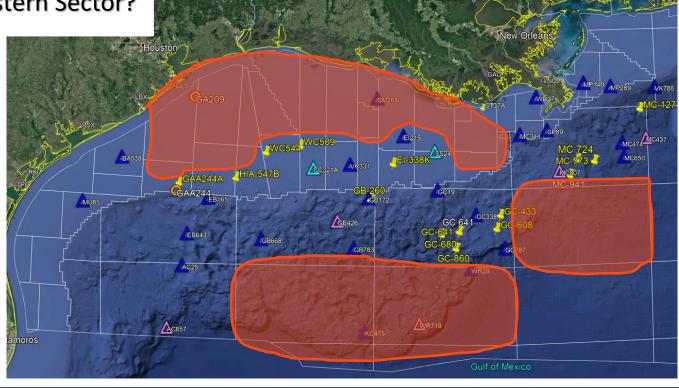
Seeking Platform Candidates

Are there any additional platforms for the AIC to consider?

a) Deep-deepwater Central Sector?

b) Deepwater Eastern Sector?

c) Near Shore?



Gulf AWOS Status Update Enhancements

- Include wind sensor placement information?
- Additional enhancement input?

GULF OF MEXICO AVOS STATUS February 2, 2021

Commissioned Facilities	Block ▼	ICAO L 🔻	Phone 4 ▼	Frequer 🔻	Lat/Lon ▼	Unreliable V in∈▼	
Alaminos Canyon 25/Hoover-Diana	AC25	KHHV	713-431-	119.075	26.939/-94.689	No	
Alaminos Canyon 857/Perdido (Shell E&P)	AC857	KGYE	504-425-	120.275	26.1297-94.898	No	
Brazos 538 (Williams Atlantic-Gulf)	BA538	KBQX	979-843-	118.375	28.3147-95.620	No	
East Breaks 165 (Fieldwood Energy)	EB165	KEMK	337-210-	119.475	27.8197-94.323	No	
East Breaks 643A/Boomvang Spar (Occidental)	EB643		832-636-9297	119.525	27.3547-94.625	Yes, 225-360°	
East Cameron 321A (W&T Offshore)	EC321	KEZP	504-323-	119.050	28.2197-92.794	No	
Eugene Island 215B (Arena Offshore)	El215B	KEIB	832-463-	119.475	28.6357-91.489	No	
Garden Banks 172/Salsa (Shell E&P)	GB172	KGHB	504-321-2911	118.025	27.8407-91.988	No	
Garden Banks 426/Auger (Shell E&P)	GB426	KQT9	504-728-	118.375	27.5467-92.44	Yes, 345-022°	
Garden Banks 668/Gunnison Spar (Occidental)	GB668	KGUL	832-636-	119.025	27.304/-93.538	Yes	
Garden Banks 783/Magnolia TLP (V&T)	GB783	KGBK	TBD	118.825	27.2047-92.203	Yes, from the East	
Green Canyon 19 (Shell Pipeline)	GC19	KXEB	504-728-	118.55	27.945/-90.996	Yes, all directions	
Green Canyon 338/Front Runner (Murphy E&P)	GC338	KGRY	281-846-	118.875	27.625/-90.441	Yes	
Green Canyon 787/Atlantis (BP)	GC787A	KATE	979-235-	119.525	27.1957-90.027	No	
Keathley Canyon 875/Lucius Spar (Occidental)	KC875	<u>K18H</u>	832-636-	118.075	26.1257-92.038	Yes 110-160	
Main Pass 140B (Fieldwood Energy)	MP140B	KMIS	337-210-	119.825	29.296/-88.842	Yes, from the South	
Main Pass 289C (Fieldwood Energy)	MP289C	KVKY	337-210-8989	118.075	29.248/-88.441	Yes 140-180	
Mississippi Canyon 311A (Fieldwood Energy)	MC311A	KMDJ	337-210-	119.325	28.643/-89.794	No	
Mississippi Canyon 437/Appomattox (Shell E&P)	MC437	KVQW	504-425-	118.325	28.573/-87.934	No	
Mississippi Canyon 474/Na Kika (BP)	MC474	KIKI	979-230-	118.025	28.521/-88.289	No	
Mississippi Canyon 650/Blind Faith (Chevron)	MC650	KDSF	7295	119.925	28.3437-88.165	Yes 290-010	
Mississippi Canyon 807/Mars (Shell E&P)	MC807	KCYD	504-425-	119.025	28.1/-89.13	No	
Mustang Island A85A (EnVen Energy Ventures)	MUA85A	KMZG	504-208-2392	119.325	27.727/-96.191	Yes 010-190	
Ship Shoal 241 (Shell Pipeline Company)	SS241	KPZZ	985-288-	121.125	28.4347-91.034	No	
South Marsh 268A (Fieldwood Energy)	SM268A	KSCF	337-210-	119.575	29.1167-91.871	No	
South Pass 89E-B (Shell Pipeline Company)	SP89E-B	KMTK	337-761-	124,175	28.697/-89.395	No	
Vermilion 331A (Talos Energy)	VR331A	KVOT	281-619-	118.125	28.270/-92.264	No	
Viosca Knoll 786/Petronius (Chevron)	VK786	KVOA	985-773-	118.925	29.229#-87.781	Yes 355-005	
Walker Ridge 29/Big Foot (Chevron)	WR29	KWBE	985-773-	118.525	26.931/-90.507	Yes, all directions	
Walker Ridge 718/Jack St. Malo (Chevron)	WR718	KJSL	985-773-	119.575	26.1427-91.154	Yes, from the NNE	
West Delta 27A (Cox Operating)	WD27	KDLP	713-730-	120.425	29.121/-89.547	No	

