

HONOLULU INTL AIRPORT TOWER DATA LINK SYSTEM

Tower Data Link System (TDLS) operational, Predeparture Clearance (PDC) available at Honolulu International Airport. To participate, email 9-AWA-ATS-PDC@faa.gov or contact Gary Norek at FAA, Airspace and Procedures, ATO-1, 800 Independence Ave., SW, Washington, DC, 20591, telephone (202) 385-8510.

LASER LIGHT OPERATION

Keck Observatory, Gemini Observatory and Subaru Observatory

A permanent laser light operation is being conducted nightly between sunset and sunrise at Keck Observatory and Gemini Observatory N19-49-26/W156-28-09, Kamuela VOR (MUE) 122 degree radial at 16 nautical miles. The laser beam may be injurious to eyes if viewed on axis. Cockpit illumination and flash blindness may also occur if the beam enters the cockpit. Honolulu Control Facility, (808) 840-6201 is the FAA coordination facility.

Maui Space Surveillance Complex

A permanent laser light operation is being conducted nightly between sunset and sunrise at the Maui Space Surveillance Complex (MSSC) N204231/W1561528, Maui VOR (OGG) 131 degree radial at 15 nautical miles. The laser beam may be injurious to eyes if viewed on axis. Cockpit illumination and flash blindness may also occur if the beam enters the cockpit. Honolulu Control Facility, (808) 840-6201 is the FAA coordination facility.

CONTINUOUS POWER FACILITIES

In order to insure that a basic ATC system remains in operation despite an areawide or catastrophic commercial power failure, key equipment and certain airports have been designated to provide a network of facilities whose operational capability can be utilized independent of any commercial power supply.

In addition to those facilities comprising the basic ATC system, the following approach and lighting aids have been included in this program for a selected runway.

1. ILS (Localizer, Glide Slope, COMLO, Inner, Middle and Outer Markers)
2. Wind Measuring Capability
3. Approach Light System (ALS) or Short ALS (SALS)
4. Ceiling Measuring Capability
5. Touchdown Zone Lighting (TDZL)
6. Centerline Lighting (CL)
7. Runway Visual Range (RVR)
8. High intensity Runway Lighting (HIRL)
9. Taxiway Lighting
10. Apron Light (Perimeter Only)

The following have been designated "Continuous Power Airports," and have independent back up capability for the equipment installed.

Airport/Ident	Runway No.	Airport/Ident	Runway No.
Albuquerque, NM (ABQ)	08	Milwaukee, WI (MKE)	01L
Anchorage, AK (ANC)	07R	Minneapolis, MN (MSP)	30L
Andrews AFB, MD (ADW)	01L	Nashville, TN (BNA)	02L
Atlanta, GA (ATL)	09R	New Orleans, LA (MSY)	10
Baltimore, MD (BWI)	10	New York, NY (JFK)	04R
Bismarck, ND (BIS)	31	New York, NY (LGA)	22
Boise, ID (BOI)	10R	Newark, NJ (EWR)	04R
Boston, MA (BOS)	04R	Oklahoma City, OK (OKC)	35R
Charlotte, NC (CLT)	36L	Omaha, NE (OMA)	14R
Chicago, IL (ORD)	10	Ontario, CA (ONT)	26L
Cincinnati, OH (CVG)	36C	Philadelphia, PA (PHL)	09R
Cleveland, OH (CLE)	06R	Phoenix, AZ (PHX)	08
Dallas/Fort Worth, TX (DFW)	17C	Pittsburgh, PA (PIT)	10L
Denver, CO (DEN)	35R	Reno, NV (RNO)	16R
Des Moines, IA (DSM)	31	Salt Lake City, UT (SLC)	34L
Detroit, MI (DTW)	03R	San Antonio, TX (SAT)	12R
El Paso, TX (ELP)	22	San Diego, CA (SAN)	09
Fairbanks, AK (FAI)	02L	San Francisco, CA (SFO)	28R
Great Falls, MT (GTF)	03	San Juan, PR (SJU)	08
Honolulu, HI (HNL)	08L	Seattle, WA (SEA)	16C
Houston, TX (IAH)	26L	St. Louis, MO (STL)	30R
Indianapolis, IN (IND)	05L	Tampa, FL (TPA)	01L
Jacksonville, FL (JAX)	07	Tulsa, OK (TUL)	36R
Kansas City, MO (MCI)	19R	Washington, DC (DCA)	01
Los Angeles, CA (LAX)	24R	Washington, DC (IAD)	01R
Memphis, TN (MEM)	36L	Wichita, KS (ICT)	01L
Miami, FL (MIA)	08R		

OTE—The existing CPA runway is listed. Pending and future changes at some locations will require a revised runway designation.

CHANGE NOTICE

A Change Notice will only be issued for safety considerations such as when an amended or original instrument approach procedure is issued.

VMC FLIGHT (VFR)

1. The Oakland oceanic CTA/FIR, unless otherwise specified, is classified as class A airspace above FL055 (IFR only). VMC flights are not authorized in class A airspace but may operate within the Oakland FIR as follows:

- a. At or below FL055 (class G).
- b. VMC procedures are authorized in class D and E airspace.
- c. VFR flights may be conducted in the airspace surrounding Pacific islands located within the Oakland oceanic CTA/FIR with the following restrictions:
 - i. Between sunrise and sunset; and
 - ii. When operating less than 100 nautical miles of shoreline of any landmass; and
 - iii. Below FL200:

Note: VMC Flights operating within 100nm of landfall are not considered to be "over water" flights (AC91-70).

2. All "over water" VMC flights planning to operate outside of controlled airspace (class G) but on routes within the Oakland FIR are required for national security to submit an ICAO flight plan with Flight Service (FSS).

- a. The flight plan shall contain reporting points along the route not more than 80 minutes apart.
- b. It is the VMC pilots' responsibility to open and close their VMC flight plan with FSS.

3. All over water VMC flights are required to maintain a continuous listening watch on the appropriate frequency, and make position reports not more than 80 minutes apart on the appropriate HF frequencies.

Note: Satphones do not meet the "continuous listening watch" requirements as prescribed by ICAO.

4. Flight following and alerting services are provided by ATC for all over water flights.

5. State owned aircraft (military, customs etc.) may operate VFR within Oakland oceanic FIR if exercising "Due regard."

LATERAL AND VERTICAL LIMITS OF OCEANIC CONTROL AREAS

The Oakland oceanic control area (CTA) is aligned laterally to coincide with the Oakland Flight Information Region (FIR). The Oakland CTA has a lower limit of FL055, except where Class D or E airspace is designated; there is no upper limit.

ADDRESSING FLIGHT PLANS WITH OAKLAND CENTER

With the introduction of a new computer system with the Oakland oceanic airspace (Ocean 21), all aircraft entering Oakland's international oceanic airspace (KZAK) should address the new computer KZCEZQZX AND KZAKZRZX.

OCEANIC IFR SEPARATION STANDARDS

LONGITUDINAL: At least 10 minutes between turbojet aircraft on the same or continuously diverging course. Non-turbojets, at least 15 minutes.

CROSSING: All aircraft at least 15 minutes.

LATERAL: At least 100 nautical miles between intended routes, 50 nautical miles using RNP-10 and 30 nautical miles using RNP-4 in specified areas. Lateral separation minima may be reduced in some cases when suitable nav aids are available and/or when Required Navigational Performance (RNP) is authorized.

VERTICAL: At least 1,000 feet from the lower limit to flight level 290. Above flight level 290 at least 2,000 feet. Vertical separation above FL290 may be reduced when Reduced Vertical Separation Minimum (RVSM) is authorized.

LOWER SEPARATION MINIMA – OAKLAND OCEANIC FIR

In accordance with ICAO Rgnl Supplementary Procedures–DOC 7030 PAC/RAC–1 6.4, notice is hereby given that separation lower than specified in 6.1 and 6.2 may be applied in accordance with PANS–RAC DOC 4444–RAC 501 Part 111, sections 7, 8 and 9 within the Oakland Oceanic FIR. The use of lower separation standards within the airspace listed below is contingent upon satisfactory and current flight check data of the navigational aids.

AIRSPACE

100 NM seaward of the boundary of the Honolulu Domestic area
 50 NM of Guam
 130 NM of Wake Island
 40 NM of Wake Island
 130 NM of Midway Island
 40 NM of Midway Island
 50 NM of Majuro Island
 50 NM of Kwajalein Island
 130 NM of Kwajalein Island
 40 NM of Kwajalein Island
 50 NM of Weno Island/Chuuk
 50 NM of Yap Island
 50 NM of Ponape Island
 50 NM of Saipan Island
 50 NM of Babelthuap Island/Koror

NAVIGATIONAL AIDS

SOK, LIH, HNL, MKK, LNY,
 OGG, ITO, UPP and IAI VORTACS
 AJA NDB
 AWK VORTAC FL180–450
 AWK VORTAC SFC–FL180
 NQM TACAN FL180–450
 NQM TACAN SFC–FL180
 MAJ NDB/DME
 NDJ NDB
 NDJ TACAN FL180–450
 NDJ TACAN SFC–FL180
 TKK NDB/DME
 YP NDB/DME
 PNI NDB/DME
 SN NDB
 ROR NDB/DME

MACH NUMBER TECHNIQUE

The minimum longitudinal separation between aircraft may be reduced with the application of Mach Number Technique (MNT) thereby improving airspace utilization.

APPLICATION

1. MNT may be used only between turbojet aircraft following the same or continuously diverging track, which have reported over a common point.
2. MNT can only be applied between aircraft that are assigned a single cardinal altitude or the aircraft concerned are in level, climbing or descending flight.
3. Longitudinal separation between aircraft using MNT is based on the aircraft maintaining the assigned Mach number at all times, including during climb and descent. If it is not feasible, for operational reasons, to maintain the last assigned Mach number, the pilot shall advise ATC at the time of the initial clearance or subsequent climb/descent request or clearance.
4. Aircraft shall adhere to the Mach number assigned by ATC and shall obtain approval before making any change to the Mach number. If it is essential to make an immediate change in Mach number (i.e. due to turbulence) ATC shall be notified as soon as possible that such a change has been made.

MNT SEPARATION MINIMA. When the lead aircraft maintains the same Mach number of the following aircraft, the minima when using MNT is 10 minutes.

REDUCTIONS TO SEPARATION WHEN APPLYING MACH NUMBER TECHNIQUE. To apply reductions, it must be possible to ensure that the required time interval will exist at the common point from which the aircraft either follow the same track or continuously diverging tracks.

Both turbojet aircraft will be assigned an appropriate Mach number. The lead aircraft will be assigned a Mach number greater than the following aircraft. Separation minima are as follows:

Difference in Mach number between aircraft	Minimum separation between aircraft
0.02 Mach	9 Minutes
0.03 Mach	8 Minutes
0.04 Mach	7 Minutes
0.05 Mach	6 Minutes
0.06 Mach	5 Minutes

MACH NUMBER TECHNIQUE WITH FASTER AIRCRAFT BEHIND. Mach Number Technique may be applied when a faster aircraft will follow another aircraft at the same flight level. In this case, longitudinal separation may be established during transition from offshore airspace to the oceanic control area, or when both aircraft are within oceanic airspace. Sufficient longitudinal separation will be applied to ensure at least 10 minutes separation until another form of separation is achieved.

NAVIGATIONAL PERFORMANCE IN OCEANIC AREAS

In any air traffic control environment there is a need to ensure that aircraft adhere to the centerline of the cleared route. Demonstrated navigational accuracy provides the basis for determining lateral spacing and separation minima necessary with respect to traffic which may be operating outside but adjacent to the airspace protected for a given route. To sustain or refine the separation minima, adherence to cleared route must be demonstrated. The best available measurement of such adherence is obtained by radar observation of each aircraft's proximity to centerline prior to its coming into coverage of short range navigation aids at the end of the oceanic navigated portion of flight. If observation indicates that an aircraft was not reasonably within airspace normally protected, the reasons for the apparent deviation from centerline must be determined and steps must be taken to prevent recurrence and to improve overall navigational performance.

Where radar is available to monitor organized oceanic route systems, Oceanic Navigational Error Reports (ONER) will be recorded on observed lateral deviations of 20 NM or more. ONERs will be investigated to determine causal factors. Pilots should understand that these reports are instrumental in providing data for detecting significant changes in the navigational environment which may require corrective action.

BASIC OCEANIC LONG-RANGE NAVIGATION AND COMMUNICATION REQUIREMENTS

Any operation which is conducted in international airspace on an IFR flight plan, a VFR controlled flight plan, or at night, and is conducted beyond the published range of normal airways navigation facilities (NDB, VOR/DME), is considered to be a long range navigation operation. Long range navigation in controlled airspace (CTA) requires aircraft to be navigated within the degree of accuracy required for air traffic control, meaning that aircraft must make every effort to follow the centerline of the assigned route, to maintain assigned flight level and speed filed or assigned. Accurate navigational performance is necessary to support the separation minima applied by ATC. These separation minima can be found in the International Civil Aviation Organization (ICAO) Rgnl Supplementary Procedures Document 7030. For flights conducted within international airspace under United States jurisdiction, the Air Traffic Control Handbook, Chapter 8--Offshore/Oceanic Procedures (FAA Order 7110.65) provides a simplified version of these separation minima.

Federal Aviation Regulation (FAR) 91.703 requires that civil aircraft must comply with ICAO Annex 2 when operating over the high seas. Annex 2 requires that "Aircraft shall be equipped with suitable instruments and with navigation equipment appropriate to the route being flown." ICAO Annex 6, Part II stipulates that an airplane operated in international airspace must be provided with navigation equipment which will enable it to proceed in accordance with the flight plan and in accordance with the requirements of air traffic services. This means that navigation equipment should be capable of providing the pilot with ability to navigate the aircraft with required accuracy.

Annex 2 also requires that an aircraft shall adhere to the "current flight plan unless a request for change has been made and clearance obtained from the appropriate air traffic control facility;" and "unless otherwise authorized or directed by the appropriate air traffic control unit, controlled flights shall, insofar as practicable: a) when on an established ATS route, operate along the centerline of that route; or b) when on any other route, operate directly between the navigation facilities and/or points defining that route."

If a flight inadvertently deviates from an ATC cleared route immediate action should be taken to rejoin the track as soon as possible. When a deviation from track is discovered, air traffic control must be informed so that appropriate actions may be taken to resolve any potential hazards to other aircraft which may have been created by the deviation. Any navigation error which results in an aircraft straying from the centerline of its cleared route and beyond its protected airspace could create a significant hazard, since the error could not normally be observed by air traffic control.

ICAO Annex 6, Part II contains standards and recommended practices adopted as the minimum standards for all general aviation airplanes engaged in international air navigation. It requires that airplanes operated in accordance with Instrument Flight Rules, at night, or on a VFR controlled flight, have installed and approved radio communication equipment capable of conducting two-way communication at any time during the flight with such aeronautical stations and on such frequencies as may be prescribed by the appropriate authority.

Note: Satellite telephones do not meet the two-way communication at any time requirements as stated in ICAO Annex 6 part II.

All of the aforementioned requirements contained in Annex 2 and Annex 6, as supplemented by Rgnl Supplementary Procedures Document 7030, are incorporated in section 91.1 and 91.703 of the FAR for aircraft operating under United States civil certification in international oceanic airspace.

A. USE OF VERY HIGH FREQUENCY (VHF) AND HIGH FREQUENCY (HF) FOR COMMUNICATIONS. Due to the inherent "line of sight" limitations of VHF radio equipment when used for communications in international oceanic airspace, those aircraft operating on an IFR or controlled VFR flight plan beyond the communications capability of VHF will be required as per ICAO annex 2 to maintain a continuous listening watch and communications capability on the assigned HF frequencies. These frequencies are listed in Section IV of this CHART Supplement as part of the general purpose communication facilities operated by Aeronautical Radio, Incorporated (ARINC). These facilities will be responsible for the relay of position reports and other pertinent information between the aircraft and Air Traffic Control.

Note: Use of satellite telephones does not provide "a continuous listening watch" and therefore does not meet minimum ICAO requirements.

B. SPECIAL PACIFIC AREA COMMUNICATIONS. Frequency 123.45 MHz has been designated for use in air-to-air communications between aircraft operating in the Pacific area out of range of VHF ground stations to exchange operational information and facilitate resolution of operational problems.

C. GUARD OF VHF EMERGENCY FREQUENCY. Pilots should remember that there is a need to continuously guard the VHF emergency frequency 121.5 MHz when on long over-water flights, except when communications on other VHF channels, equipment limitations, or cockpit duties prevent simultaneous guarding of two channels. Guarding of 121.5 MHz is particularly critical when operating in proximity to flight information region (FIR) boundaries since it serves to facilitate communications with regard to aircraft which may experience in-flight emergencies, communications, or navigational difficulties. (Reference ICAO Annex 10, Vol II, Paragraphs 5.2.2.1.1.1 and 5.2.2.1.1.2)

D. USE OF NONDIRECTIONAL BEACON (NDB) FOR NAVIGATION. The use of NDB as the "primary" source of navigation for long range oceanic flight presents the operator with numerous limitations and restrictions that are inherent in low frequency radio equipment and low frequency signals. These include:

1. NDB of the highest power (2000 watts or more), which are maintained and flight checked as suitable for navigation, are limited in their usable service and/or reception range to no more than 75 NM from the facility at any flight level.

2. Though the operator may be able to receive standard (AM/amplitude modulation) broadcast stations with NDB equipment, primary dependence on the facilities for air navigation is a questionable operating practice. The following are some of the inherent problems associated with reception of these stations:

a. Infrequent identification of the station.

b. Identification of foreign language stations may be impossible without some knowledge of the language.

c. Transmitter sites are not always collocated with studio facilities.

d. Termination of service without notice.

e. Weather systems causing erratic and unreliable reception of signal.

f. Atmospheric disturbances causing erratic and unreliable reception of signal.

g. No flight checks conducted to verify the suitability and reliability of the facility and its signal for use in air navigation.

h. Fluctuation (bending) of signal due to "shoreline/mountain" effect.

i. Standard broadcast stations are not dedicated for air navigation purposes.

