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# HOUSTON OCEANIC

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STANDARD OPERATING PROCEDURES

*Revision: 10/1/2009*

*Not for real world use*

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# FORWARD

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This order defines the duties and responsibilities for personnel providing air traffic control services for the Houston Oceanic Airspace. Guidance contained herein is supplemental to all other vZHU, VATUSA, and VATSIM directives. Personnel are required to be familiar with the provisions of this hand-book that pertain to their operational responsibilities and to exercise their best judgment if they encounter situations not covered by it.

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Air Traffic Manager, Virtual Houston ARTCC

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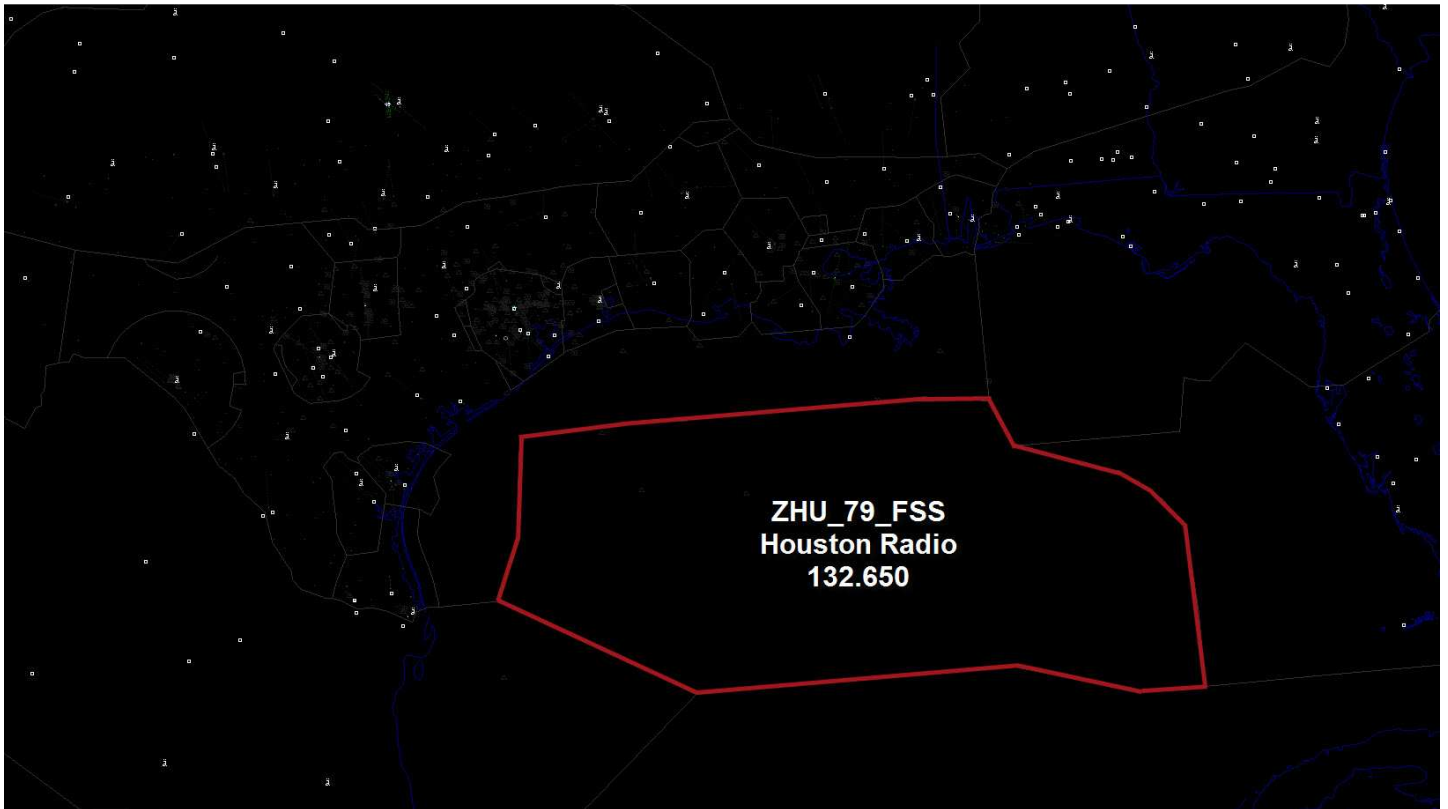
# THE AIRSPACE

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The Houston Oceanic Airspace is a portion of airspace over the Gulf of Mexico that is approximately 600 nautical miles wide at its longest point. The airspace is not radar controlled as the radar coverage is limited to nonexistent.

The Houston Oceanic Airspace is essential to aircraft traveling to and from some Mexico and other Central and South America destinations.

The Houston Oceanic Airspace extends from the surface (SFC) to unlimited.



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# GENERAL CONTROL PROCEDURES

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## OCEANIC CONTROL CERTIFICATION

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TRAINING AND CERTIFICATION FOR OCEANIC IS COMPLETELY VOLUNTARY AND SHALL BE INITIATED BY CONTROLLER'S REQUEST. TO BE QUALIFIED TO ASK FOR OCEANIC TRAINING AND CERTIFICATION THE CONTROLLER MUST HOLD A CONTROLLER 1 (C1) CERTIFICATION OR ABOVE.

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## OCEANIC CONTROL PROCEDURES & PHRASEOLOGY

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**ALL AIRCRAFT SHALL BE SEPARATED AT MINIMUM 15 NAUTICAL MILES OR 3 MINUTES.**

### SEPARATION

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There are five methods of separating aircraft in a non-radar environment.

