



Honolulu Control Facility

HCF MILITARY PROCEDURES

Document Number	HCF 7110.5
Version	A
Effective Date	08/03/2024

DOCUMENT INFORMATION

Purpose

This document prescribes the procedures to be utilized for military traffic in the area of the Honolulu Control Facility. This document serves to create and implement standardized procedures for the handling of military traffic and airfields.

Distribution

This document is distributed to all Honolulu Control Facility personnel.

Responsibility

The Air Traffic Manager or their designee shall be responsible for the maintenance of this document and any policies that deviate from it.

Procedural Deviations

Exceptional or unusual requirements may dictate procedural deviations or supplementary procedures to this order. A situation may arise that is not adequately covered herein; in such an event use good judgment to effectively resolve the problem.

Updates and Changes

The Air Traffic Manager or their designee may post interim changes to this document in the form of notices via the HCF website and discord. Controllers are requested to check for any notices prior to controlling for changes in procedures.

Cancellation

This document cancels any relevant procedures or agreements previous to this one, beginning on the date of effectiveness of this document.

TABLE OF REVISIONS

DATE	REVISION	EDITOR/VERSION
08 Mar 2024	Initial Release	Dirk Thorben Kottenhahn HCF 7110.5A

Table of Contents

1	General	5
2	Military Airfields	6
2.1	Andersen Air Force Base Positions	6
2.2	Wheeler Army Airfield Positions	6
2.3	Kaneohe Bay Marine Corps Air Station.....	6
2.4	Barking Sands Pacific Missile Range Facility	6
2.5	Bradshaw Army Airfield.....	6
3	Military Procedures.....	7
3.1	General.....	7
3.2	Special Use Airspaces (SUA).....	8
3.2.1	Prohibited Areas	8
3.2.2	Restricted Areas.....	8
3.2.3	Warning Areas.....	8
3.2.4	Military Operations Area.....	8
3.2.5	Alert Areas.....	8
3.2.6	SUA Operations	8
3.3	Callsigns.....	9
3.4	Flight Plans.....	9
3.5	Formation Flying.....	10
3.5.1	Takeoff/Landing Clearance.....	10
3.6	Departure Procedures.....	10
3.6.1	Wind Information.....	10
3.6.2	Change to Departure	10
3.6.3	Unrestricted Climbs	11
3.6.4	High Key Departures.....	11
3.7	Arrival/Approach Operations.....	11
3.7.1	TACAN Approaches	11
3.7.2	Carrier Breaks	11
3.7.3	Overhead Breaks.....	11

3.7.4	Flame Out/Simulated Flame Out/High or Low-Key Approaches.....	12
3.7.5	Emergency Landing Patterns.....	13
3.8	MARSA.....	14
4	Air Defense and NORDO Procedures.....	15
4.1	Key Terms.....	15
4.2	Reasons for Intercept.....	16
4.3	Interception Phases and Procedure.....	16

1 General

The recent months showed a big increase of military traffic on the network both by pilots that aren't in a vSOA as well as pilots that are in a vSOA. This SOP will concentrate mostly on the vSOA pilots since their training allows them to fulfill procedures that are restricted via the [Special Operations, Policy & Procedures Manual](#) (or short PPM), one of them being the NORDO interception where the Center Controller can actually call on vSOA pilots to intercept an aircraft that is not responding.

This manual will both serve as a guideline on how to interact with military traffic as well as a SOP for the military airfields present in the HCF and Guam CERAP.

2 Military Airfields

HCF and Guam CERAP currently have 5 airfields that are fully military as well as several airfields that are mixed civilian and military usage, e.g. PHNL with Hickam attached to it or PHJR which has an USCG Base attached to it.

Procedures at the airfields will be the same as on civilian airfields and military traffic won't have preferential handling there due to the VATSIM rules and policies. The real difference will come in when military pilots request procedures like the ones explained later.