3. Considering the limitations, the operator should make every effort to navigate the aircraft so as to maintain the "track/course" and the "tolerances" specified in the ATC clearance as per Annex 2 and the Rgnl Supplementary Procedures Document 7030. An error of 10 degrees at a distance of 2000 miles equates to approximately 350 NM of course deviation; the inadequacies of the NDB as the sole source of navigation for oceanic flight must be evaluated carefully.

AREA NOTICES AMERICAN SAMOA

PAGO PAGO INTERNATIONAL AIRPORT

PROCEDURES

Inbound. About 30 miles from the airport, monitor 118.3 for broadcasts from other aircraft. At 15 miles from the airport broadcast your position, altitude and intentions. Follow this with your position on downwind, base leg and final approach.

Outbound. Monitor 118.3 for broadcasts from other aircraft before taxiing. Broadcast your position on the airport and intentions. Follow this with an announcement before you taxi onto the runway for takeoff.

HAZARDS, CAUTIONS AND WARNINGS

AMERICAN SAMOA – POWER LINES: Permanently installed power lines between island of Ofu and Olosega 400 feet ASL unlighted and unmarked.

HONOLULU CTA/HAWAII

GENERAL INFORMATION ON FLYING TO HAWAII

(Entry and Departure Requirements)

Air Commerce Regulations of the United States, Part 6, place certain responsibilities upon owners and operators of aircraft engaging in flights to and from foreign countries.

Customs and other agencies concerned desire to facilitate air travel to the fullest extent possible while carrying out their responsibilities. Aircraft operators can assist by familiarizing themselves with the regulations and by complying with them under all circumstances. Failure to do so may incur substantial penalties.

The following sets forth the principal requirements of concern to private plane operators engaging in international flights.

ARRIVAL AND DEPARTURE MANIFESTS. All aircraft departing from the continental United States or Alaska or Hawaii are exempt from filing an arrival or departure manifest. Aircraft arriving from any other place are required to file arrival and departure manifests.

ADVANCE NOTICE REQUIRED. Advance notice of each arrival must be furnished to U.S. Customs officials at or nearest to the place of intended first landing who will notify the Immigration and Public Health officials.

Advance notice should be sent so as to be received in sufficient time to enable the officers designated to inspect the aircraft to reach the place of landing before the arrival of the aircraft. At most airports, at least 2 hours advance notice is required for this purpose.

Notification may be made by telephone, which is preferable, or by telegram or radio. The notice should specify the following: (a) Type of aircraft; (b) Identification number (NC number); (c) Name of pilot; (d) Place of last departure; (e) Airport of entry; (f) Number of alien and citizen passengers; and (g) Estimated time of arrival (indicating whether H.S.T., P.S.T., etc).

Aircraft may use the following method of notifying customs when departing from a country or remote area where a predeparture flight plan cannot be filed or an "advise customs" message cannot be included in a predeparture flight plan: Call the nearest domestic or international FAA flight service station as soon as it is estimated that radio communication can be established and file a VFR (DVFR) flight plan and include as the last item "advise customs". The station with which such a flight plan is filed will forward it to the appropriate FAA station who will notify the customs office responsible for the destination airport. If the pilot fails to include "advise customs" in the radioed flight plan, it will be assumed that he has made other arrangements and FAA will not advise customs.

FAA assumes no responsibility for delays in advising customs if the flight plan is given to the FAA too late for timely delivery to customs before arrival of the aircraft. FAA cannot relay an "advise customs" flight plan if the pilot indicates a destination airport where flight service notice to customs is NOT available.

AIRPORTS FOR ENTRY OR REENTRY. If the operator of a private aircraft returning to or visiting the United States wishes to land at any airport of entry, advance notice of arrival is necessary. This advance notice should be sent also to the immigration and public health officers at or nearest the intended place of first landing.

If he intends to land at a place not designated as an airport of entry, he must obtain permission to make such landing and give advance notice of arrival to the customs office nearest the intended place of first landing. It is not necessary that separate requests be sent to immigration and public health officers in these cases.

WHAT TO REPORT. The advance notice should specify the type of aircraft, registration marks, name of commander, place of last departure, international airport, number of alien passengers, number of citizen passengers, and the estimated time of arrival. This advance notice should be sent in time to enable officers, designated to inspect the aircraft, to reach the place of landing before the aircraft arrives.

Upon arrival, the operator and passengers will be examined in the same manner as any international traveler. They must declare any articles acquired abroad. If any passengers or cargo are carried, an inward manifest must be filed. Customs officers can supply forms for both types of declaration, although operators should have their own supply.

IN CASE OF EMERGENCY. If an emergency landing is made in the United States, the aircraft operator should report as promptly as possible to the nearest customs, immigration and public health officers. The aircraft operator should not permit any merchandise or baggage to be removed, or any passengers to depart, without official permission unless necessary for preservation of life or property.

THE MATTER OF CHARGES. No charges are made for services during business hours when a landing takes place at any airport of entry; except that, when an aircraft arrives on a Sunday or holiday, or during other than regular hours, OVERTIME PAY WILL BE COLLECTIBLE. These charges are required by law. They may amount to as much as two days pay for each officer for any service performed on a Sunday or holiday. However, the charges are prorated where more than one aircraft is processed.

If the landing is made at a place other than an airport of entry, any expenses incurred by Government officers in going to and from the place of landing are payable by the plane operator. In addition, if the aircraft arrives on a Sunday or holiday, or during other than regular hours, OVERTIME PAY WILL BE COLLECTIBLE.

UNITED STATES LANDING RIGHTS AIRPORTS. At the following airports an application for permission to land must be submitted in advance to U.S. Customs. At least two hours advance notice of arrival must also be furnished to U.S. Customs. Advance notice of arrival may be included in your flight plan filed in Canada or Mexico if destined to an airport where flight notification service is available; this notice will be treated as an application for permission to land.

HAWAII

Lihue/Lihue Airport
Hilo/Hilo Intl
Honolulu/Honolulu Intl
Kahului/Kahului Airport

NOTE: Flight Service notification to U.S. Customs available through Honolulu Radio. Hawaii has no airport of entry as above defined. Request for permission to land at a Hawaiian landing rights airport should be directed to 808-861-8462 ext 0.

RADAR SERVICE – HONOLULU DOMESTIC AREA

In an effort to eliminate the mid-air collision potential in the Honolulu Domestic area, civil aircraft are encouraged to take one of the following two courses of action: (1) File an IFR flight plan, if the pilot is qualified and aircraft properly equipped; (2) Take advantage of the VFR radar advisory service provided by Honolulu Control Facility, by contacting Honolulu Control Facility on 119.3 MHz for aircraft SE of Oahu, 126.5 MHz when W of Oahu, or on 124.1 MHz when NE of Oahu. Aircraft desiring this service should request VFR radar advisory service and give aircraft identification, type, altitude, position with reference to the nearest navaid or geographical location, heading and destination. If controller workload permits, radar traffic advisories will be issued after radar identification is accomplished by aircraft position correlation, or aircraft identifying turns. This is in addition to the radar services provided by Maui and Honolulu Approach Controls for aircraft in their respective areas.

RADAR SERVICE – KONA DOMESTIC AREA

Primary radar service unavailable below 5000 feet MSL east of Haleakala and south of Maunakea. In the area as described, radar services are available only to transponder equipped aircraft.

GLIDE SLOPE SIGNALS ON LOCALIZER BACK COURSE

Localizer Back Course instrument approach procedures do not utilize glide path information. In most back course areas, however, extraneous glide slope signals emanating from the front course site can be detected—THESE GLIDE SLOPE SIGNALS SHOULD BE DISREGARDED WHEN CONDUCTING LOCALIZER BACK COURSE APPROACHES.

The FAA has conducted an airborne survey to determine the level of extraneous glide slope signal at each location. Where a significant level of "fly down" glide slope signal is present, the approach chart will be annotated as an additional alert to the pilot.

VFR FLIGHT WITHIN HAWAII

NOTE: CAUTION – HIGH DENSITY COMMUTER AND SIGHTSEEING TRAFFIC

VFR Cruising altitude at or below 3,000 feet AGL

In order to reduce traffic conflict between interisland flights at or below 3,000 feet, an informal cruising altitude program is in use in the Hawaiian Islands. Recommended eastbound altitudes: 2500, 1500, 500 feet; recommended westbound altitudes: 3000, 2000, 1000 feet.

SPECIAL ALERTNESS RECOMMENDED: Pilots engaged in sightseeing Hawaii must be sure their attention is not diverted from their primary responsibility for the safe operation of their aircraft. There is extensive VFR traffic operating along shorelines of all islands. Aircraft range in size from Cessna 152 to DeHavilland DHC-7 (4-engine). These aircraft generally operate from the shoreline to three miles offshore, at altitudes below 4500 feet.

Pilots should be aware of the high density traffic areas listed below.

NORTH SHORE MOLOKAI—MAUI

The route from Koko Head (CKH) VORTAC to and along the north shore of Molokai and Maui is extremely heavily traveled by aircraft engaged in commuter and sightseeing operations. As many as seven aircraft may be operating along Molokai north shore in both east and west bound directions, simultaneously and on a routine basis. The number may be up to 15 aircraft during peak traffic periods. VFR CHECKPOINTS: ILIO POINT, KALAUPAPA, and CAPE HALAWA on Molokai; NAKALELE POINT on Maui.

The following precautions are recommended:

- Maintain an especially alert watch for other aircraft. Traffic becomes concentrated in the vicinity of Ilio Point, Kalaupapa (airport), Cape Halawa, and Nakalele Point. Altitude changes should be avoided in these areas.
- Maintain an alert listening watch on 122.9 MHz and announce aircraft position, direction of flight and altitude when passing the VFR checkpoints named above.

EXAMPLE: ROYAL 76, ILIO POINT EASTBOUND 1500
TANGO 34, CAPE HALAWA WESTBOUND 2000

-Landing aircraft-Molokai Airport: Before crossing within one mile of the shoreline, or before passing abeam the VFR checkpoints noted above, arriving aircraft should broadcast position, altitude and intentions on 122.9 MHz prior to contacting Molokai Tower.

EXAMPLE: ROYAL 76 THREE WEST ILIO POINT, 1500, LANDING MOLOKAI

-Landing aircraft-Kalaupapa Airport: Aircraft landing at Kalaupapa Airport should comply with transiting procedures and, when approximately five miles from the airport, broadcast position, altitude and intentions on 122.9 MHz (remaining clear of the Molokai Airport Traffic Area). Follow this up with appropriate announcements on downwind, base leg and final approach. When departing Molokai for Kalaupapa, request frequency change to 122.9 MHz after departure, in order to make these broadcasts.

HONOLULU CLASS B AIRSPACEOPERATING RULES AND PILOT/EQUIPMENT REQUIREMENTS

Regardless of weather conditions, an ATC authorization is required prior to operating within Class B airspace. Pilots should not request an authorization to operate within CLASS B unless the requirements of sections 91.215 and 91.131 of the FAR are met. Included among these requirements are:

- (1) Unless otherwise authorized by ATC, the aircraft must be equipped with an operable two-way radio capable of communicating with ATC on appropriate frequencies for that terminal control area.
- (2) No person may takeoff or land a civil aircraft at an airport within CLASS B or operate within CLASS B unless:
 - (a) The pilot in command holds at least a private pilot certificate; or
 - (b) The aircraft is operated by a student pilot who has met the requirements of FAR section 61.95.
- (3) Unless otherwise authorized by ATC, each person operating a large turbine engine-powered airplane to or from a primary airport shall operate at or above the designated floors while within the lateral limits of CLASS B.
- (4) Unless otherwise authorized by ATC, the aircraft must be equipped with an operable VOR or TACAN receiver.
- (5) Unless otherwise authorized by ATC, the aircraft must be equipped with a 4096 code transponder with automatic altitude reporting equipment.

NOTE. ATC may, upon notification, immediately authorize a deviation from the altitude reporting requirement; however, a request for a deviation from the 4096 code transponder equipment requirement must be submitted to the controlling ATC facility at least one hour before the proposed operation.

FLIGHT PROCEDURESA. IFR Flights

Aircraft operating within the Honolulu CLASS B airspace must be operated in accordance with ATC clearances and instructions.

B. VFR Flights

1. Arriving aircraft, or aircraft desiring to transit CLASS B should contact Honolulu Control Facility on the frequency depicted for the sector of flight with reference to the geographical center of the airport. Pilots should state, on initial contact, their position, direction of flight and destination. If holding of VFR aircraft is required, the holding point will be specified by ATC and will be a prominent geographical fix, landmark or VOR radial.
2. Aircraft departing the primary airports are requested to advise the Honolulu clearance delivery position prior to taxiing of the intended route of flight and altitude. Aircraft departing from other than the primary airports should give this information on appropriate ATC frequencies or as directed by ATIS information if the route penetrates CLASS B.
3. Aircraft desiring to transit CLASS B will obtain clearance on an equitable "first-come, first-served" basis, providing the requirements of FAR 91 are met.

ATC PROCEDURES

All aircraft will be controlled and separated while operating with CLASS B, except helicopters may not be separated from other helicopters. Although radar separation will be the primary standard used, approved visual and other nonradar procedures will be applied as required or deemed appropriate. Traffic information on observed targets will be provided on a workload permitting basis to aircraft operating outside of CLASS B.

NOTE: Assignments of radar headings and/or altitudes are based on the provision that a pilot operating in accordance with visual flight rules is expected to advise ATC if compliance with an assigned route, radar heading or altitude will cause the pilot to violate such rules.

CLASS D/CLASS E AIRSPACE

Elimination of Special VFR (FAR 91.157) Operations within Certain CLASS D/CLASS E airspace (FAR 93.113)
 Special VFR flight operations by fixed-wing aircraft have been suspended within Honolulu CLASS D/CLASS E airspace which contains the following airports:
 Honolulu International Airport
 Ford Island Auxiliary Landing Field

At all other CLASS D/CLASS E airspace, Special VFR operations will be permitted only if IFR operations are not delayed. Requests for relief from the special VFR prohibition will be considered for certain frequently recurring flight operations, including agricultural, industrial, and flights conducted by IFR-rated pilots in IFR equipped aircraft. The ruling affects only Special VFR operations. VFR operations may continue to be conducted.

TRAFFIC ADVISORIES AT NON-TOWER AIRPORTS

The following procedures are supplemental to those described in the FAA Aeronautical Information Manual (AIM).

1. AT A NON-FSS, NON-UNICOM AIRPORT

- a. When inbound, tune to 122.9 MHz about 15 miles from the airport (if IFR, when the controller advises: "CHANGE TO ADVISORY FREQUENCY APPROVED") and listen for broadcasts from any other aircraft. Then, about 5 miles from the airport broadcast your position, altitude, and intentions. Follow this up with appropriate announcements of your position on downwind, base and final approach.
- b. When outbound, tune to 122.9 MHz before taxiing and listen for broadcasts from any other aircraft. Then broadcast your position on the airport and intentions. Follow this up with an announcement before you taxi onto the runway for takeoff.

2. AT A NON-FSS AIRPORT LISTED AS HAVING UNICOM

- a. When inbound, tune to 122.8 MHz about 15 miles from the airport (if IFR, when the controller advises: "CHANGE TO ADVISORY FREQUENCY APPROVED") and listen for any other aircraft communicating with the UNICOM operator. Then, about 5 miles from the airport, inform the UNICOM operator of your position, altitude and intentions.
- b. When outbound, contact the UNICOM operator on 122.8 MHz before taxiing and furnish your position on the airport and intentions.
- c. In both cases, the UNICOM operator will provide runway, wind, and at his discretion, traffic information.

3. PART TIME TOWER (WHEN CLOSED)

- a. When inbound at about 15 miles from the airport (if IFR, when the controller advises: "CHANGE TO ADVISORY FREQUENCY APPROVED") tune to and listen for broadcasts from other aircraft on the appropriate frequency listed below. Then, about 5 miles from the airport, broadcast your position, altitude and intentions. Follow this up with appropriate announcements of your position on downwind, base and final approach.

- j. Hilo Intl - 118.1 MHz
- k. Kahului Airport - 118.7 MHz
- l. Keahole Airport - 120.3 MHz
- m. Lihue Airport - 118.9 MHz
- n. Molokai Airport - 125.7 MHz

- i. When outbound, tune to the appropriate frequency before taxiing and listen for broadcasts from any other aircraft. Then broadcast your position on the airport and intentions. Follow with an announcement before you taxi onto the runway for takeoff.

HONOLULU TERMINAL AREA - VFR CLASS B DEPARTURE ROUTES

RESPONSIBILITIES

VFR CLASS B DEPARTURE ROUTES WILL BE ISSUED ONLY UPON REQUEST. Detailed departure instructions will be furnished to others. All procedures and altitudes described in this letter are subject to weather and traffic conditions. Pilots are not relieved of their responsibilities to see and avoid other traffic, to maintain appropriate terrain and obstruction clearance, and to remain in weather conditions equal to or better than the minima required by FAR 91.155. When compliance with an assigned route, heading, or altitude is likely to compromise pilot responsibility with respect to terrain, obstruction clearance, and/or weather minima, approach control should be so advised.

DEPARTURE PROCEDURES

Before taxiing, pilots shall contact clearance delivery on 121.4/281.4 and state the current ATIS information code and requested departure procedure. Clearance delivery will issue the departure route clearance and assign transponder code, unless otherwise directed by ATC, pilots shall depart CLASS B via the cleared route.

Example: Pilot - N86DD SHORELINE THREE DEPARTURE WITH INFORMATION QUEBEC.

ATC - N86DD IS CLEARED OUT OF CLASS B VIA SHORELINE THREE DEPARTURE SQUAWK 0271.