1. Depart at a specified time.
  - *Specify an aircraft to depart an airport at a certain time.*
2. Arrive at a fix at a specified time.
  - *Instruct an aircraft to cross a fix at or before a certain time. The phraseology would be, "(CALLSIGN), cross (FIX) at or before (ZULU TIME)" or "(CALLSIGN), cross (FIX) at or after (ZULU TIME)".*
3. Hold at a fix until a specified time.
  - *Instruct an aircraft to hold at a fix until a specified time or for a specified time. The phraseology would be, "(CALLSIGN), hold at (FIX) until (ZULU TIME)".*
4. Change altitude at a specified time or fix.
  - *Instruct an aircraft to climb or descend at a specified time or fix. The phraseology would be, "(CALLSIGN), at (FIX), climb and maintain (ALTITUDE)," or "(CALLSIGN), descend/climb and maintain (ALTITUDE) at or before (ZULU TIME)."*
5. Alter the aircraft's speed.
  - *Instruct the aircraft to accelerate or decelerate at a certain time or at a certain fix. The phraseology would be, "(CALLSIGN), maintain Mach POINT (SPEED) or GREATER/LESS at or before (TIME)" or "(CALLSIGN), maintain Mach POINT (SPEED) or GREATER/LESS at (FIX)"*

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### TRANSPONDER AND ALTIMETER OPERATION

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Aircraft entering the Oceanic airspace will set their altimeter to *Standard Altimeter* (29.92), regardless of altitude, *unless* they are executing an approach to an island field within the airspace.

Aircraft entering the Oceanic airspace will set their transponders to squawk 2000.

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### OCEANIC CLEARANCES

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Oceanic Clearances are the most reliable tool for initial separation between traffic that will enter the Oceanic airspace. Adjacent Centers are responsible to contact you as an Oceanic controller before the flight enters the airspace. The oceanic clearance consists of a five minute window that an aircraft may enter the airspace.

Phraseology—

*Example:*

*HOU\_38\_CTR: "Request Oceanic clearance, COA123, FL350, MUSYL at 0210Z"*

- *Houston Daisetta Center is requesting that Continental 123, cruising at FL350 will cross MUSYL at 0210 Zulu time"*

ZHU\_79\_FSS: "COA123, JG"

- Houston Radio acknowledges the request and accepts it.

...or...

ZHU\_79\_FSS: "COA123, 0240Z"

- Houston Radio acknowledges the request but asks Houston Daisetta Center to hold Continental 123 before entering the airspace at the MUSYL fix for 20 minutes.

### **If an aircraft is delayed after an Oceanic clearance is given...**

HOU\_38\_CTR: "COA123 was MUSYL at 0210Z, now 0230Z"

ZHU\_79\_FSS: "COA123, 0240Z"

- Houston Radio acknowledges the change in time, but cannot accept the aircraft before 0240 Zulu.

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### **POSITION REPORTS**

Aircraft are only required to report initially with their **ALTITUDE, NEXT FIX, and TIME CROSSING NEXT FIX.**

(CALLSIGN): "Houston Radio, Houston Radio, (CALLSIGN) with you, (ALTITUDE), (FIX) at (ZULU TIME)"

ZHU\_79\_FSS: "Houston Radio copies (CALLSIGN) at (ALTITUDE), (FIX) at (ZULU TIME).

After initial contact, aircraft will be required to call in with their next fix and time crossing next fix after passing their initial fix, and each sequential fix after that.

*For example,*

(CALLSIGN): "Houston Radio, Houston Radio, (CALLSIGN) was (FIX) at (ZULU TIME). Estimating (FIX) at (ZULU TIME), how copy?"

ZHU\_79\_FSS: "Houston Radio copies (CALLSIGN) was (FIX) at (ZULU TIME). Estimating (FIX) at (ZULU TIME), call over (FIX)"

If an aircraft does not contact you within **10 minutes** of their estimated time, initiate a SELCAL check.

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### **SELCAL CHECKS**

When the adjacent Center hands control of an aircraft to you no later than 5 minutes from entering the Oceanic airspace, you will NOT receive a radar hand off. The pilot will call in through radio with their initial information. On initial contact, perform a SELCAL check with this pilot.

The phraseology is as follows—

ZHU\_79\_FSS: "(CALLSIGN), standby for SELCAL check."

#### **Perform SELCAL check**

(CALLSIGN): "Houston Radio, SELCAL check OK, (CALLSIGN)"

ZHU\_79\_FSS: "(CALLSIGN), copy SELCAL check OK"

## TERMINATING SERVICES

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When an aircraft's fix is one that will have them exit the Oceanic control space, inform the aircraft to contact you **FIVE (5) MINUTES PRIOR** to the fix.

*For example,*

*(CALLSIGN):* "Houston Radio, Houston Radio, (CALLSIGN) was (FIX) at (ZULU TIME). Estimating (FIX) at (ZULU TIME), how copy?"

*ZHU\_79\_FSS:* "Houston Radio copies (CALLSIGN) was (FIX) at (ZULU TIME). Estimating (FIX) at (ZULU TIME), call five minutes prior to (FIX)"

### **When the aircraft calls prior to the fix...**

*(CALLSIGN):* "Houston Radio, Houston Radio, (CALLSIGN) is five minutes prior to (FIX)"

*ZHU\_79\_FSS:* "Houston Radio copies, (CALLSIGN) is five minutes prior to (FIX). At (FIX), contact Houston Center on 126.950"

...or...

*ZHU\_79\_FSS:* "Houston Radio copies, (CALLSIGN) is five minutes prior to (FIX). At (FIX), monitor UNICOM on 122.800"