Federal (FAA-leased) AWOS sites indicated with alternating white and blue fill. Non-Federal (privately owned) AWOS sites indicated

To access weather information: https://www.aviationweather.gov/metar?gis=off

Green Canyon 443/ King's Quay (Murphy)

Green Canyon 641/ Tahiti (Chevron)

High Island A547B (Arena)

	ADVISORY						
MUA85A and VR331A are ourrently unavailable due to platform shut-in							
 EC321A and GB668 are currently unavailable due to significant storm damage 							
 GB783 AWOS phone number to be available upon transition to new telecommunications service provider 							
 Garden Banks 426 / Auger AWOS is undergoing a Location Idenfier (LID) change from KQT9 to KAGI 							
A WOS Mellioval III-Progress of	Block ID	ICAO ID	Phone #	Frequency	Lat/Long	Status	
Port Fourchon, LA (Era Helicopters)		KXPY		119.675	29.1237-90.202	Completed Dec 2020	
Brazos 133B (Fieldwood Energy)	BA133B	KBBF	337-210-8998	118.875	27.835/-96.013	Planned for Feb 2021	
High Island A376B (Fieldwood Energy)	HIA376B	KHQI	337-210-8999	118.275	27.934/-93.669	Planned for Feb 2021	
Sabine Pass 13B	SA13B	KVBS	832-461-0101	119.075	29,478/-93,638	Completed Dec 2020	
AVOS Awaiting Installation	Block ID	ICAO ID	Phone #	Frequency	Lat/Long	Strategic Impact	
Galveston 209A (Arena Offshore) - July 2021	GA209A	TBD	TBD	TBD	29.060/-88.091	Replaces SA13B	
Eugene Island 251A (Arena Offshore) - Aug 2021	El251A	EKE	TBD	TBD	28.4977-91.570	Replaces El215B	
Mississippi Canyon 724/ Gulstar One (Hess/Williams) - Aug 2021	MC724	TBD	TBD	TBD	28.234/-88.995	Expands Coverage / Adds Redundancy	
Locations Under Consideration for Possible Federal AVOS Installation	Block ID	D Objective					

GC443 New Install / Pairs with GB172, GB668, and GB783

GC641 New Install / Pairs with VR29, GC787, and GC338 ST37A/52 Replace Fourchon, LA (XPY)

HIA547B Replace HI A376B (HQI) PROBLEMS? (Applicable to Federal sites above ONLY): Please report Federal AWOS performance problems to the L3Harris Network Operations Center (NOC), open 24/7, at 888-461-7277 (preferred) or DL-SBSS_NOC@ att. com

NOTE: The FAA does not have remote maintenance monitoring capability for the telephone dial-up or VHF radio. Please report outages/problems of Federal AVOS sites to the NOC.



Gulf AWOS Status KMZ File (map)

Recommended enhancements include:

- 1. Alphabetize LIDS, Lease Blocks, Pairings lists
- 2. Include frequency in Lease Block ID (ie EC321/119.050)
- 3. Include link to Historical METAR Report in description
- 4. Black border for increased visibility
- Other enhancements??