NOTE: Large acft expect clearance via radar vectors, initial heading 140°/200°

Runway 04/08L Procedures**Shoreline Four Departure**

Departing runways 4 maintain runway heading to the H-1 freeway. Departing runway 8L maintain runway heading to Nimitz Highway. Turn right, parallel Nimitz Highway proceeding direct to the center of Honolulu Harbor. Fly one mile offshore passing abeam Kewalo Basin thence direct to one mile due south of Diamond Head. Turn left and resume own navigation, remaining within 2 miles of the shoreline until departing the Class B. Maintain 1500 feet while within CLASS B. Departure control frequency will be 124.8/317.6. Intended for twin-engine aircraft.

Freeway Four Departure

Departing runway 4 maintain heading to the H-1 freeway, departing runway 8L turn left to parallel runway 4 to the H-1 freeway. Then turn right, resume own navigation via the H-1 freeway eastbound, then via the Kalaniana'ole Highway until passing abeam Koko Head. Maintain 1500 feet while in CLASS B. Departure Control frequency will be 124.8/317.6. This departure is intended for single-engine aircraft.

Redhill Three Departure

Departing runways 4 maintain runway heading to the Moanalua Road (State Highway 78), departing runway 8L turn left and fly parallel to runways 4 to Moanalua Road. Then, turn left, fly OVER Moanalua Road northwestbound until departing CLASS B. Maintain 1500 feet while in CLASS B. Departure Control frequency will be 119.1/239.05. Restricted to small category aircraft only, large aircraft can expect radar vectors.

CAUTION: VFR traffic proceeding inbound to the H-1/H-2 interchange descending to 1500 feet and below.

Runway 22/26R Procedures

NOTE: All aircraft turn on landing lights while in CLASS B.

Kona Three Departure

After departure, turn left heading 180 degrees for radar vectors eastbound. Expect to be vectored 5 miles or more south of Diamond Head to avoid Runway 26L LDA final approach course. Maintain 1500 feet while in CLASS B. Departure Control frequency will be 124.8/317.6.

West Loch Three Departure

After departure, turn right as soon as practicable until north of Runway 26R. Then fly direct to center of West Loch of Pearl Harbor. Maintain 1500 feet while in the CLASS B. Departure control frequency will be 119.1/239.05.

CAUTION: VFR traffic proceeding eastbound from the west shoreline to the H-1/H-2 interchange descending to 2000 feet or below.

ARRIVAL PROCEDURES

Arrivals contact Approach Control and receive CLEARANCE BEFORE entering CLASS B. The HNL CLASS B is established from the HNL VORTAC. High density traffic in vicinity H-1/H-2 interchange.

North Two Arrival

Contact App Con 119.1/239.05 prior to H-1/H-2 interchange at or above 2000'. PROCEDURE WHEN CLEARED: From the H-1/H-2 interchange, proceed direct to and cross Ford Island at 1500', then descend to pattern altitude direct to the Navy/Marine Golf Course. Enter left downwind Runway 4L or right downwind Runway 22R as assigned by App Con.

West Two Arrival

Contact App Con 119.1/239.05 prior to Kahe Power Plant at or above 2000'. PROCEDURE WHEN CLEARED: From Kahe Power Plant, proceed direct to H-1/H-2 interchange at 2000', then proceed direct to and cross Ford Island at 1500'. Descend to pattern altitude direct to the Navy/Marine Golf Course. Enter left downwind Runway 4L or right downwind Runway 22R as assigned by App Con. Note: Aircraft below 2000' should contact Kalaeloa Tower on 132.6 prior to Kahe Power Plant.

East Two Arrival

Runways 04/08 configuration. Contact App Con 119.1/239.05 prior to NORBY intersection (MKK262 radial 20 DME or CKH 112 radial 12 DME). PROCEDURE WHEN CLEARED: From NORBY, proceed inbound on the MKK 262 radial at or below 3500'. Expect radar vectors for right base to Runway 4R.

Freeway Two Arrival

Runways 04/08 configuration. Contact App Con 119.1/239.05 prior to Koko Head at or above 2000'. PROCEDURE WHEN CLEARED: From Koko Head, proceed direct to Waialae Golf course, then follow the H-1 Freeway to enter left downwind to Runway 4L. Maintain 2000' until advised by tower.

Kona Arrival

Runways 22/26R configuration. Contact App Con 119.1/239.05 prior to NORBY intersection at or below 3000'. PROCEDURE WHEN CLEARED: Proceed to Koko Head, then direct to Waialae Golf Course. Follow the H-1 Freeway to enter left base to Runway 22L. Use caution: Turbojet aircraft will be inbound along the south shoreline.

SIMULTANEOUS OPERATIONS

Simultaneous take-offs and landings on intersecting runways are common at the Honolulu International Airport. IT IS THE RESPONSIBILITY OF THE PILOT TO DETERMINE WHETHER HE/SHE CAN COMPLY WITH A HOLD-SHORT RESTRICTION. Upon acceptance of a "HOLD-SHORT" instruction, pilots should acknowledge for such clearances with a read back of "roger, hold-short, aircraft ID."

HONOLULU INTERNATIONAL AIRPORT

Gatehold Procedures

THE FOLLOWING GATEHOLD PROCEDURES ARE ESTABLISHED FOR ALL OVERSEAS TURBOJET DEPARTURES FROM HONOLULU AIRPORT:

1. Advise clearance delivery: "identification, 10 minutes to taxi, destination, requested flight level".
2. The statement "10 minutes to taxi" means that you will depart the blocks, taxi, tow or pushback within 10 minutes after receiving enroute ATC clearance. Failure to push-back within 10 minutes after receipt of your clearance may result in ATC canceling your clearance when other aircraft are requesting the same altitude/route assignment and is/has pushed from the gate.
3. When ATC specifies a release (take-off) time for your requested route and altitude, alternatives with no or less delay will be offered, if available. If your choice involves a release time, call for push-back at least 10 minutes prior to your release (take-off) time (the intent of this procedure is to have you at the departure runway at your release time). Failure to push back 10 minutes prior to your release time may result in ATC canceling your clearance when other aircraft are requesting the same altitude/route assignment and is/has pushed from the gate.
4. ATC will not contact you if time elapses and your clearance is cancelled; it is the pilots responsibility to push-back in a timely manner. In the event the allotted time expires contact clearance delivery to verify the status of your clearance prior to calling for push-back.
5. If you wish to depart the gate and absorb the delay in a holding area closer to the departure, advise ground control of your desire.
6. When two aircraft are requesting the same altitude/route and call for clearance at approximately the same time, the first aircraft to call will receive the altitude/route. The second aircraft will receive the alternatives. The first aircraft may lose their assigned altitude/route if all the following occurs:
 - a. The first aircraft has not pushed from the gate in the specified time in paragraphs 2 or 3.
 - b. The second aircraft is/has pushed from the gate.
 - c. The second aircraft requests that altitude after push back.
7. Enroute clearances are based on accurate "10 minute to taxi" declarations. Those flight that taxi without receiving any enroute clearance will receive no altitude/route priority.

- NOTES: 1. Compliance will ensure an orderly sequence of altitude/route assignments during peak traffic movements.
 2. Oceanic departures are sequenced with Hilo and Kahului traffic.

Informal Runway Use Program

Unless runway closures, wind, weather or traffic conditions, aircraft emergencies, actual air defense missions or operational necessities require otherwise, all turbojet aircraft and all aircraft having a maximum passenger capacity of more than 30 seats or a maximum payload capacity of more than 7,500 pounds, including all models of the Convair 240, 350, and 440; Martin 202 and 404; F-27 and FH227; Hawker Siddeley 748; military fighter interceptor turbojet; and any other aircraft with a minimum zero fuel weight in excess of 35,000 pounds will be assigned runway as follows:

GROUP I

turbojet aircraft capable of 300,000 pounds gross takeoff weight or more
 4 or more engine turbojet, and military fighter interceptor turbojet type aircraft

DC10, L1011, DC8, B747, B707, C135, B52, F15, F16, E6, etc).

RADE (NORTHEAST) WIND CONDITIONS

Departures: 8R
 Arrivals: 8L

ONA (SOUTHWEST) WIND CONDITIONS

Departures: 26L or 22R/L
 Arrivals: 26L

GROUP II

Other turbojet, turbine; powered and propeller driven type aircraft. (B727, B737, MD80, C130, etc).

8L
 4R/L or 8L

22R/L or 26R
 26L

AIRCRAFT LANDING RUNWAY 8L: Fly the ILS approach procedure or fly a base leg over Kalaeloa (John Rodgers Fld) maintaining 3000 feet until established on the final approach course. Large jet or smaller aircraft may fly a close-in base leg remaining over the center of Pearl Harbor channel.

AIRCRAFT LANDING RUNWAY 26L/R: Remain at traffic pattern altitudes as long as possible before beginning descent for landing.

DEPARTURES – ALL RUNWAYS: Turn southward as soon as possible after takeoff. Remain at least one mile offshore of Waikiki, Diamond Head, Koko Head and Ewa Beach.

NOTES: 1. Cooperation of all users is expected to preclude disruption or creation of conflicting traffic flows.

2. Pilots unable to comply with the program should advise Honolulu Ground or Approach Control as soon as possible for traffic adjustments.

KAHULUI AIRPORT

Gatehold Procedures

THE FOLLOWING GATEHOLD PROCEDURES ARE ESTABLISHED FOR OVERSEAS TURBOJET DEPARTURES FROM KAHULUI AIRPORT:

1. Advise clearance delivery: "identification, 10 minutes to taxi, destination, requested flight level".
2. The statement "10 minutes to taxi" means that you will depart the blocks, taxi, tow or pushback within 10 minutes after receiving enroute ATC clearance.
3. When ATC specifies a release (takeoff) time of more than 15 minutes for your requested altitude/route, alternatives with no or less delay will be offered, if available. If your choice involves a release time of more than 15 minutes, advise Clearance Delivery if you desire to wait at the gate.
4. Depart the blocks within 10 minutes after receiving enroute clearance when release time is less than 15 minutes. Ready to taxi means ready to immediately depart the blocks/taxi, tow or pushback. Failure to do so will result in ATC canceling your clearance when other aircraft are requesting the same altitude/route and are ready to taxi.
5. Enroute clearances are based on accurate "10 minute to taxi" declarations. Those flights that taxi without receiving any enroute clearance will receive no altitude/route priority.

NOTES: 1. Compliance will ensure an orderly sequence of altitude/route assignments during peak traffic movements.

2. Oceanic departures are sequenced with Honolulu and Hilo traffic.

KONA INTL AT KEAHOLE

Gatehold Procedures

THE FOLLOWING GATEHOLD PROCEDURES ARE ESTABLISHED FOR OVERSEAS TURBOJET DEPARTURES FROM KONA INTL AT KEAHOLE AIRPORT:

1. Advise clearance delivery: "identification, 10 minutes to taxi, destination, requested flight level."
2. The statement "10 minutes to taxi" means that you will depart the block, taxi, tow, or pushback within 10 minutes after receiving enroute ATC clearance.
3. When ATC specifies a release (takeoff) time of more than 15 minutes for your requested altitude/route, alternatives with no or less delay will be offered, if available. If your choice involves a release time of more than 15 minutes, advise Clearance Delivery if you desire to wait at the gate.
4. Depart the blocks within 10 minutes after receiving enroute clearance when release time is less than 15 minutes. Ready to taxi means ready to immediately depart the blocks/taxi, tow, or pushback. Failure to do so will result in ATC canceling your clearance when other aircraft are requesting the same altitude/route and are ready to taxi.
5. Enroute clearances are based on accurate "10 minutes to taxi" declarations. Those flights that taxi without receiving any enroute clearance will receive no altitude/route priority.

NOTES: 1. Compliance will ensure an orderly sequence of altitude/route assignments during peak traffic movements.

2. Oceanic departures are sequenced primarily with Honolulu, Maui, and Hilo traffic.

LIHUE AIRPORT

Gatehold Procedures

THE FOLLOWING GATEHOLD PROCEDURES ARE ESTABLISHED FOR OVERSEAS TURBOJET DEPARTURES FROM LIHUE AIRPORT:

1. Advise clearance delivery: "Identification, 10 minutes to taxi, destination, requested flight level."
2. The statement, "10 minutes to taxi" means that you will depart the blocks, taxi, tow, or pushback within 10 minutes after receiving enroute ATC clearance.
3. When ATC specifies a release (takeoff) time of more than 15 minutes for your requested altitude/route, alternatives with no or less delay will be offered, if available. If your choice involves a release time of more than 15 minutes, advise Clearance Delivery if you desire to wait at the gate.
4. Depart the blocks within 10 minutes after receiving enroute clearance when release time is less than 15 minutes. Ready to taxi means ready to immediately depart the blocks/taxi, tow, or pushback. Failure to do so will result in ATC canceling your clearance when other aircraft are requesting the same altitude/route and are ready to taxi.
5. Enroute clearances are based on accurate "10 minutes to taxi" declarations. Those flights that taxi without receiving any enroute clearance will receive no altitude/route priority.

- NOTES: 1. Compliance will ensure an orderly sequence of altitude/route assignments during peak traffic movements.
 2. Oceanic departures are sequenced with Honolulu, Maui, Hilo, and Keahole traffic.

Informal Runway Use Program

The area directly south of Lihue Airport and west of Carters Point has been designated as a noise sensitive area. The opening of Rwy 17-35 has given us the opportunity to significantly reduce aircraft noise in the vicinity of schools and homes. This program is the result of the cooperative efforts of state, local and federal government and is designed in accordance with the U.S. Department of Transportation Aviation Noise Abatement Policy.

- A. **GENERAL** Unless runway closures, weather, traffic conditions, aircraft emergencies, actual air defense missions, or operational necessity requires, aircraft will be assigned runways and routings as described in this section. Pilots are requested to adhere to these procedures during all hours, including 2100 to 0700 local.
- B. **ITINERANT DEPARTURES** All jet and multi-engine propeller aircraft should depart on Rwy 03, 17, or 35. Aircraft to initiate turns seaward as soon as possible following takeoff.
- C. **ITINERANT ARRIVALS** All jet and multi-engine propeller aircraft should land on Rwy 35, 21, or 17. All approaches should occur from a seaward direction.
- D. **LOCAL OPERATIONS (Touch-and-Go and Low Approach)** Preferred runways for local operations of jet and multi-engine propeller aircraft are Rwy 17-35. Downwind leg for Rwy 17-35 should be at least 1 mile east of the coastline.
- E. **TOWER ADVISORY** When the runway specified in these procedures is other than the runway most nearly aligned with the wind, controllers shall preface their instructions with the phrase "For Noise Abatement". If in the interest of safety a runway different from that specified is preferred the pilot is expected to advise Lihue Tower accordingly. Lihue Tower will honor such requests and advise the pilot that the runway requested is noise sensitive.

HILO INTERNATIONAL AIRPORT

Gatehold Procedures

THE FOLLOWING GATEHOLD PROCEDURES ARE ESTABLISHED FOR OVERSEAS TURBOJET DEPARTURES FROM HILO INTERNATIONAL AIRPORT:

1. Advise clearance delivery: "Identification, 10 minutes to taxi, destination, requested flight level".
2. The statement "10 minutes to taxi" means that you will depart the blocks, taxi, tow or pushback within 10 minutes after receiving enroute ATC clearance.
3. When ATC specifies a release (takeoff) time of more than 15 minutes for your requested altitude/route, alternatives with no or less delay will be offered, if available. If your choice involves a release time of more than 15 minutes, advise Clearance Delivery if you desire to wait at the gate.
4. Depart the blocks within 10 minutes after receiving enroute clearance when release time is less than 15 minutes. Ready to taxi means ready to immediately depart the blocks/taxi, tow, or pushback. Failure to do so will result in ATC canceling your clearance when other aircraft are requesting the same altitude/route and are ready to taxi.
5. Enroute clearances are based on accurate "10 minute to taxi" declarations. Those flights that taxi without receiving enroute clearance will receive no altitude/route priority.

- NOTES: 1. Compliance will ensure an orderly sequence of altitude/route assignments during peak traffic movements.
 2. Oceanic departures are sequenced primarily with Honolulu, Maui, and Keahole traffic.

Preferred Departure Routing

Jet departures planning U.S. Mainland destinations via the Composite Route System-Hawaii to U.S. Mainland will be sequenced as follows:

R578 VIA THE ITO 345 RADIAL 39 MILE DME FIX AND THE UPP 066 RADIAL TO FITES.

R577 VIA THE ITO 345 RADIAL 55 MILE DME FIX AND THE UPP 048 RADIAL TO EBBER.

R465 VIA THE ITO 345 RADIAL 158 MILE DME FIX AND THE OGG 027 RADIAL TO CLUTS.

R463 AND NORTH VIA V25 ARROW DIRECT APACK.

Flight plan format for these routes is as follows:

IT0345039	FITES	R578
IT0345055	EBBER	R577
IT0345158	CLUTS	R465

Your cooperation in filing flight plans in accordance with the above data will be appreciated.

HAZARDS, CAUTIONS, AND WARNINGS

HAWAII – POHAKULOA TRAINING AREA: Extensive military aircraft training in and near R3103 at speeds of 250 knots. All pilots flying over the island of Hawaii within 10 NM of R3103 (SFC to 30,000 feet) should be alert for high speed maneuvering aircraft.

HAWAII – TRAFFIC PATTERN VOLCANIC ERUPTION AREA: During eruptions in the Hawaii Volcanos Parks area, left hand elliptical traffic patterns will be established up wind of the eruption area for all aircraft. Minimum altitude 2000 feet above the terrain. Remain clear of smoke. Pilots are requested to maintain an alert listening watch on 122.9 MHz and announce aircraft position, direction of flight, altitude and intentions.

HAWAII: Caution advised all airports on Kauai, Oahu, Molokai, Lanai and Maui. Migratory bird activity surface to 1500 feet within a 5 NM radius of the airports from August-May.

HAWAII – TOUR AIRCRAFT: High volume tour aircraft operating over Hawaii. For traffic information, monitor 127.05 NW of ITO VOR 215 radial, monitor 122.85 SE of ITO VOR 215 radial.