2.1 Andersen Air Force Base Positions

Position	Name	Call Sign	Frequency
Andersen Tower	Andersen Tower	UAM_TWR	126.200
Andersen Ground	Andersen Ground	UAM_GND	121.700
Andersen Delivery	Andersen Delivery	UAM_DEL	126.725

2.2 Wheeler Army Airfield Positions

Position	Name	Call Sign	Frequency
Wheeler Tower	Wheeler Tower	HHI_TWR	126.300
Wheeler Ground	Wheeler Ground	HHI_GND	121.850

2.3 Kaneohe Bay Marine Corps Air Station

Position	Name	Call Sign	Frequency
Kaneohe Approach	Kaneohe Approach	NGF_APP	125.000
Kaneohe Tower	Kaneohe Tower	NGF_TWR	120.700

2.4 Barking Sands Pacific Missile Range Facility

Position	Name	Call Sign	Frequency
Barking Sands Tower	Barking Sands Tower	BKH_TWR	126.200
Barking Sands Ground	Barking Sands Ground	BKH_GND	124.200

2.5 Bradshaw Army Airfield

Position	Name	Call Sign	Frequency
Bradshaw Tower	Bradshaw Tower	BSF_TWR	119.275
Bradshaw Ground	Bradshaw Ground	BSF_GND	121.700

3 Military Procedures

3.1 General

There is one thing a controller needs to keep in mind with military procedures as well as certain other procedures/activities: VSOA restricted activities. The VATSIM SOA PPM explains in detail which activities are restricted to SOAs only and as such a controller also needs to have an eye on that and deny that activity to a pilot that is not part of a SOA and also involve a supervisor in case the pilot doesn't want to accept it.

The following activities are restricted to SOA only:

- Conducting joint training exercises with other approved VSO organizations
- War games
- Air to air refueling
- Carrier operations
- Flying low level military routes
- Flying escort missions
- Executing air combat maneuvers
- Interception/scramble of other aircraft¹
- Having access to special use airspace.
- Search & Rescue Operations
- Firefighting Operations
- Launch and Recovery of Space Vehicles
- Air Displays (Flying Displays, Races)

Additional to that, a lot of the procedures being explained further down in this document are only if workload permits. An Overhead Break at Honolulu for example should only be permitted if the current traffic situation permits it, like if you have a lot of arrivals and departures for the runway the pilot is aiming for, an overhead break can and should be denied.

¹ ATC staff can in special circumstances request an intercept or scramble by an approved Special Operations Partner Pilot when they are unable to contact an aircraft within their airspace or at the request of the pilot should all pilots agree, Due regard is to be taken into consideration of all users experience on the network.

3.2 Special Use Airspaces (SUA)

3.2.1 Prohibited Areas

Prohibited Areas are shown as “P” on charts and normally are areas that are established for security reasons and normally civilian traffic shouldn’t be allowed in them.

3.2.2 Restricted Areas

These are shown by a “R” on charts. Restricted areas are normally areas which can potentially pose a danger to anyone entering them due to certain activities happening in them if they are activated (like artillery fire, dogfighting etc.). If an area is active, pilots need a clearance by ATC in order to enter the area.

3.2.3 Warning Areas

Normally shown by a “W” on charts. Warning areas can basically be seen as a MOA over the water where non-participating aircraft (like civilian aircrafts passing through it) can potentially be in danger.

3.2.4 Military Operations Area

A MOA is normally shown as “Name MOA” on charts and typically is a training area for the military that separates them from IFR traffic. An active MOA can still be crossed by IFR traffic if proper separation can be provided, otherwise traffic should be rerouted around the area. VFR traffic can enter without clearance but should exercise extreme caution given military pilots are freed of a lot of restrictions normally placed on them in that area, like sub-sonic speed restrictions, formation training and low-altitude maneuvers.

3.2.5 Alert Areas

Shown with an “A” on charts, these areas may contain a high volume of pilot training or unusual aerial activity. There is no clearance needed to enter but pilots should be alert when entering these areas.

3.2.6 SUA Operations

When an aircraft requests to enter an airspace, you must clear them into it and issue an altitude restriction (if any restriction exists).

Example: Bee 13, entering Whiskey 192, Cleared Operational. Maintain block 5,000 through 17,000.

After readback, you can instruct them to report established (inside) or report a passing point into the airspace.

Example: Bee 13, report established.

As soon as the aircraft is entering or established, you terminate the radar service and switch them to another frequency. Also, you must instruct them to contact you on exit.