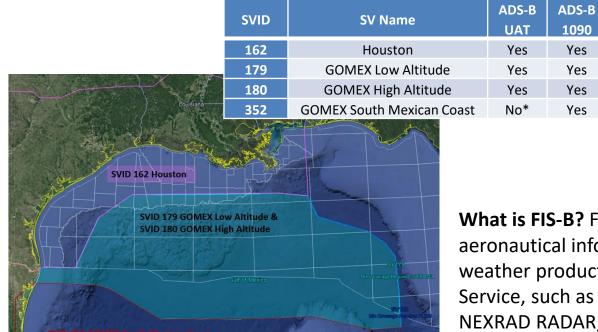






Equipage and Services in the Gulf

- 1. Discuss equipage in the Gulf of Mexico
 - a. Prevalence of 978 UAT vs 1090ES
- Discuss services used in the Gulf of Mexico
 - a. Utilization of FIS-B (Flight Information Services Broadcast) Is it being used?



What is FIS-B? FIS-B broadcasts a range of aeronautical information products from the FAA and weather products from the National Weather Service, such as AIRMET, SIGMET, METAR, SPECI, NEXRAD RADAR, NOTAM, TAF, and WINDS ALOFT

ADS-R

UAT

Yes

Yes

Yes

No

ADS-R

1090

Yes

Yes

Yes

No

TIS-B

UAT

Yes

No

No

No

TIS-B

1090

Yes

No

No

No

FIS-B

UAT

Yes

Yes

Yes

No

Community Awareness

Colleen Ahlers, Project Management

EC321 (EZP) AWOS SKID

Background: The fiberglass AWOS skid and some sensors were severely damaged in the 2020 hurricane season. The structural integrity remaining is unlikely to survive another cyclonic storm event.

Action Pending: Removal of the AWOS as soon as possible, followed by a replacement



On behalf of Houston Center (ZHU)

Due to the activation of a <u>new</u> ZHU program feature, ZHU requests that Gulf IFR helicopter flight plan filings include the surveillance application data in field 18 in order to maximize efficiency of ZHU's pre-planning workloads.



Aircraft Equipage	ICAO Form Field 10b:	ICAO Form Field 18:
1090 ES	B1 or B2	SUR/260B
978 UAT	U1 or U2	SUR/282B
1090 & 978	B1 or B2 and U1 or U2	SUR/260B 282B

References

AC 90-114A Change 1, Chapter 4

AIM Paragraph 5-1-9-b-8-g

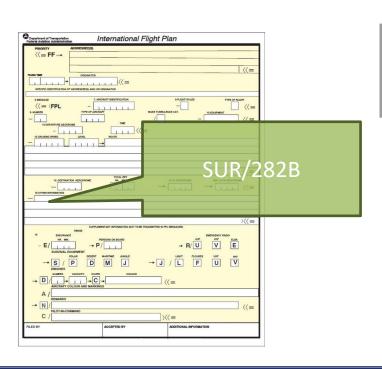
<u>FAA Air Traffic Services –</u> Flight Plan Filing Guidance

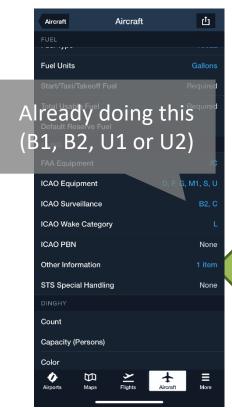
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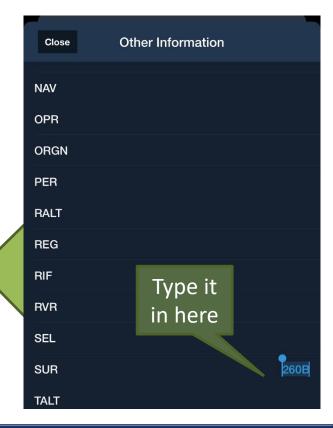
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Practical examples below include filing by form and by foreflight

Tip: If filing by phone, dictate the "forward slash", too







Meeting Wrap Up

Rana Obeid, Federal Lead

Cooperative Actions in the Gulf





Summary

1. MOU Executed

2. FAA Infrastructure Status

→ AWOS loss rate is greater than installations rate

3. Weather Box Expansion

→ On track for August completion

4. AIC Decisions/Recommendations

5. Industry Feedback and Support

→ Enhancing services & resources provided to the Gulf Aviation Community



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