KAUAI – NAVIGATIONAL WARNING: Electromagnetic radiation will continuously exist within a 2500 foot radius and 2500 feet above unified S band antenna located at N22°06.81'/W159°39.83' near Kokee NASA Telemetry Station, Kauai. Helicopters and slow speed aircraft flying within the airspace will be exposed to direct radiation which may produce harmful effects to personnel and equipment. Radiation cannot be seen and must be presumed by all pilots to continuously exist.

KAUAI – PORT ALLEN AIRPORT: Warning – Exercise extreme caution in the vicinity of Port Allen due to high volume of Tour Rotorcraft and Fixed Wing, Glider, and Military Operations.

KAUAI – TOUR AIRCRAFT: High volume tour aircraft operating over Kauai. Monitor 127.05 for traffic information.

LANAI – LANAI AIRPORT RAMP AREA: Due to ramp space limitations, all transient aircraft must contact arpt manager 808-872-3830 PPR for parking or depart within one hour of arrival. The apron area has been divided as follows: West Corner-light acft transient parking, South Corner-HAZARDOUS MATERIAL Handling, East Corner-Heavy acft transient parking, North Corner-Airline and Air Cargo Operations.

LANAI – TOUR AIRCRAFT: High volume tour aircraft operating over Lanai. Monitor 122.9 for traffic information.

MAUI – KAHODLAWE ISLAND: Flying below the altitude of 300 feet or landing on the island of Kahoolawe, Hawaii is inherently dangerous. Live unexploded munitions are on the surface of the island. Rotor and prop wash may disturb these items, resulting in a detonation. Anyone desiring to land on Kahoolawe Island must contact the Kahoolawe Island Reserve Commission at (808) 243-5029 or 243-5022.

MAUI – KAHULUI AIRPORT/HELIPORT: The area east of the approach end of Rwy 02 has been designated as a helicopter operating area. No fixed wing operations approved except via PPR. Contact arpt manager 808-872-3880.

MAUI – KAHULUI AIRPORT RAMP AREA: Yellow segmented and solid lines painted on the apron area fronting the passenger terminal represents the line of demarcation between the authority of the FAA and the State. The FAA is responsible for the control and direction of all ground traffic from the solid yellow line outward toward the field. That area is considered to be an active operating area. Aircraft, vehicles, and/or ground equipment entering this area must have prior clearance from the tower. The area lying between the line and the terminal building falls under the jurisdiction of the State. The acft pilot and ground vehicle operator crossing from the taxiway is responsible for avoiding collisions, accidents, and using safe operating procedures. Ramp area East of RWY 02-20 falls under the jurisdiction of the State. The FAA is not responsible for control or direction of ground traffic in that area. Yellow demarcation lines cross east ramp taxiway entrances.

MAUI – HALEAKALA CONTROLLED FIRING AREA: The Haleakala Controlled Firing Area is described as follows: From 10,000 feet MSL to unlimited within a circular area with a 1 NM radius from the Mount Haleakala Maui Observatory (located at the 10,000 foot level at N20°42.42'/W156°15.38') and expanding outward and upward in a conical shape from this 1 NM radius based on an angle from the observatory of 15 degrees above the horizontal. The conical boundary leaves the 1 NM radius at 10,000 feet MSL and passes through 20,000 feet MSL at the 7.22NM radius and through 42,000 feet at the 20.90 NM radius. Pulsed Ruby Laser operations potentially hazardous to eyesight will be conducted within this area intermittently for 5 to 30 minute periods generally at night and advertised by NOTAM. Laser operations are predicted on the non-interference with IFR operations through coordination with the Honolulu Control Facility. Pilots of aircraft flying VFR should avoid the controlled firing area during its advertised time of use. As a precautionary measure however Laser operations will be suspended if an aircraft penetrates the area of concern. The status of the controlled firing area can be obtained by contacting FAA Honolulu FSS.

MAUI-KAHOOLAWE CONTROLLED FIRING AREA: The Kahoolawe Hawaii Controlled Firing Area is described as follows: From SFC up to and including 5000'MSL within that area bounded by N20°37'30"/W156°32'48", to N20°34'48"/W156°30'24", to N20°28'56"/W156°30'24", to N20°28'06"/W156°41'48", to N20°20'30"/W156°44'12", to N20°33'12"/W156°44'30", to N20°37'30"/W156°36'24", thence to point of beginning. The CFA includes the entire island of Kahoolawe. Ordnance

disposal/demolition work potentially hazardous to aircraft shall be conducted by NOTAM during daylight hours only. The controlling agency is FAA Honolulu Control Facility. The status of the CFA can be obtained by contacting the FAA Honolulu AFSS.

MAUI – PARASAILING AREA: Parasailing off-shore Lahaina (OGG VORTAC 250R/014 DME) 1000’/below, sunrise to sunset.

MAUI – AEROBATIC OPERATIONS: 1 NM radius (OGG VORTAC 175R/011 DME) from 0315–0415Z Sundays 1500’ and below.

MAUI – ULTRALIGHT OPERATIONS: Extensive ultralight operations from atop Mt. Haleakala to Kalama Park (OGG VORTAC 175R/011DME). Unpowered ultralights remain over land. It is recommended that aircraft arriving from the south remain offshore, west of the OGG 175R until 11 DME before turning inbound to Kahului airport.

MAUI – TOUR AIRCRAFT: High volume tour aircraft operating over Maui. Monitor 120.65 for traffic information.

MOLOKAI – TOUR AIRCRAFT: High volume tour aircraft operating over Molokai. Monitor 121.95 for traffic information.

OAHU – HONOLULU INTERNATIONAL AIRPORT – RAMP AREA: Broken yellow lines, ramps and taxiways indicate the edge of full strength bearing pavement. Pilots are cautioned to avoid taxiing main gear over stabilized taxiway and apron shoulders. Shoulder pavement is stabilized only and not load bearing. Exercise care in following taxiway centerlines at all times especially on turns and at intersections. Yellow non movement area boundary lines painted on the apron area fronting the terminal complex represents a line of demarcation between the authority of the FAA and the airport operator (State). The FAA is responsible for the control and directing of all ground traffic from the non movement area boundary line outward toward the field. This area is considered an air operation area (AOA). Aircraft, vehicles and/or ground equipment entering this area must have proper clearance from the air traffic control tower. The area lying between the non movement area boundary lines inbound toward the concourse falls under the jurisdiction of the airport operator (State). The aircraft pilot and ground vehicle equipment operator crossing the non movement boundary lines from the taxiway is responsible for avoiding collisions, accidents, and using safe operating procedures in the non movement area.

OAHU – HONOLULU INTERNATIONAL AIRPORT AND METROPOLITAN AREA: Numerous cranes at the airport and metropolitan areas up to 500’ AGL.

OAHU – HONOLULU INTERNATIONAL AIRPORT – PROXIMITY TO KALAELOA (JOHN RODGERS FLD): All pilots are reminded of the proximity of Honolulu Airport to Kalaeloa (John Rodgers Fld). Exercise caution when approaching Honolulu Airport as both fields have parallel Runways 04. Several landings have been made at Kalaeloa (John Rodgers Fld) by pilots mistaking it for Honolulu Airport. Minimum IFR altitude for aircraft overflying Kalaeloa (John Rodgers Fld) is 2200 feet.

OAHU – KANEHOE BAY MCAS – HIGH PERFORMANCE AIRCRAFT: Kaneohe Bay MCAS advises high performance aircraft will make maximum performance VFR climbs from takeoff Rwy 04/05 at various times following a warning broadcast on Kaneohe Tower and Approach Control frequencies. Request all aircraft contact Kaneohe Tower prior to transiting CLASS D airspace northeast of Rwy 04/05.

OAHU – KANEHOE BAY MCAS – CONTROLLED FIRING AREA: The MCAS Kaneohe Bay Controlled Firing Area is described as follows: From the surface to, but not including 3,000 feet MSL within that area bounded on the east by latitude N21°30.81’, longitude W157°40.33’, to latitude N21°25.91’, longitude W157°40.34’, on the south by a line extending to latitude N21°25.91’, on the west by a line extending to latitude N21°30.81’, longitude W157°44.04’, and on the north by a line extending to the point of beginning. Machine gun, rifle and mortar firing operations within Ulupau Crater potentially hazardous to aircraft will be conducted at periods between 0600 to 2300 local time Monday through Friday and 0600 to 1800 local time on Saturday and Sunday, as required. These weapons training activities are predicated on non-interference with aircraft. The controlling authority, Commanding Officer, MCAS Kaneohe Bay, has agreed to cease any activity hazardous to aircraft upon being advised of the approach of aircraft to or within the controlled firing area. In that regard, such activity will be suspended if aircraft are observed by the controlling authority to be within or entering the controlled firing area. All aircraft operators should, nevertheless, remain alert for the possibility of hazardous activity when operating within the controlled firing area.

HAU – KALAELOA (JOHN RODGERS FLD): Tanker vessels with mast height up to 170 feet intermittently operating 2 NM South of approach end Rwy 04.

HAU – GLIDER OPERATIONS: Caution – Gliders operating over central Oahu, 20 NM Radius of the Wheeler (HHI) NDB (excluding INL TCA), surface to 22,000 feet during mountain wave conditions. Occasional higher operations in unusually strong conditions. Gliders aren’t normally transponder equipped and aren’t visible on ATC radar.

HAU – HAZARD AREAS: (1) Pilots are cautioned to avoid, or maintain a minimum of 500 feet AGL over the following ammunition storage areas due to significant threat to life and property posed by possible forced landing or other mishap.

AREA	DIMENSIONS	LOCATION FROM HNL VORTAC
NAD Waikele	1.5 NM Radius	353 radial at 5.2 DME
NAD Luualaei	2.5 NM Radius	316 radial at 9.7 DME

(2) All pilots are cautioned to avoid Kaena Point land mass within 1½NM (9,120 feet). Potential personnel and electro explosive device hazards exist due to high power radio frequency transmitters.

HAU – HANG GLIDING: Hang gliding operations will be conducted from Makapuu Point 3 miles west along ridge to Waimanalo each from 1800 to 0500Z daily, 2000 feet and below. Exercise extreme caution when transiting the area.

HAU – ULTRALIGHT OPERATIONS: Extensive ultralight operations conducted between Makapuu Point and Manana (Rabbit Island).

HAU – TOUR AIRCRAFT: High volume tour aircraft operating over Oahu. Monitor 122.85 for traffic information.

HAU – EARTH TRACKING STATION: Effective immediately and UFN all pilots are requested to avoid overflights below 1000 feet GL of Com Earth Tracking Station located at HNL300023 DME fix at all times.

HAU – RIFLE/PISTOL RANGE: Military rifle/pistol range located on west side of Pearl Harbor channel entrance between Ewa and Keahi Point (HNL264R 3.0 DME) (N21°18.81’/W157°58.84’) active Monday through Friday between 0700 to 700 HST. Danger area from the shoreline extends one nautical mile southeast, 4500 feet wide, from the surface to 200 ft. All aircraft inbound to HNL Rwy 4R/L and 8R/L, remain above 200 feet until east of this area.

HAU – NAVIGATIONAL WARNING: Electromagnetic radiation will continuously exist within a 2800 foot radius and 2800 feet above 1 antenna systems along a three mile stretch of mountain ridge between N21°33.81’/W158°13.83’ and 21°33.81’/W158°15.83’ as part of the Kaena Point Satellite Tracking Station, Oahu, Hawaii. Helicopters and slow speed

aircraft, including hang gliders, flying within the above airspace will be exposed to direct radiation which may produce harmful effects to personnel and equipment. Radiation is not visually apparent and must be presumed by all pilots to continuously exist.

OAHU – LIGHTS-OUT MILITARY TRAINING: Extensive military rotary wing traffic in and near Alert Area A-311. Unlighted military rotary wing training conducted within boundaries of A-311 from 1 hour after sunset through 1 hour before sunrise, surface to 500 feet AGL.

OAHU – AIRBORNE HAZARD: Fireworks Displays will be conducted every Friday between 7:00 pm and 9:00 pm, for three minutes at Hilton Hawaiian Village (HNL VORTAC 096R/5NM), 600 ft and below, ½ NM radius. Avoidance Advised.

HELICOPTER PILOTS – KAPALAMA HELIPAD: Additional high tension electrical line installed on West border of helipad. Use Caution.

HAWAII – OIL POLLUTION REPORTS

Pilots observing oil slicks are requested to report them to a Flight Service Station by radio as soon as possible. If a pilot cannot file by radio, he should report by telephone or in person at the next point of landing or at destination. The report should include the approximate location using prominent landmarks, size of slick, type of vessels observed in vicinity, and other pertinent information.

KIRIBATI

Full details of all aeronautical facilities in the Kiribati, which includes the Line Islands, are promulgated in the New Zealand Aeronautical Information Publication, South Pacific Flight Guide.

TARAWA – BONRIKI AIRFIELD: Operates during daylight hours only. Field is not lighted at night. Tarawa authorities request that pilots arrive before dark.

KIRITIMA TI (CHRISTMAS ISLAND) – CASSIDY INTL: Operates during daylight hours for any flight which has given 48 hours prior notice. Airport not manned unless flights are known to be operating. Fuel is available during daylight hours with prior notice.

Non-scheduled Flight Procedures

1. If an operator intends to carry out a non-scheduled flight in transit across, or make non-traffic stops in the territory of Kiribati, he may do so without the necessity of obtaining prior permission. However, the attention of operators is drawn to the need for prior notification in respect to navigation aids.
2. If an operator intends to perform a non-scheduled flight into Kiribati for the purpose of taking on or discharging passengers, cargo, or mail he shall apply to:

Postal Address:	Director of Civil Aviation P.O. Box 487 Betio, Tarawa Kiribati
Telegraphic Address:	AVIATION, BETIO, Tarawa
3. The application for permission to carry out such operations must include the following information in the same order as shown hereunder:
 - A. Name and address of applicant.
 - B. Type of aircraft and registration marks.
 - C. Date and times of arrival and departure from airfields in Kiribati.
 - D. Place or places of embarkation or disembarkation, as the case may be, of passengers and/or freight.
 - E. Purpose of flight and number of passengers, and/or nature and amount of freight.
 - F. Name, address and business of charterer, if any.
4. Normally the time required for consideration of applications is brief, but applicants should make allowances for communication delays.

FEDERATED STATES OF MICRONESIA WENO ISLAND-CHUUK INTERNATIONAL AIRPORT

1. Prior permission required for all non-scheduled aircraft from Civil Aviation Directorate, Department of Transportation, Communications and Infrastructure, Division of Civil Aviation, P. O. Box PS 2, Palikir, Pohnpei, FM 96941-0000; Tel (691) 320-2865; Fax (691) 320-5853; e-mail TransFSM@mail.fm
2. A copy of clearance and schedule must then be submitted to:
 - a) Chuuk International Airport, P. O. Box 189, Weno, Chuuk State, FM 96942; Tel-Office (691) 330-5940, SWARS (691) 330-2352; FAX (691) 330-4242; e-mail ChuukAirport@mail.fm. The Chuuk Airport Executive Manager must be notified three (3) days prior for the ETA of the aircraft. A flight plan must be filed 12 hours prior for the ETA, include Pohnpei Intl Airport (PTPN) as an additional address of the Fit Plan.
 - b) Immigration Office, P. O. Box 666, Weno, Chuuk State, FM 96942; Tel. (691) 330-2355; FAX (691) 330-4135; e-mail CIL@mail.fm
 - c) Customs Office, P. O. Box 610, Weno, Chuuk State, FM 96942; Tel. (691) 330-4482; FAX (691) 330-5893; e-mail CTAchk@mail.fm
 - d) Quarantine Office, Tel (691) 330-3720; FAX (691) 330-3721; e-mail ChuukQuart@mail.fm
3. Transient aircraft must make prior arrangements with Mobil Oil Guam for fuel and also Mobil Oil Micronesia-Chuuk, P. O. Box 130, Weno, Chuuk State, FM 96942, Tel (691) 330-2540; FAX (691) 330-2688.

GUAM CTA/MARIANA ISLANDS

GUAM-APRA HARBOR—DROTE POINT

In the interest of national security, the Commander, Naval Forces Marianas (COMNAVMAR) requests all civil aircraft avoid overflying U.S. Naval ships and military property west of a line between Santa Rita and Piti below 1500 feet.

RADAR SERVICE PROGRAM GUAM TERMINAL AREA

The VFR radar service program in the Guam Terminal Area provides full time radar advisory and sequencing service to VFR aircraft within 25 miles of the Nimitz VORTAC and radar advisory sequencing and separation within the Andersen TRSA and arriving Andersen AFB. Pilots of VFR aircraft arriving airports in Guam Terminal Area should contact Guam Approach Control when 25 NM from the Nimitz VORTAC. All aircraft use 269.0 or 119.8 MHz. Approach control will issue runway, wind and traffic information, and vectors as necessary for proper sequencing with other arriving aircraft at Andersen AFB and Agana airports. When a pilot reports the aircraft he is to follow in sight, he will be advised to follow it. Departing VFR aircraft desiring traffic information should request VFR radar service on initial contact with Andersen Ground Control or Agana Tower, and advise direction of flight. Tower will advise when to contact departure control and frequency. Since this is a voluntary program, the procedures are not to be interpreted as relieving pilots of their responsibilities to see and avoid other traffic operating in basic VFR weather conditions, to maintain appropriate terrain and obstruction clearance, or to remain in weather conditions equal to or better than the minima required by FAR 91.155. Whenever compliance with an assigned route or heading is likely to compromise pilot responsibility respecting terrain and obstruction clearance and weather minima, Guam approach control should be so advised so that the heading may be revised as appropriate.

- NOTES: 1. A graphic depiction of the Guam Terminal Area and Andersen TRSA may be found at the end of this section.
 2. Information on flying within a TRSA may be located in Section V of this supplement or in the Aeronautical Information Manual.

TINIAN INTL AIRPORT - COMMUNICATION

NON-FSS airport with UNICOM available from 2000-0930Z. When inbound tune to 123.6 about 15 miles from the airport (if IFR when the controller advises CHANGE TO ADVISORY FREQUENCY APPROVED) and listen for any other aircraft communicating with the UNICOM operator. When about 5 miles from the airport inform the operator of your position, altitude and intentions. When outbound contact the UNICOM operator before taxiing and furnish your position on the airport and intentions. In both cases the UNICOM operator will provide runway, wind and traffic information.