Example: Bee 13, Radar Services terminated. Maintain VFR. Squawk (either a military designated beacon code, or VFR at your discretion). Advise Center on this frequency upon exit. Frequency change approved.

When an aircraft exits the airspace with an IFR request, you must re-issue the clearance as you switched them to VFR before.

3.3 Callsigns

Military Callsigns are normally split up in 3 types: You have the tactical callsigns, standard branch callsigns as well as the standard military mission callsigns.

Military callsigns are not grouped like with other civilian flights, so not “Demon Fourteen” but “Demon One Four”.

Tactical callsigns like “FIRE18” or “DEMON14” are typically associated with a unit and limited to 7 characters, so they can be shortened when filed to meet that limit, like KILLER11 being shortened to KILLR11.

Standard branch callsigns are just the standard you will see for non-mission flights or transport elements.

US Air Force	US Coast Guard	US Army	US Marine Corps	US Navy
A	C	R	VM	VV
Air Force	Coast Guard	Army	Marine	Navy

Standard Military Mission Callsigns are just as the name says default callsigns for certain missions that are not bound to a military operation for example.

USAF Air Mobility Command	Special Air Missions	USAF Aerial Refueler	Air Force One
RCH (“Reach”)	SAM or S	SHELL, TEXCO, OPEC	AF1

3.4 Flight Plans

The flight plan of a military pilot that is part of a SOA typically always has a link to their website plus their ID in the remarks so that ATC can quickly verify if they are really a SOA pilot and as such allowed to conduct the above activities.

Flight plans normally also include notes about a delay in an airspace or at a certain waypoint (like for a CAP) or notes about activating a certain MOA or Restricted Airspace or if the pilot is available for a Scramble.

Examples:

- CLOUDx CLOUD BEAK /D0030 CME PIO -> The pilot plans to stay inside the BEAK airspace for 30 minutes
- “Activate BEAK and TALON MOAs”, “Activate R5107”
- “Defending TFR 3/1234”
- “Alert/Scramble”

3.5 Formation Flying

Formation flying is something you will quite often see with military pilots but also with civilian pilots. In a formation normally only the flight leader has their transponder on Mode C while the other members of the formation are squawking standby to avoid unnecessary traffic alerts for the controller.

Separation rules are slightly different for formation flights with them adding 1 additional mile for each formation.

Example:

- Formation flight of 2 F18 with a single F22 behind them, they need to be separated 6 miles (Standard 5 miles plus 1 mile for the formation)
- Formation flight of 2 F18 with a formation flight of 4 F22 need a separation of 7 miles (Standard 5 miles plus 1 mile for each formation)

3.5.1 Takeoff/Landing Clearance

There is no change for Takeoff or Landing clearances when dealing with formations. The formation leader will handle the communications and the whole formation will do it as one entity, meaning they will also line up on the runway as one entity, so you could also have the situation of 4 F15 being on the runway at the same time.

Formation flights are normally not allowed to conduct touch-and-go operations due to the potential danger involved in it that one aircraft fails to do the touch-and-go and the trailing aircraft collides with them.

3.6 Departure Procedures

3.6.1 Wind Information

Military aircraft always require wind information even if the wind is calm or if the ATIS normally informs about it.

3.6.2 Change to Departure

If working on a Tower position with an active radar controller above, all non-Cargo/Transport/Helo aircraft should be instructed to change to departure frequency during the take-off clearance. In order to make that easier, consider all "F", "A", "EA" and "T" aircraft types to be a non-Cargo/Transport/Helo aircraft with the exception of the T39 and T1. With that the pilot switches to departure frequency prior to commencing the takeoff roll.

Alternatively, you can instruct the aircraft to switch frequency when A) passing 2,500 feet or when B) level off with wings level, in case you forgot to issue "Change to Departure".

Examples:

- Bee 13, Honolulu Tower, Runway 8 Left, Wind Calm, Cleared for Takeoff. Change to Departure.

- Bee 13, passing 2,500, contact departure.
- Bee 13, when straight and level, contact departure.

3.6.3 Unrestricted Climbs

Unrestricted climbs are conducted where high performance aircraft depart runway heading (or sometimes even directly vertical) at a climb rate that is way higher than normal climb rates of civilian aircraft to reach their requested or approved altitude.