HAZARDS, CAUTIONS, AND WARNINGS

GUAM - SATELLITE TRACKING OPERATIONS: Because of possible interference with satellite tracking operations and to avoid a potentially hazardous radiation field, pilots are advised to avoid the area within 1 NM of the UNZ VORTAC 033R at 12.2 DME at and below 3100 feet.

GUAM - BALLOON RELEASE: National Weather Service Guam Observatory releases twice ascending balloon borne atmospheric sensing instruments at N13°33'/E144°50' between 1100-1115Z and 2300-2315Z. Instrument equipment consists of 6 foot diameter rubber balloon with string train 100 feet in length containing a red paper parachute and small white plastic radiosonde instrument. Equipment estimated to ascend to altitudes of 10,000 feet within a 5 mile radius by 1130Z and 2330Z. Ascends to 50,000 feet by 1215Z and 0015Z. Ascends to 100,000 feet by 1300Z and 0100Z respectively.

AUCKLAND OCEANIC FIR

1. Altimeter Setting Requirements

- 1.1 Within the Auckland Oceanic FIR, the vertical position of aircraft shall be maintained by reference to standard pressure value of 1013.2 hPa, except that:
 - a. Aircraft shall change to and from the appropriate zone QNH value upon entering and leaving the QNH zones;
 - b. Where the aerodrome of destination or departure is not within a QNH zone aircraft shall use the appropriate aerodrome QNH value when at or below 13,000 feet within 100NM from the shoreline of the landmass on which the destination or departure aerodrome is situated.
- 1.2 Within the New Zealand domestic, Samoa, Tonga and Cook Area QNH Zones, when at or below 13,000 feet aircraft shall maintain vertical position by reference to the appropriate zone QNH, except that aircraft landing and taking off or operation within a control zone shall use the appropriate aerodrome QNH. However, a QFE altimeter setting may be used in accordance with paragraph 1.7.
- 1.3 The transition layer between the transition altitude of 13,000 feet and the transition level of FL150 provides adequate separation between aircraft observing different pressure values when the QNH is above 980 hPa. However, when the zone QNH is 980 MB or less, the minimum usable flight level above the zone involved shall be FL160.
- 1.4 The transition layer shall not be used except when ascending or descending. While passing through the transition layer, vertical position shall be expressed in terms of flight levels (1013.2 hPa) when ascending and in terms of altitude (QNH) when descending.
- 1.5 Pilots departing from an aerodrome where no QNH value is available shall set the aerodrome elevation on the altimeter prior to departure and shall obtain the appropriate altimeter setting as soon as possible and in any case before entering IMC.
- 1.6 QNH values passed to aircraft will be rounded down to the nearest whole hPa.
- 1.7 Use of QFE Altimeter Setting.
 - 1.7.1 Where suitable equipment is available, a QFE altimeter setting will be provided, on request, for flights operating by visual reference within an aerodrome traffic circuit. Additionally, foreign operators normally using a QFE altimeter setting for instrument approaches will be provided, on request, with a QFE for the aerodrome elevation except for:
 - a. An instrument runway, if the runway threshold is 7 feet or more below the aerodrome elevation;
 - b. A precision approach runway; in which case the QFE for the relevant threshold elevation will be provided.
 - 1.7.2 QFE values passed to an aircraft will be rounded down to the nearest whole hPa.

2. Enroute Communications

- 2.1 Aircraft enroute within the Auckland Oceanic FIR shall maintain a continuous listening watch on the frequency assigned by the Air/Ground control station.
NOTE: The requirement to maintain a continuous listening watch may be met by the use of approved automatic signaling devices such as SELCAL.
- 2.2 Aircraft inbound to Auckland Oceanic FIR shall establish RTF contact with ATC on Auckland Oceanic frequencies at the Auckland boundary. Outbound aircraft shall transfer to route frequency when instructed by ATC.
- 2.3 Aircraft entering the Samoa, Tonga, Cook or New Zealand domestic sectors, will be instructed when to change from route frequency to the frequency of the appropriate ATC unit. Aircraft leaving these sectors will be instructed by ATC when to change to the route frequency.

3. Enroute Air Navigation Facilities and Service Charges

Airways Corporation, the ATC service provider in the upper airspace of the Auckland Oceanic FIR, levies charges for enroute air navigation services provided to aircraft. Operators of any aircraft for which navigation services are made available in the Auckland Oceanic FIR should be aware that they may be obligated to pay charges for the services provided.

OAKLAND OCEANIC FIR/CTA**INTERNATIONAL PILOT WEATHER BRIEFING**

Honolulu Automated Flight Service Station (HNL AFSS) conducting international pilot weather briefing test program.

Call HNL AFSS at 1-800-WX-BRIEF (1-800-992-7433) or 1-866-766-0820 for the list of foreign aerodromes served.

CENTRAL EAST PACIFIC (CEP)

1. The Central East Pacific (CEP) is the organized route system between Hawaii and California. Seven ATS routes, R463, R464, R465, R585, R576, R577, R578 and associated transition waypoints are within the CEP. Reduced Vertical Separation Minimum (RVSM) and Required Navigation Performance 10 (RNP-10) are required for aircraft operating within the CEP at FL290 through FL410. Non-approved aircraft can expect FL280 and below or FL430 and above, traffic permitting.
2. Flight levels normally assigned in the CEP are in accordance with ICAO Appendix 3a, (East odd, West even).
3. Applicable ATC procedures can be found in FAA Orders 7110.65 and 8400.12 and in ICAO Document 7030 – PAC/RAC, Annex 2, Appendix 3, and Document 9574.

COMPOSITE SEPARATION

Composite separation is achieved by using a combination of at least 50 NM lateral separation and 1000 feet vertical separation. Composite separation may only be applied to aircraft established within the CEP and/or aircraft leaving/joining the CEP.

RNP-10 SEPARATION

RNP-10 lateral separation (50 NM) may be applied within the Oakland Oceanic FIR between RNP-10 approved aircraft. RNP-10 lateral separation is based on the equipment qualifier filed by the aircraft. Operators shall determine that the appropriate state authority has approved the aircraft and the aircraft will meet the RNP-10 requirements for the filed route of flight and any planned alternate routes. The letter "R" in field 10 (equipment) of the ICAO standard flight plan indicates RNP-10 approved aircraft. This equipment qualifier should be filed provided the aircraft will maintain RNP-10 eligibility for the entire route segment within the Oakland FIR. RNP-10 approval is required for all PACOTS and for all aircraft operating within the CEP at FL290 through FL410. Non-RNP approved aircraft can expect FL280 and below or FL430 and above, traffic permitting.

RVSM SEPARATION

Reduced Vertical Separation Minimum (RVSM-1,000-foot vertical separation between RVSM approved aircraft) may be applied within the Oakland Oceanic FIR between FL290 and FL410. Aircraft operating within this airspace between FL290 and FL410 require RVSM approval. RVSM vertical separation will be based on the equipment qualifier filed by the aircraft. The operators shall determine that the appropriate state authority has approved the aircraft and the aircraft will meet the RVSM requirements for the filed route of flight and any planned alternate routes. The letter "W" in field 10 (equipment) of the ICAO standard flight plan indicates RVSM approved aircraft.

1. Non-RVSM Equipped Civil Aircraft:

A. Non-RVSM equipped civil aircraft unable to fly to an appropriate destination at or below FL280 and unable to fly at or above FL430 may flight plan at RVSM flight levels in the RVSM stratum provided one of the following conditions exists:

- 1) The aircraft is being initially delivered to the state of registry or operator; or
 - 2) The aircraft was formerly RVSM approved but has experienced an equipment failure and is being flown to a maintenance facility for repair in order to meet RVSM requirements and/or obtain approval; or
 - 3) The aircraft is being utilized for mercy or humanitarian purposes.
- B. The approval for non-RVSM is intended exclusively for the purposes indicated above.

2. Non-RVSM Equipped State Aircraft:

Non-RVSM state aircraft may flight plan at RVSM flight levels in Oakland, Anchorage, Tokyo and Naha's airspace without prior coordination. State aircraft should include in the remark section "STS/Military NON-RVSM" in field 18 of the ICAO flight plan.

3. Suspension of RVSM:

ATC will consider suspending RVSM procedures within affected areas of the Oakland Oceanic FIR when there are pilot reports of greater than moderate turbulence. Within areas where RVSM procedures are suspended, the vertical separation minimum between all aircraft will be 2000 ft.

CONTROLLER PILOT DATA LINK COMMUNICATIONS (CPDLC)

Oakland ARTCC has full CPDLC capability and normal service in the entire Oakland Oceanic FIR for FANS-1/A capable aircraft. The Oakland Oceanic FIR log-on address is "KZAK"; the facility is "OAKODYA."

1. HF Communications Requirement

Prior to entering the Oakland Oceanic FIR, contact ARINC on HF and identify the flight as CPDLC equipped. Provide SELCAL, departure and destination, aircraft registration number and SATVOICE telephone number, if available. Expect to receive primary and secondary HF frequency assignments from ARINC for the entire route of flight within the Oakland Oceanic FIR. Pilots must maintain HF communications capability with ARINC at all times within the Oakland Oceanic FIR.

2. Log-On**GENERAL**

For aircraft departing from airports along the west coast of North America and Hawaii, Oakland center request that data-link aircraft not logon to Oakland oceanic (KZAK) until after leaving 10,000 FEET. This request is made to eliminate ADS periodic reports for aircraft that are still on the ground which will assist in the transition from our domestic airspace automation environment. Additionally, this should reduce operator cost.

A. Aircraft entering the Oakland Oceanic FIR CPDLC service area from non-CPDLC airspace: Log on to CPDLC at least 15 but not more than 45 minutes prior to entering the Oakland Oceanic FIR CPDLC service area. Contact ARINC on HF and inform them you are a CPDLC flight. Send a position report when CPDLC is established.

B. Aircraft entering the Oakland Oceanic FIR CPDLC service area from adjacent CPDLC airspace: Pilots should determine the status of the CPDLC connection. If KZAK is the active center, the pilot shall contact ARINC on HF, identify the flight as a CPDLC flight, and send a position report via CPDLC. If KZAK is not the active center, the pilot shall, within 5 minutes after the boundary is crossed, terminate the CPDLC connection, then log on to KZAK, contact ARINC on HF and advise ARINC that they are a CPDLC flight. Send a position report when CPDLC ATC COM is established.

3. CPDLC Position Report Message Format

Oakland Center Oceanic (KZAK) cannot accept position reports containing latitude and longitude (lat/Long) in the ARINC 424 format, which is limited to five characters (e.g. 40N50). Position reports in the KZAK CPDLC service area containing Lat/Long waypoints will be accepted in complete latitude and longitude format only. Flights unable to send position reports in complete latitude and longitude format must accomplish position reporting via HF voice communications.

4. Flights Over-flying Honolulu Control Facility Airspace.

Prior to entering Honolulu Control Facility airspace aircraft will receive an END SERVICE message that will result in termination of CPDLC. Aircraft shall re-plot on to CPDLC prior to reentering Oakland Oceanic FIR airspace when Honolulu Control Facility advises to contact en route communications or ARINC.

5. Flights Entering Guam ARTCC Airspace.

Contact Guam CERAP 250 miles out on 118.7, squawk 2100.

6. Flights Overflying Guam ARTCC Airspace.

Maintain the CPDLC connection with Oakland ARTCC; however, do not use CPDLC for ATC COM until Guam CERAP advises you to again contact en route communications or ARINC.

BEACON CODE REQUIREMENTS

Upon entering the Oakland Oceanic FIR and after radar service is terminated, each aircraft should adjust their transponder to display code 2000 on their display. Aircraft should maintain code 2000 thereafter until otherwise directed by air traffic control. (FAA Order 7110.66)

DIRECT SATVOICE CAPABILITY

Oakland Oceanic FIR Oceanic control has the capability for air/ground and ground/air satellite telephone service (SATVOICE). Direct SATVOICE contact between the pilot and Oakland Oceanic FIR shall be limited to distress and urgency situations or other exceptional circumstances only. Aircraft desiring to contact Oakland Center Oceanic should use the following INMARSAT security numbers:

INMARSAT number
436697

Commercial Telephone Number
510-745-3415 or 3416

PACIFIC ORGANIZED TRACK SYSTEM (PACOTS) GUIDELINES

1. General Information

A. Geographical Boundary

PACOTS tracks may be established within the Oakland, Tokyo, Naha, Manila, Anchorage, Tahiti, Auckland, Nadi, Port Moresby, and Brisbane FIRs.

B. Track Definition Message (TDM)

Oakland ARTCC is using the TDM format for PACOTS tracks. Questions regarding published PACOTS tracks should be directed to Oakland ARTCC Traffic Management Unit (TMU), at (510) 745-3771.

C. Number and Designator of PACOTS Tracks

Oakland ARTCC or Japan Air Traffic Flow Management (ATFMC) may develop more or fewer tracks according to user needs, military activity, significant weather, or other limitations.

ROUTES	TRACK DESIGNATORS
(1) Hawaii to Japan _____	A & B
(2) Japan to Hawaii _____	11 & 12
(3) North America to Japan _____	C, D, E, F & G
(4) Japan to North America _____	1, 2, 3 & 4
(5) Dallas Ft. Worth to Japan _____	M
(6) Japan to Dallas Ft. Worth _____	8
(7) North America to Hong Kong/Taipei _____	H, I, J & K
(8) Hong Kong/Taipei to San Francisco _____	14
(9) Hong Kong/Taipei to Los Angeles _____	15
The following PACOTS are on request only:	
(10) California to Australia/New Zealand _____	W & X
(11) Australia/New Zealand to California _____	20 & 21
(12) North America to Manila _____	L

Note: To be included in the TDM list for tracks W, X, 20 and 21 and L call (510) 745-3450.

The following track designators are used when Dynamic Aircraft Route Planning (DARP) testing are used:

(13) California to Australia/New Zealand (DARPS) _____ Y & Z

D. Usable Flight Levels

All IFR flight levels at or above FL290, except the Westbound North America-Japan PACOTS which also includes FL280 in the Oakland Oceanic FIR. The Westbound North America-Japan PACOTS are included in the Track Advisory Program. Certain restrictions may apply for non-PACOTS traffic operating in the opposite direction to the published PACOTS system.

E. City Pair Tracks

Where ATC has identified a requirement for flight planning restrictions on a particular city pair, these restrictions will be published by Class 1 NOTAM or as part of the daily track message. Users crossing 165-east longitude between 0930-1230 UTC will file eastbound PACOTS Track 2 (or 4 when published) to KSFO and Track 3 (or 4 when published) to KLAX.

F. Lateral Spacing of Tracks

PACOTS Tracks are established at least 50 nautical miles apart. Tracks are defined using latitude/longitude expressed in whole degrees or named fixes with the exception of FIR crossing points.

G. Flight Planning

The following flight planning restrictions and rules only apply within the oceanic control areas of the respective FIRs. Furthermore, these restrictions do not affect aircraft filing on ATS routes in the CEP route system or the NOPAC Composite Route System unless individual routes within these systems are specifically identified as unusable in NOTAMS.

1) Participating Aircraft.

a) Aircraft requesting altitudes at or above FL280 may file via route notified in the daily NOTAM or track message.

b) Aircraft may file to leave or join an outer PACOTS track at any reporting point. Aircraft leaving an outer track should file routes that diverge, within 10 degrees of longitude, to at least 50NM from the nearest PACOTS track. Flight level assignment for aircraft joining an outer track will be based on traffic.

2) Non-Participating Aircraft. Random routes under the PACOTS at FL270 and below are permitted, unless prohibited by NOTAM.

H. ATC Procedures

1) For flight planning and initial clearances, crossing between PACOTS tracks at FL280 and above will not be permitted. Once established on the PACOTS track, changes may be approved as traffic permits.

2) Aircraft should not expect to climb into the PACOTS unless filed on a route corresponding to a PACOTS track. In this case, climb into the PACOTS will be approved as traffic permits.

3) The minimum longitudinal separation between aircraft crossing the Tokyo FIR boundary on the same track at the same flight level will be 10 minutes using Mach number technique.

I. Position Reporting

Within the Oakland and Anchorage oceanic control areas position reports shall be made using latitude/longitude coordinates or named fixes as specified in the track definition messages (TDM). Position reports shall comprise information on present position, estimated next position, and ensuing position in accordance with ICAO Doc 7030/PAC procedures. Reporting points of reference not specified in the TDM and/or rounding off geographical coordinates is prohibited.

2. Eastbound Japan-Hawaii PACOTS**A. Time Frame**

Effective daily 1000-2100 UTC for aircraft crossing 160-east longitude between 1200 and 1600 UTC.

B. Preparation of Japan-Hawaii PACOTS

Japan Air Traffic Flow Management (ATFMC) will complete at or before 2200 UTC daily preparation of the selected PACOTS tracks. The ATFMC will coordinate the tracks with Oakland ARTCC. The Japan-Hawaii PACOTS will be comprised of one or two tracks. When two tracks are used, they will be separated by at least 50 NM laterally within the airspace between the Tokyo and Honolulu gateways. The North track will be designated as Track 11 and the South track as Track 12. When military airspace is active, the North track will include a restriction requiring aircraft to cross a designated fix, at or before a specified time. This will allow aircraft to clear the military airspace before activation. In some instances, a single track may be required, which will be designated as Track 11.

C. Notification of Japan-Hawaii PACOTS

Notification of the geographical coordinates of Track 11 and Track 12 will be transmitted by TDM and NOTAM at approximately 2200 UTC daily by Japan Air Traffic Flow Management (ATFMC).

D. Flight Planning

Participating eastbound departing from or traversing Central West Japan and crossing 160°-east longitude between 1200 UTC to 1600 UTC should flight plan as described in the daily TDM and NOTAM.

3. Westbound Hawaii-Japan PACOTS**A. Time Frame**

Effective daily 1900-0800 UTC for aircraft crossing 160°-east longitude between 2300 and 0600 UTC.

B. Preparation of the Hawaii-Japan PACOTS

Preparation of the geographical coordinates of the Hawaii-Japan selected PACOTS tracks will be made daily by Oakland ARTCC. Normally, two tracks will be developed. The northernmost PACOTS track is designated "A" and the southernmost PACOTS track is designated "B." A third weather avoidance track may be developed if necessary.

C. Notification of the Hawaii-Japan PACOTS

Notification of the geographical coordinates of the selected PACOTS tracks will be transmitted by TDM and NOTAM at approximately 1100 UTC daily by Oakland ARTCC.

D. Flight Planning

Participating westbound aircraft departing Hawaii to Japan and crossing 160°-east longitude between 2300 UTC and 0600 UTC should flight plan as described in the daily TDM and NOTAM.

4. Eastbound Japan-North America PACOTS**A. Time Frame**

Effective daily from 0700 UTC to 2300 UTC applies to traffic crossing 160°-east longitude between 0900 UTC and 1600 UTC.

B. Preparation of Japan-North America PACOTS

Preparation of selected PACOTS Tracks will be completed daily by Japan Air Traffic Flow Management (ATFMC). Normally two tracks from Japan to California and one track from Japan to the Pacific Northwest will be developed.

C. Notification of the Japan-North America PACOTS

Notification of the geographical coordinates of the selected PACOTS tracks will be transmitted by TDM and NOTAM at approximately 2200 UTC daily by Japan Air Traffic Flow Management (ATFMC). Number will designate tracks with the northernmost being referred to as TRACK 1.

D. Flight Planning

Participating aircraft from or over Japan to North America and crossing 160°-east longitude between 0900 UTC and 1600 UTC should flight plan as follows:

1) As described in the daily TDM and NOTAM.

2) Portions of G344 and R591 may be included as a PACOTS track. When operating on G344 and R591 NOPAC procedures apply.

5. Westbound North America-Japan PACOTS**A. Time Frame**

1) Effective daily from 1900 UTC to 0800 UTC. Required for traffic crossing 160°-east longitude between 0200 UTC and 0600 UTC.

2) The Westbound TDM or NOTAM identifies tracks subject to Track Advisory procedures for aircraft entering the tracks between 1900 UTC and 0100 UTC. Aircraft participating in Track Advisory procedures receive priority over nonparticipating aircraft (see TRACK ADVISORY PROCEDURES section).

B. Preparation of Westbound PACOTS Routes

Preparation of selected PACOTS will be completed daily by Oakland ARTCC. Normally two tracks from California and one or two tracks from the Pacific Northwest into the Tokyo FIR will be developed. Tracks are to be designated alphabetically with the letters "C" and "D" designating the tracks from the Pacific Northwest (letters A and B are reserved for Westbound Hawaii-Japan PACOTS). The tracks from California will be designated "E," "F" and "G."

C. Notification of Tracks

Notification of selected PACOTS tracks will be transmitted by TDM and NOTAM at approximately 1100 UTC daily by Oakland ARTCC. The number of tracks each day will be determined by the position of the jet stream.

D. Flight Planning

Participating aircraft flying from North America to the Tokyo FIR and crossing 160°-east longitude between 0200 UTC and 0600 UTC should flight plan as follows:

1) As described in the daily TDM and NOTAM.

2) Aircraft using NOPAC Route R591 and G344 should comply with the applicable time restrictions as follows:

R591 cross AKISU at or before 0600 UTC

G344 cross CUTEE at or before 0600 UTC

(3) Aircraft may request revised NOPAC routing from Anchorage Center once established within their radar/VHF coverage area.

6. California, Australia/New Zealand PACOTS

A. Time Frame

As indicated in the daily track Message.

B. Preparation of California-Australia/New Zealand PACOTS Routes

Preparation of selected PACOTS tracks will be completed daily by Oakland ARTCC. Normally six tracks are generated daily. Track X KLAX to NZAA, Track W KLAX to ASSY, DARPS Track Y KLAX to NZAA, DARPS Track Z KLAX to YSSY, Track 21 NZAA to KLAX and Track 20 YSSY to KLAX.

Note: These PACOTS are only published to users wishing to receive daily TDM messages. To be added to the receiving list contact Oakland Center at (510) 745-3320.

C. Notification of Tracks

Notification of selected PACOTS tracks will be transmitted by track message before 0000 UTC daily by Oakland ARTCC.

D. Flight Planning

Participating aircraft flying both directions between KLAX and the South Pacific and crossing 160-west longitude between 0700 UTC and 1800 UTC should flight plan as described in the TDM and NOTAM.

7. Westbound North American-Taipei, Hong Kong and Manila PACOTS

The westbound PACOTS were expanded to include destinations of Taipei, Hong Kong, and Manila. Westbound PACOTS tracks serving these destinations are published twice daily.

A. Time Frame

As indicated in the daily track messages NOTAM.

B. Preparation of North American-Taipei, Hong Kong and Manila PACOTS

Oakland ARTCC will complete preparation of selected PACOTS serving Taipei and Hong Kong twice daily. Normally two tracks will be developed. Tracks are to be designated alphabetically with the letters "H," "I," "J" and "K". Preparation of a single PACOTS serving Manila will be published as needed and identified by the letter "L".

C. Notification of Tracks

Notification of PACOTS "H" and "I" will be transmitted by TDM and NOTAM at approximately 1100 UTC. Notification of PACOTS "J," "K" and "L" will be by TDM and NOTAM at approximately 0000 UTC.

D. Flight Planning

Participating aircraft flying between North America and Taipei, Hong Kong and Manila should flight plan as follows:

- 1) As described in the daily TDM and NOTAM.
- 2) Participating aircraft departing from California between 0500 UTC and 1200 UTC with destinations of Taipei, Hong Kong or Manila should file PACOTS tracks "J," "K" or "L."

8. Track Advisory Procedures

Track Advisory consists of Oakland ARTCC Traffic Management Unit (TMU) publishing Westbound PACOTS tracks and users submitting their requested departure time with associated preferred routes and altitudes. This is followed by Oakland ARTCC TMU assigning user-requested flights to the tracks in a manner that effects efficient utilization of airspace. Oakland ARTCC TMU then publishes a Gateway Reservation List (GRL) that contains oceanic release times and associated route and altitude assignments. Dispatcher user guides for Track Advisory may be obtained from the Oakland ARTCC TMU office during administrative hours, telephone (510) 745-3450.

A. The Westbound PACOTS NOTAM identifies tracks subject to Track Advisory procedures for aircraft entering the tracks between 1900 UTC and 0100 UTC. Aircraft participating in Track Advisory procedures receive priority over nonparticipating aircraft. Users who are unable to comply with time constraints will be accommodated to the extent feasible.

B. Conventions

- 1) Pilots, who determine their assigned departure times cannot be met, are required to coordinate immediately with their dispatcher for an acceptable alternative.
- 2) Pilots are allowed a 10-minute departure window. The window begins at the assigned take off time and ends 10 minutes later.
- 3) Longitudinal separation is applied at the PACOTS entry fix. Aircraft not over the entry fix within 10 minutes after their entry fix time may not receive their initial reserved en route altitude.
- 4) The Track Advisory program will only accept right way cardinal altitudes at or above FL280, FL300, FL320, FL340 and FL360.

GUAM AREA PREFERENTIAL ROUTING

Due to traffic congestion within the Oakland CTA/FIR north, south and west of the Guam CTA airspace (a 250 NM radius of N1332/E14455), preferred routings have been established. This notice applies to all turbojet aircraft at or above FL280 operating within the Oakland CTA/FIR north, south, or west of the Guam CTA. The following are the Guam area preferential routings within the Oakland Oceanic CTA/FIR. Aircraft operators must ensure that these preferential routes are indicated in Field 15 of the ICAO flight plan. The acronym FPRD means flight plan route to destination.

Southbound aircraft en route from the Fukuoka FIR and terminating within the Guam CTA:

OVER KEITH-- KEITH R584 OTTRE FPRD
 OVER PAKDO-- PAKDO G339 SHAWS FPRD
 OVER MONPI-- MONPI A597 REEDE FPRD
 OVER OMLET-- OMLET B586 WINZR FPRD
 OVER TEGOD-- TEGOD G205 GUYES or TEGOD A337 SNAPP W21 HIRCH FPRD

Northbound aircraft originating with the Guam CTA and en route to the Fukuoka FIR:

OVER MIKYY-- MIKYY R584 KEITH FPRD
 OVER NATSS-- NATSS G339 PAKDO FPRD
 OVER RICHH-- RICHH A597 MONPI FRPD
 OVER TOESS-- TOESS B586 OMLET FPRD
 OVER TERYY-- TERYY G205 TEGOD FPRD
 OVER TEEDE-- TEEDE A337 TEGOD FPRD

Northbound or Southbound aircraft west of the Guam CTA but within the Oakland CTA/FIR:

OVER KEITH-- KEITH A339 SHREE or KEITH R204 KALIN FPRD
 OVER SHREE-- SHREE A339 KEITH FPRD
 OVER KALIN-- KALIN R204 KEITH FPRD

Eastbound or Westbound aircraft operating within the Oakland CTA/FIR and the Guam CTA:

OVER ENDAX-- ENDAX G467 KITSS FPRD
 OVER KITSS-- KITSS G467 ENDAX FPRD

The following Eastbound or Westbound fix-to-fix routes are approved:

OVER LADSS-- DIRECT KYWEE DIRECT TIDEL
 OVER TIDEL-- DIRECT KYWEE DIRECT LADSS

Aircraft within the Oakland CTA/FIR and transiting the Guam CTA must flight plan to enter/exit Guam Center airspace on an appropriate ATS route(s) or other established compulsory reporting points (e.g., FATUM or JOBSS).

Aircraft flight planning at or above FL280 with filed routes other than those described above should expect to be re-routed to the preferential route. Requests for alternate routes will be considered on a real-time basis as traffic conditions permit. However, aircraft should file for and be prepared to fly the entire preferential route. Aircraft operating EAST of 150E longitude will not be affected.

MARSHALL ISLANDS**General Information****A. Flight Plans**

File flight plans for flights out of Majuro prior to arrival. If possible, file the Majuro departure flight plan at the same time as the flight plan into Majuro is filed. If en route, file with Honolulu FSS, if possible, or through ARINC before arrival at Majuro. If on the ground at Majuro and filing a flight plan with Majuro Radio is necessary, file at least three hours in advance of proposed departure time, if possible.

B. Clearances

When requesting descent clearance into Majuro and the ground stop will be one hour or less, advise ATC and request a through clearance. When requesting an IFR clearance while on the ground, make every effort to communicate through ARINC. If unable to contact ARINC, make the request to Majuro Radio on 123.6 MHz allowing at least 30 minutes for communication delays. If unable to receive a clearance through any of the above means and you elect to depart VFR in accordance with ICAO Annex 2 and Document 7030, continue efforts to establish communication and obtain a clearance as soon as possible.

Note: Rules pertaining to VFR flight may be found within Section III--General Notices of this supplement.

C. Hazards

1) Kwajalein Atoll-Dyess AAF: Electromagnetic radiation will exist 24 hours daily within 10 NM radius of Dyess AAF from the surface to 50,000 feet. Aircraft within this airspace may be exposed to direct radiation, which may be harmful to personnel and equipment.

2) Kwajalein Atoll--180 NM Radius: Hazardous military activity will be conducted at all altitudes and flight levels within a 180 NM radius of Bucholz TACAN until further notice. All nonparticipating VFR pilots are advised to remain well clear of the area. IFR flights under ATC jurisdiction may expect possible reroute to and from Bucholz Airport. For further information, contact USAKA Range Safety Officer (805) 355-1516 at Bucholz Tower or Oakland ARTCC.

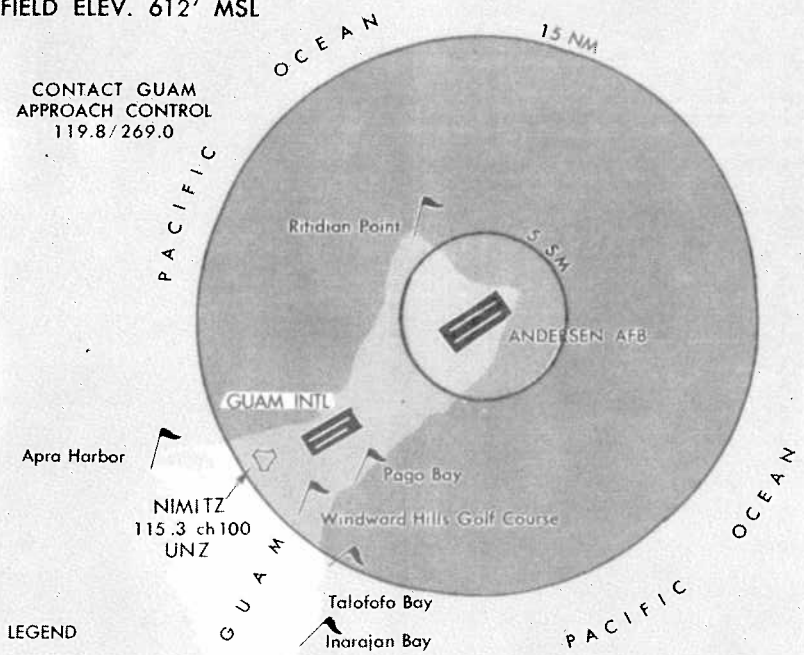
3) Kwajalein Atoll--Bucholz AAF: Electromagnetic radiation may exist 24 hours daily within 5 NM radius of Bucholz AAF from surface to 30,000 feet.

TERMINAL RADAR SERVICE AREA



ANDERSEN AFB, GUAM, M.I.

FIELD ELEV. 612' MSL

CONTACT GUAM
APPROACH CONTROL
119.8/269.0



LEGEND

-  SURFACE to 9000' MSL
-  2000' to 9000' MSL

KALAELOA ARRIVAL/DEPARTURE ROUTES

LEGEND

IFR ARRIVAL

IFR DEPARTURE

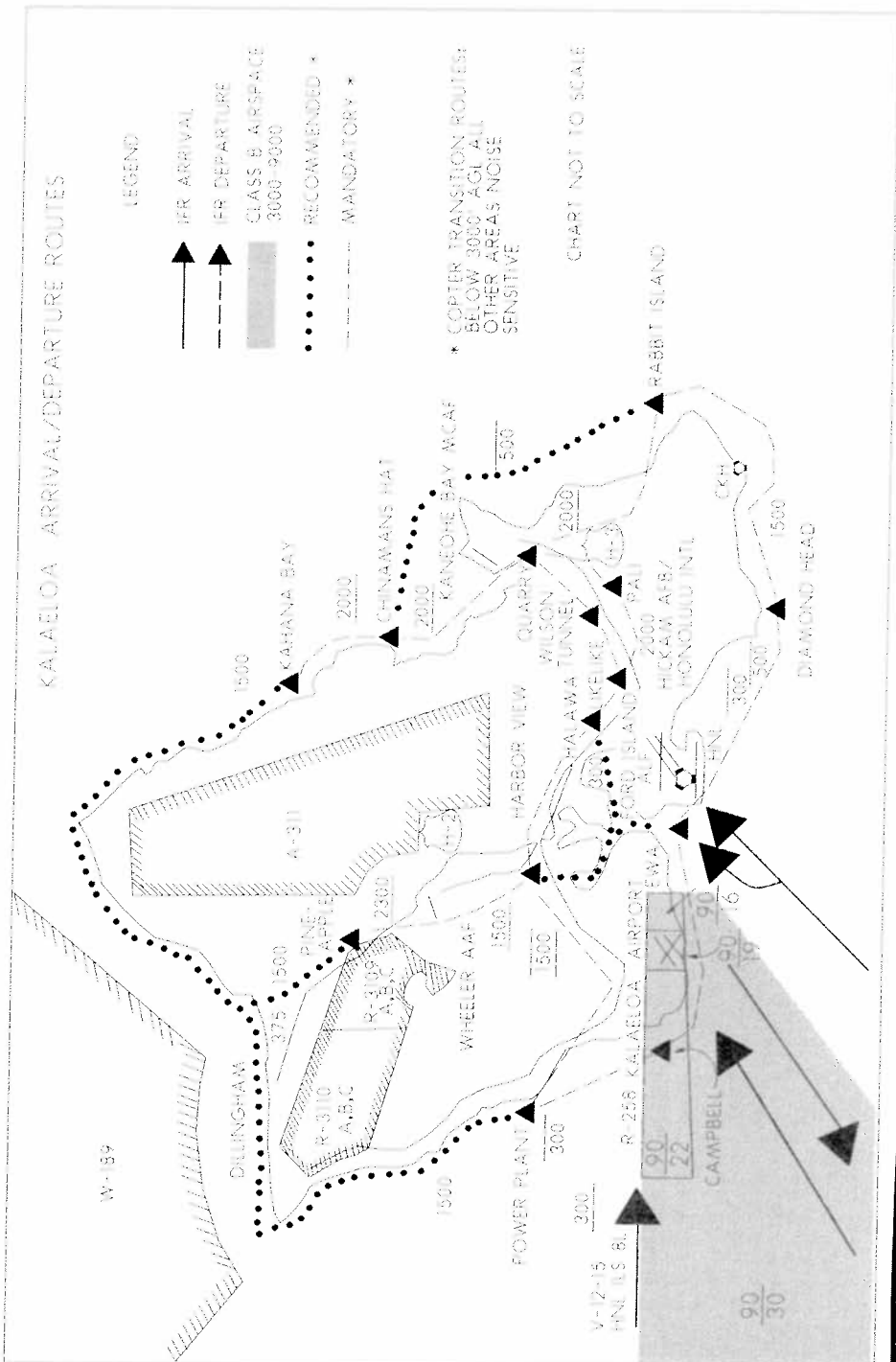
CLASS B AIRSPACE
3000-9000

RECOMMENDED *

MANDATORY *

* COPTER TRANSITION ROUTES:
BELOW 3000' AGL ALL
OTHER AREAS NOISE
SENSITIVE

CHART NOT TO SCALE



W-139

V-12-15
HNL ILS R.