These climbs always have to be coordinated with the appropriate departure controllers or even Enroute controller. Any restriction that are given by the departure or enroute controller needs to be issued to the aircraft **prior** to issuing “Unrestricted Climb approved”.

Example: Bee 13, Unrestricted Climb to 12,000 approved. Runway 8 Left, Wind Calm, cleared for Takeoff. Change to departure.

3.6.4 High Key Departures

High Key Departures are basically the opposite of a “Flame Out” approach, explained in the next section. The aircraft will normally stay with the tower controller and not be issued a “Change to departure”. On departure the aircraft will make a steep climb to an altitude between 3,000 and 5,000 feet AGL and basically enter a traffic pattern that ends “high key” overhead the runway.

Restrictions can be issued in regards to altitude, reporting point or distance to the airport/DME point.

For a High Key Departure always issue directions for the pattern turns. By default it’s left and if not issued in the clearance, aircraft normally assume left turns.

3.7 Arrival/Approach Operations

3.7.1 TACAN Approaches

TACAN approaches are basically just VOR approaches with the difference that only military aircraft with the appropriate equipment can fly them. Approach clearances are worded the same as a VOR, just replacing VOR with TACAN.

3.7.2 Carrier Breaks

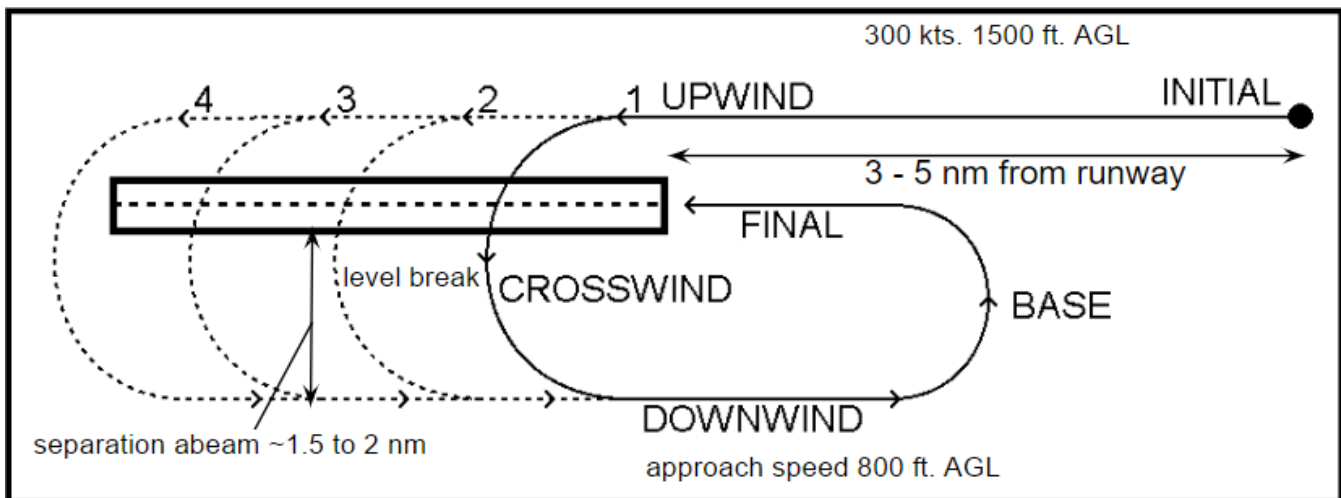
Currently no SOA is certified to do Carrier Operations, as such there will be no explanation of this procedure until the time when a SOA is actually certified in it. Given there are add-ons that provide Carriers in the Hawaiian area, controllers should keep an eye out for it and involve a supervisor if pilots do such operations, as Carrier Operations are SOA only.

3.7.3 Overhead Breaks

The Overhead Approach Maneuver, typically referred to as Overhead Break, is designed to deplete energy, reduce speed, provide separation for aircraft flying in formation that are transitioning to land one at a time, and reduce noise.