90
30

CAMPBELL

R-256

KALAELOA AIRPORT

HICKAM AFB

HONOLULU INTL

RABBIT ISLAND

DIAMOND HEAD

KANEOHE BAY MCAF

CHINAMANS HAT

WILSON

HARBOR VIEW

WHEELER AAF

FOWER PLANT

PINEAPPLE

4-311

R-310 A,B,C

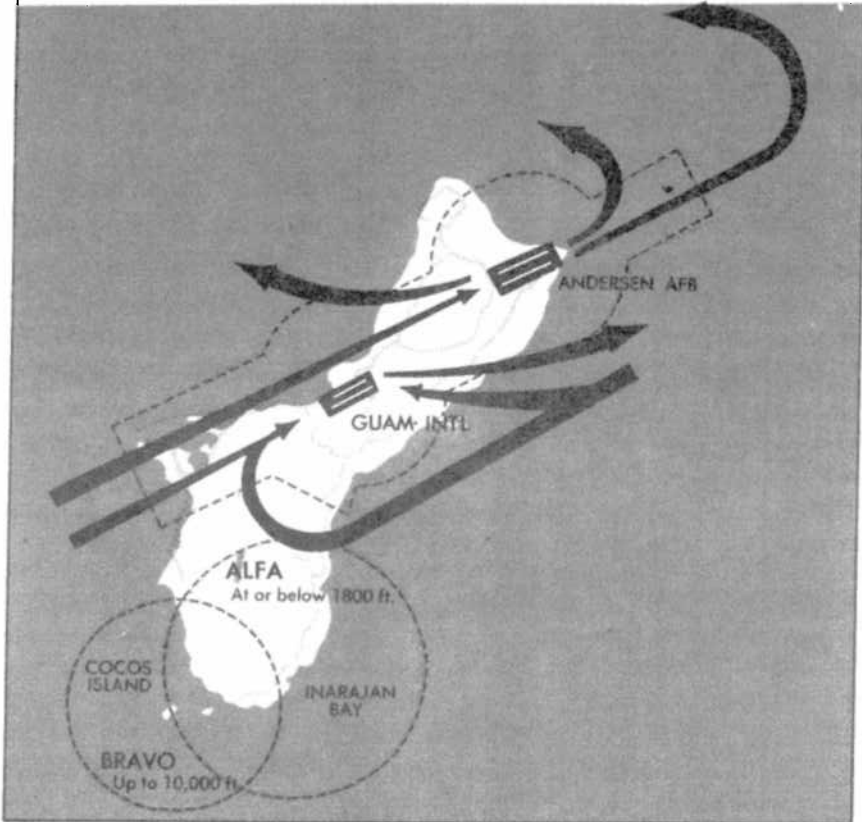
R-310 A,B,C

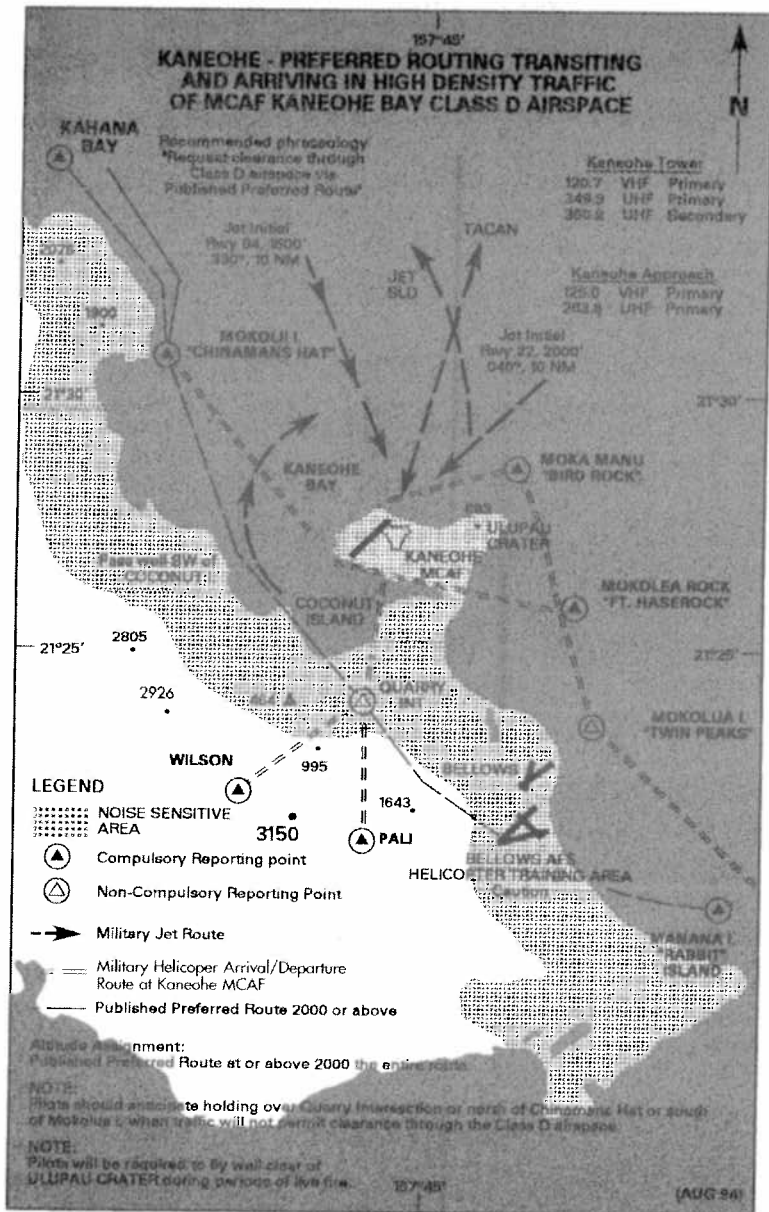
R-310 A,B,C

GUAM TERMINAL AREA

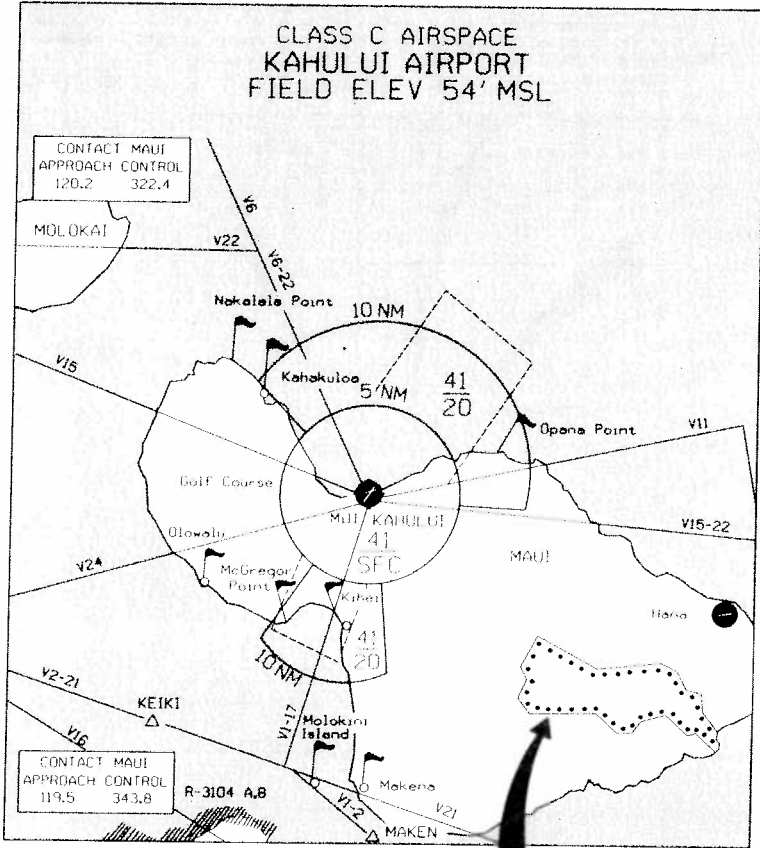
Heavily travelled routes for high performance aircraft arriving and departing Guam Intl and Andersen AFB should be avoided by light aircraft pilots flying VFR. The largest concentration of aircraft occurs within a radius of approximately 15 miles of the airports and at an altitude up to and including 4000 feet.

In addition to the above there are two areas of activity to be avoided, both outside the Agana Class D airspace. The first - ALFA - is a light aircraft low altitude training area within a 6 mile radius of Inarajan Bay. Aircraft training in this area should operate at or below 1800 feet and should monitor Guam Approach Control on freq 119.8. The second area - BRAVO - is a light aircraft high altitude training area for use up to 10,000 feet. This area is within a 5 mile radius of Cocos Island. Aircraft in this area should also monitor Guam Approach Control on 119.8.





CLASS C AIRSPACE
KAHULUI AIRPORT
FIELD ELEV 54' MSL



LEGEND

- VFR CHECK POINTS
- FLOOR IN HUNDREDS OF FEET MSL 41
- CEILING IN HUNDREDS OF FEET MSL 20

HALEAKALA NATIONAL PARK

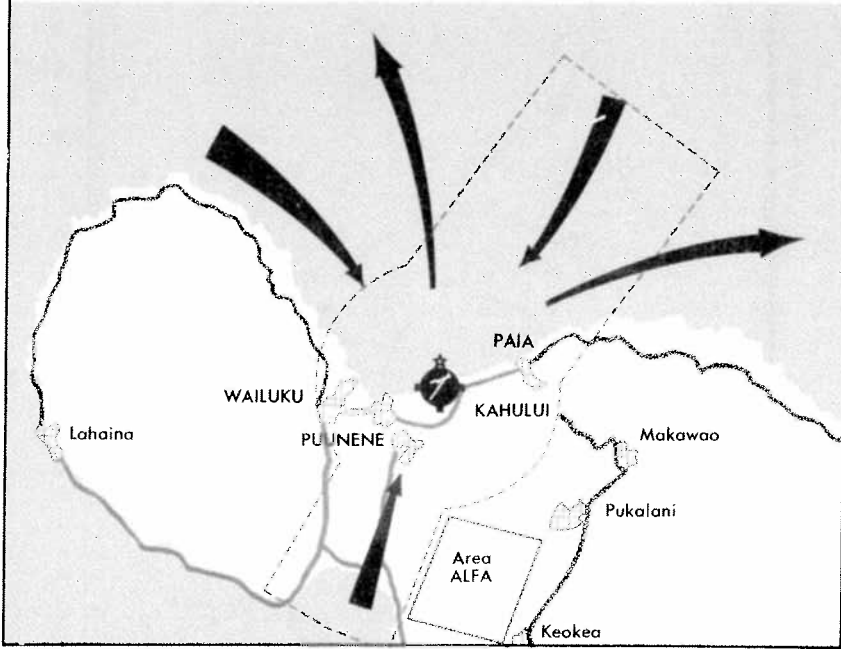
Public law prohibits flight of VFR helicopters or Fixed-wing aircraft below 9500 feet MSL over the following areas in Haleakala National Park: Haleakala Crater, Crater Cabins, the Scientific Research Reserve, Halemau Trail, Koupo Gap Trail or any designated tourist viewpoint.

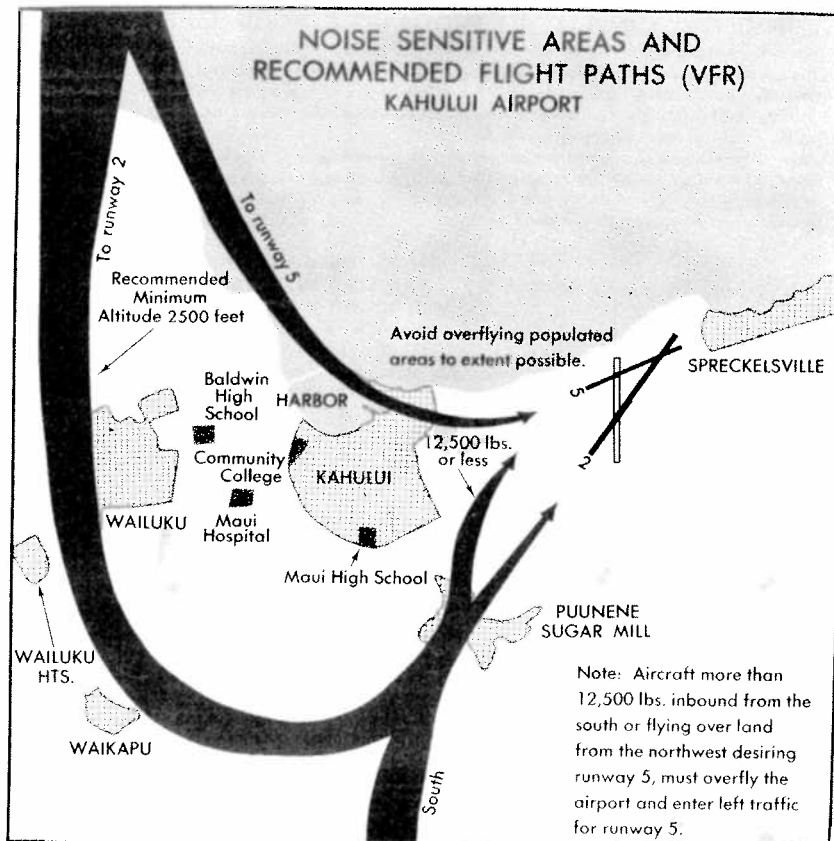
CLASS C AIRSPACE ENTRY PROCEDURES

VFR AIRCRAFT PROPOSING TO ENTER KAHULUI AIRPORT CLASS C AIRSPACE ARE REQUIRED TO CONTACT ATC PRIOR TO ENTRY. INITIAL CONTACT: REFER TO CHARTED VFR CHECK POINTS OR 10 DME FROM THE OGG VORTAC. INITIAL CALLS IN CLOSE PROXIMITY TO THE AIRSPACE BOUNDARY MAY RECEIVE INSTRUCTIONS TO "REMAIN CLEAR OF CHARLIE AIRSPACE AND STANDBY." INITIAL CALLS FROM THE MORE DISTANT CHECK POINTS ARE PREFERRED. FREQUENCIES: NORTH OF V15 - 120.2, SOUTH OF V15 - 119.5.

KAHULUI, MAUI

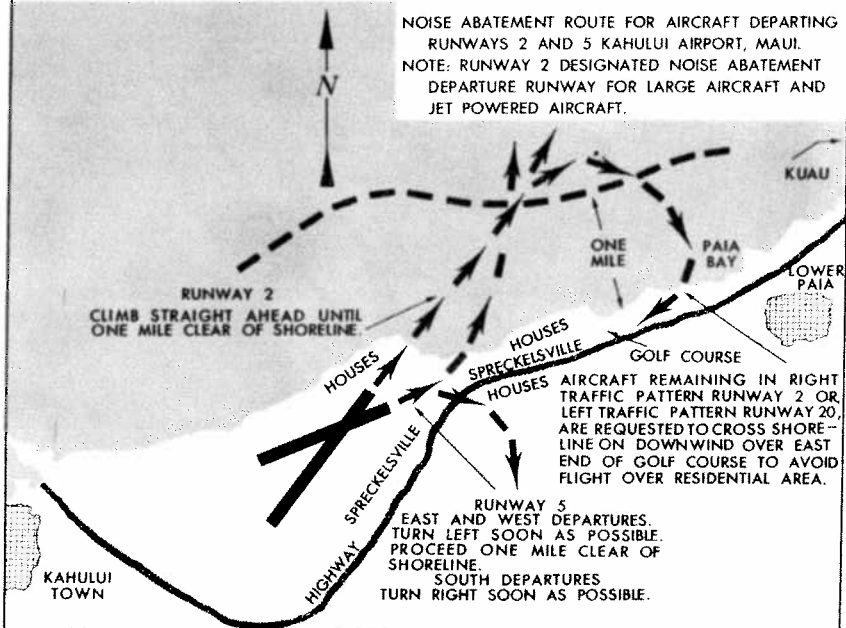
Shown are the most heavily traveled routes for high performance aircraft arriving and departing Kahului Airport, Maui. Light plane pilots flying VFR in these areas should maintain an alert lookout and monitor Maui Approach Control frequency. Aircraft transiting north of the Kahului Airport in VFR conditions are requested to remain at least 8 NM north of the airport at or below 4500 ft. if westbound, 3500 ft. if eastbound, or following the shoreline at or below 2500 ft. and be responsive to routing changes issued by Maui Approach Control or Maui Tower. The area depicted as "ALFA" is a light aircraft local training area. Area is outside Kahului Airport Class C airspace. Aircraft training in area normally operate at or below 3000 ft. and monitor Maui Approach Control.