Phraseology:

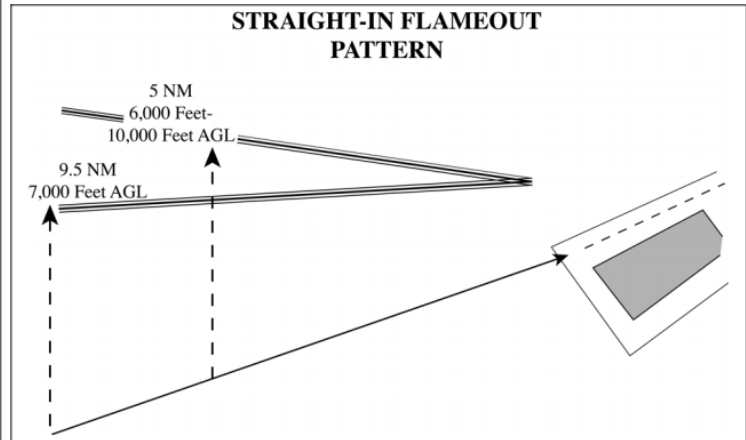
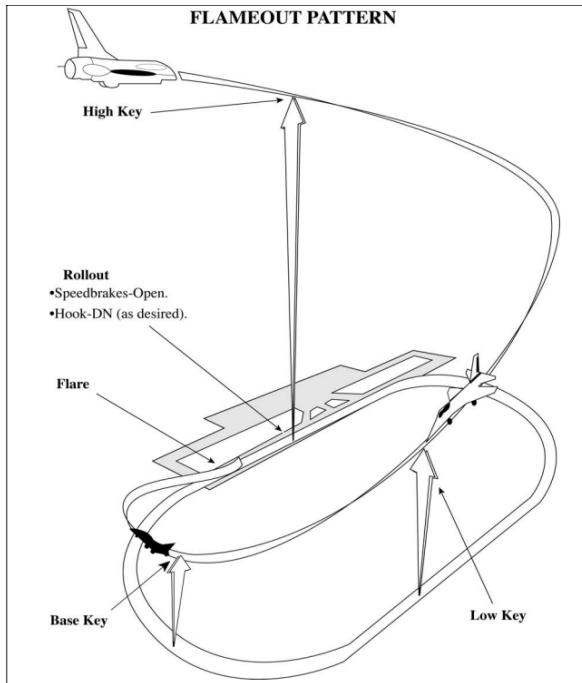
- Pilot requests / ATC assigned Overhead
- Controllers may authorize overhead maneuver and issue the following clearance:
 - Pattern altitude and direction of traffic (if either are non-standard)
 - Phraseology: “Pattern Altitude [Altitude]. [Left/Right] Turns”
 - Request for a report on an initial
 - Phraseology: “Report Initial”
 - “Break” information and request for a pilot to report the break
 - Phraseology: “Break at [specified point]. Report Break”
- Example:
 - “Demon One Four, Runway Eight Left, wind zero six zero at eight, left turns, report initial.”
 - “Demon One Four, report break.”
 - “Demon One Four, cleared to land.”



3.7.4 Flame Out/Simulated Flame Out/High or Low-Key Approaches

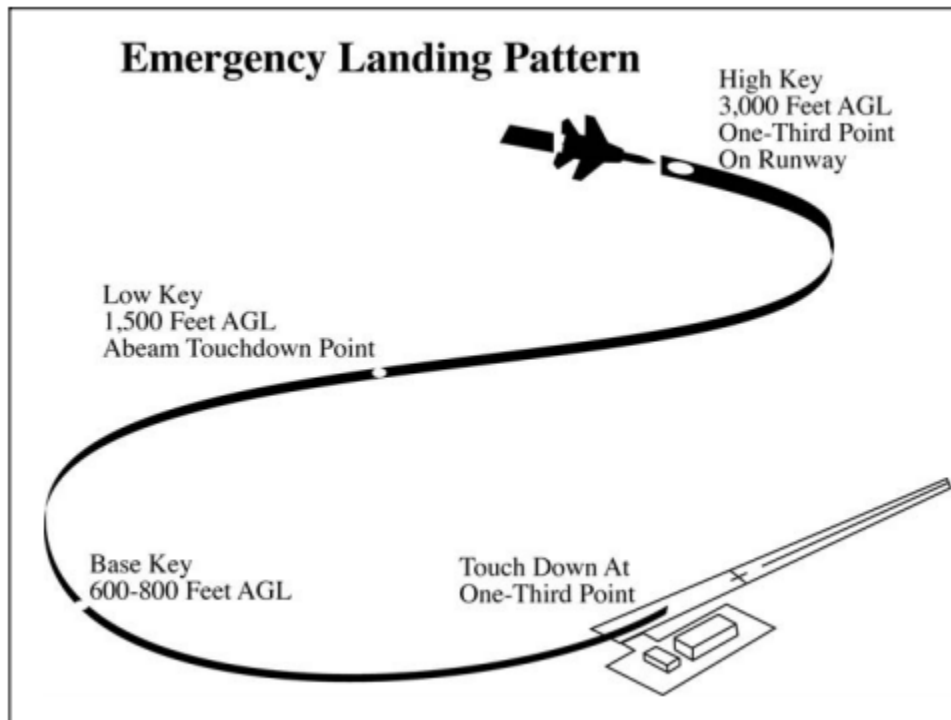
These are basically similar to an overhead break with the difference that they are much higher in altitude and the phraseology is slightly changed with “Break” being replaced by “simulated flame out” or “flame out”.

Also instead of clearing for a break, you give the aircraft a direction as if they were entering a traffic pattern.



3.7.5 Emergency Landing Patterns

ELPs are basically a 360° overhead pattern that positions an aircraft for landing when the possibility of a power loss exists or no power is available.



3.8 MARSAs

MARSAs basically means that the military assumes responsibility for separation of aircraft. Normally this is invoked inside SUAs or when military aircraft notify ATC about it, keep in mind that it's a notification and not a request.

MARSAs also comes into effect with NORDOs when interceptors are closing in on the NORDO aircraft (explained further below).

4 Air Defense and NORDO Procedures

NORDO Procedures come into play when an ATC is unable to raise communication with an aircraft, or in some cases a simulated NORDO between two SOA parties. As explained above, intercepting an aircraft is restricted to SOA only but there is a fine line. In the presented case of a simulated NORDO both the interceptor and the intercepted aircraft need to be SOA pilots, while in a real NORDO only the interceptor needs to be in a SOA.

If you have a SOA fighter available and they even notified you about them being on alert, feel free to send them to intercept the NORDO aircraft parallel to your WALLOP to a supervisor. Supervisors will work together with the SOA pilot to make sure that everyone enjoys it. That also requires you to tell the Supervisors that you already have a SOA pilot on the way, so they know about it.

As ATC you will be contacted by the SOA pilots so that you know they are available, this is done by several ways:

- Remark in the flight plan with proper identification so you can verify they are in a SOA
- A private message sent to you where they notify you about it.

And always keep in mind, the interceptor won't ask for a scramble, you will need to request them for the scramble. SOA pilots never act on their own in these situations.

When issuing a scramble, try to coordinate an unrestricted climb and give the interceptor proper information as to where the target is.

4.1 Key Terms

Term	Definition	Example
BRA	Bearing Range Altitude	123 for 40, 2000
BRAA	Bearing Range Altitude Aspect	123 for 40, 2000, Cold
Aspect	Flanking – Bandit is showing his side to you Hot – Bandit has nose pointed in your direction Cold – Bandit has his tail pointed in your direction	
Bogey Dope	A request for bearing and range to bogey and as available, heading, speed, and altitude.	
TOI	Target of Interest	
Bullseye	A pre-defined point which is used as a reference for radio calls indicating a position	
Combat Air Patrol	Patrol over defended area for the purpose of intercepting/destroying hostile aircraft before they reach their target.	

4.2 Reasons for Intercept

An intercept doesn't always need to be for a NORDO or Air Defense, you can also do it for example if an aircraft requests an inspection in an emergency for example (like are the flaps working, are the wheels down etc.).

4.3 Interception Phases and Procedure

- Approach
 - By default, intercepted aircraft are approached from behind and during the approach MARSA is invoked.
- Identification
 - During this phase, the interceptor tries to get a positive identification on the aircraft to actually make sure that he has the right target.
- Post intercept
 - This is basically the hot phase where the interceptor is actively trying to get the attention of the NORDO aircraft by calling on the radio both on the ATC frequency as well as UNI-COM in some cases. Controllers might also be able to see the fighter doing a so called head butt in front of the aircraft in order to wake them up with the TCAS alert for example.