INFORMAL RUNWAY USE PROGRAM—KAHALUI ARPT, MAUI

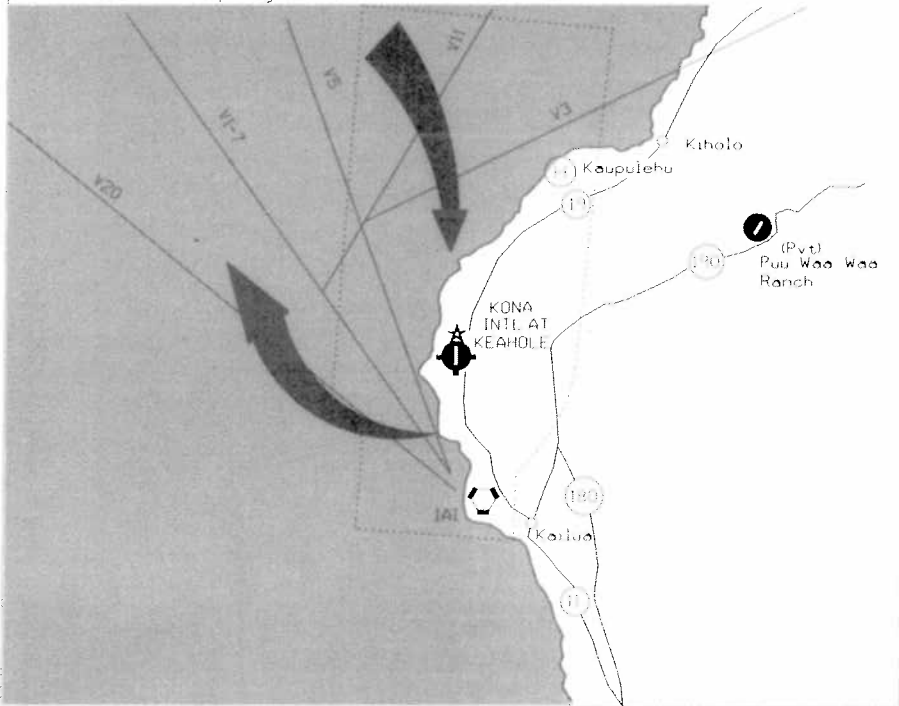
Aircraft noise complaints from Spreckelsville Beach area located adjacent to Kahului Airport have become a matter of serious concern. To alleviate the situation, noise abatement departure runways and flight patterns have been developed. All pilots are urged to follow these procedures to the maximum extent possible consistent with operational and safety requirements. Runway 2 is designated as the noise abatement departure runway for both large and jet powered aircraft. Departure flight pattern runway 2: - Climb straight ahead until one mile clear of shoreline before commencing turns. If takeoff on runway 5 is necessary, both large and jet powered aircraft are requested to: if east or westbound, turn left as soon as possible and proceed one mile clear of shoreline; if southbound, turn right as soon as possible if traffic permits, otherwise turn left.



KONA INTERNATIONAL AT KEAHOLE AIRPORT, HAWAII

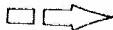



Depicted on this chart are the most heavily traveled routes for high performance aircraft arriving and departing Kona Intl At Keahole Airport, Kona, Hawaii.

General Aviation pilots flying VFR should be extra alert in these areas. Contact Kona Tower on frequency 120.3 for traffic advisories.



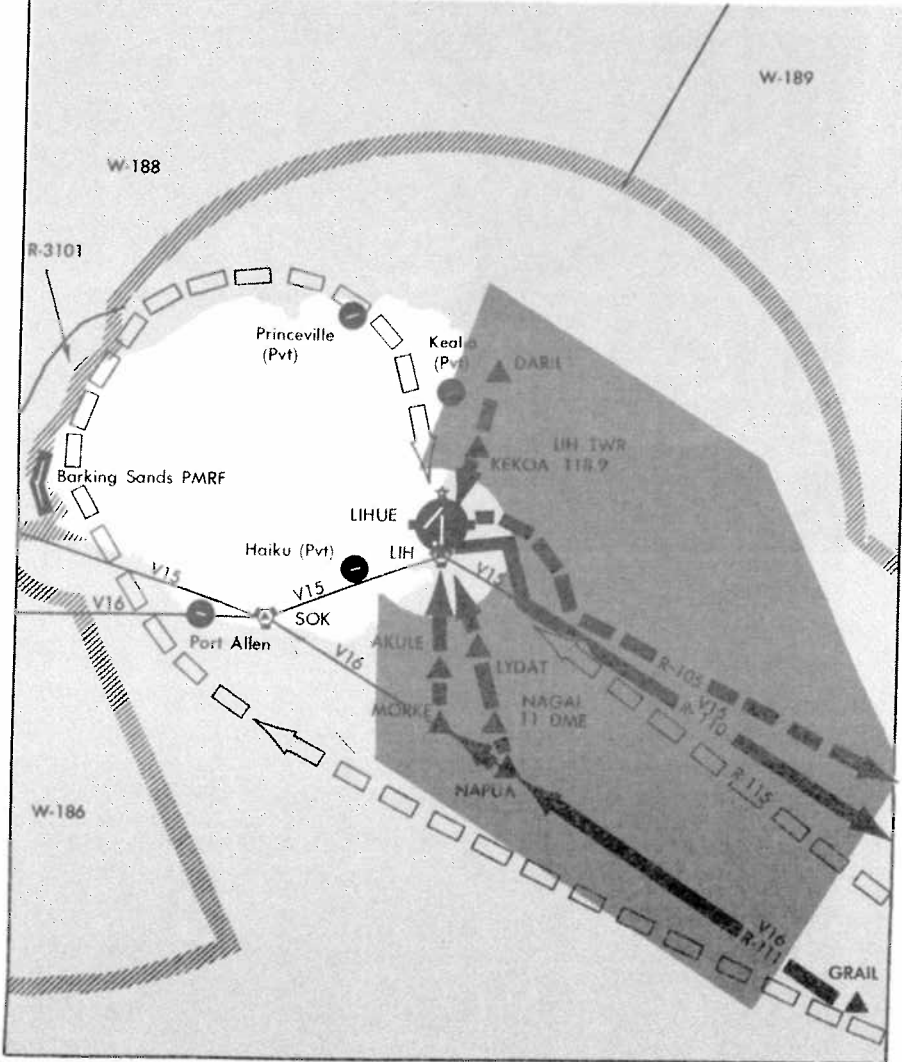
PREFERRED VFR ROUTING LIHUE AIRPORT, LIHUE, KAUAI

LEGEND

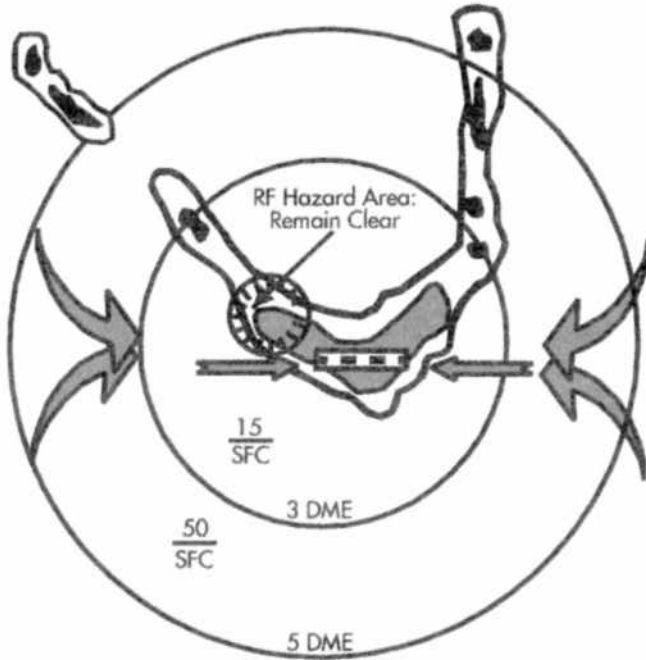
-  PREFERRED VFR ARRIVAL ROUTES
-  PREFERRED VFR DEPARTURE ROUTES
-  IFR ARRIVAL/DEPARTURE ROUTES
-  REQUEST CENTER ADVISORIES PRIOR TO TRANSITING AREA 126.5

AIRCRAFT INBOUND TO LIHUE FROM THE EAST CONTACT HONOLULU CENTER 126.5 BY MID-CHANNEL.

VFR AIRCRAFT DEPARTING LIHUE AIRPORT VIA RUNWAY 3/35 EASTBOUND, FLY OUTBOUND ON OR NORTH OF LIH 105 RADIAL UNTIL 25 MILES EAST.



Bucholz Army Airfield (Kwajalein Atoll) VFR Arrival/Departure RF Avoidance Routing



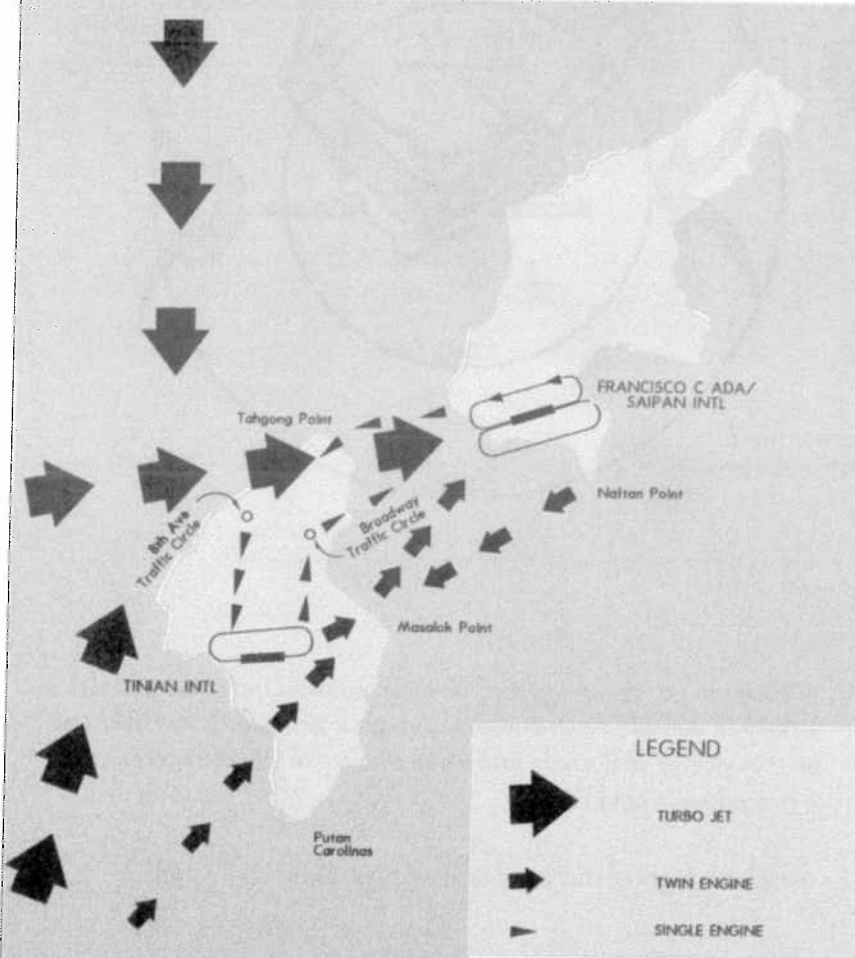
1. VFR arriving or departing aircraft must maintain indicated altitudes in vicinity of Bucholz Army Airfield. A high intensity radiated field can exist in vicinity of Bucholz and the possibility of interference exists if procedure is not followed.
2. Avoid overflight of indicated area at NW corner of Kwajalein.

PREFERRED VFR ROUTING AT SAIPAN AND WEST TINIAN AIRPORTS

Tradewind Condition

(Northeast Winds, Rwy 07, Rwy 08 In Use)

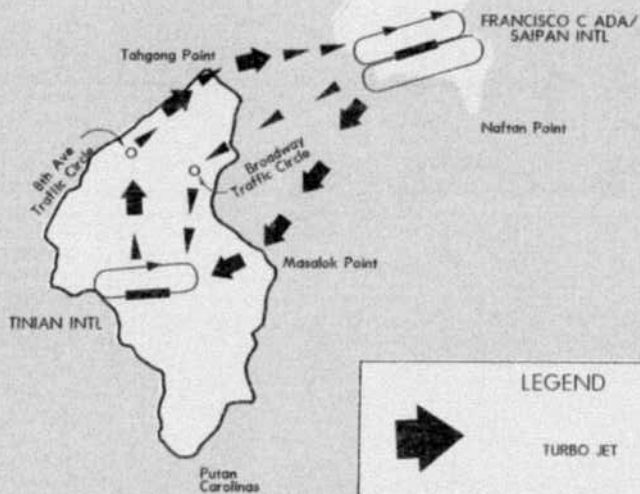
1. VFR turbo jet aircraft arriving Saipan from the southwest should proceed northbound along the west coast of Tinian. VFR turbo jets from the north-northwest should proceed southbound about 10 miles west of Saipan. They should intercept the I-GSN localizer at 10 DME and proceed inbound on the localizer maintaining at or above 2300' above mean sea level until passing KORDY (localizer/7 DME).
2. VFR twin engine aircraft arriving at Saipan from Tinian, Rota/Guam should proceed to Unai Masalok and direct to Puntan Opyan.
3. VFR single engine aircraft arriving Saipan from Tinian should turn left after takeoff and proceed northbound via BROADWAY to the traffic circle, then northeast to Asiga Point, then across Saipan channel for straight-in to Rwy 07.
4. VFR twin engine aircraft from Saipan should make right traffic to Naftan Point, then southwest bound to Puntan Masalok, then enter left traffic for Rwy 08 at West Tinian.
5. VFR single engine aircraft from Saipan should make left traffic downwind to Puntan Agingan, across Saipan channel to Puntan Tahgong (north tip of Tinian), direct to 8th Avenue traffic circle, thence via 8th Avenue to enter left traffic for Rwy 08 at West Tinian.



PREFERRED VFR ROUTING AT SAIPAN AND WEST TINIAN AIRPORTS

Southwest Wind Condition
(Rwy 25 and Rwy 26 In Use)

1. VFR single engine aircraft from Saipan Rwy 25 to West Tinian, direct across Saipan Channel to Broadway Traffic Circle, via BROADWAY to enter a right base leg for Rwy 26.
2. VFR twin engine aircraft from Saipan Rwy 25 left turn direct Unai Masalok, make straight-in to Rwy 26 at West Tinian.
3. VFR twin and single engine aircraft from West Tinian, Rwy 26 to Saipan, right turn follow 8th Avenue to Traffic Circle, direct to Puntan Tahgong across Saipan Channel to Agingan Point, enter right downwind for Rwy 25 at Saipan.

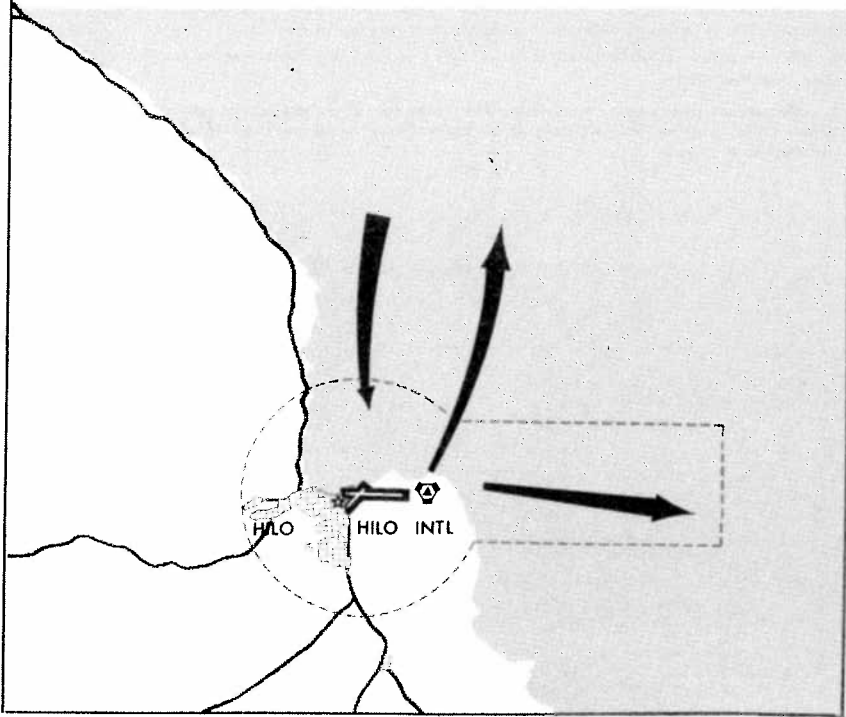


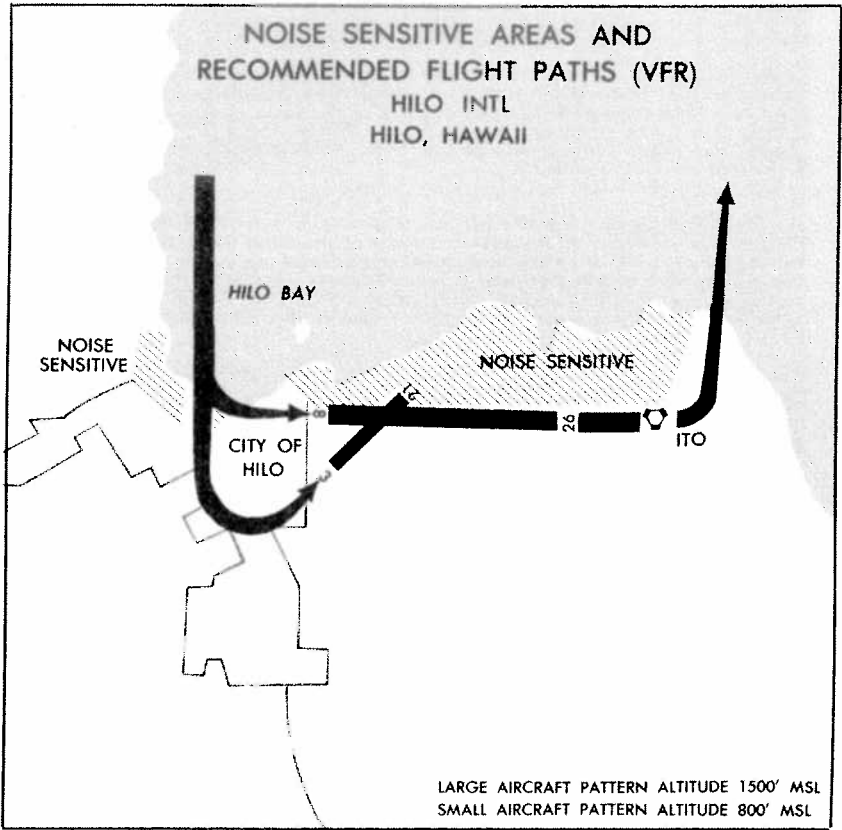
LEGEND	
	TURBO JET
	TWIN ENGINE
	SINGLE ENGINE

HILO INTL, HILO

Depicted on this chart are the most heavily traveled routes for high performance aircraft arriving and departing Hilo Intl. Hilo, Hawaii.

General aviation pilots flying VFR should be extra alert in these areas. Contact Hilo Approach Control on frequency 119.7 for traffic advisories.





DILLINGHAM AIRFIELD, OAHU

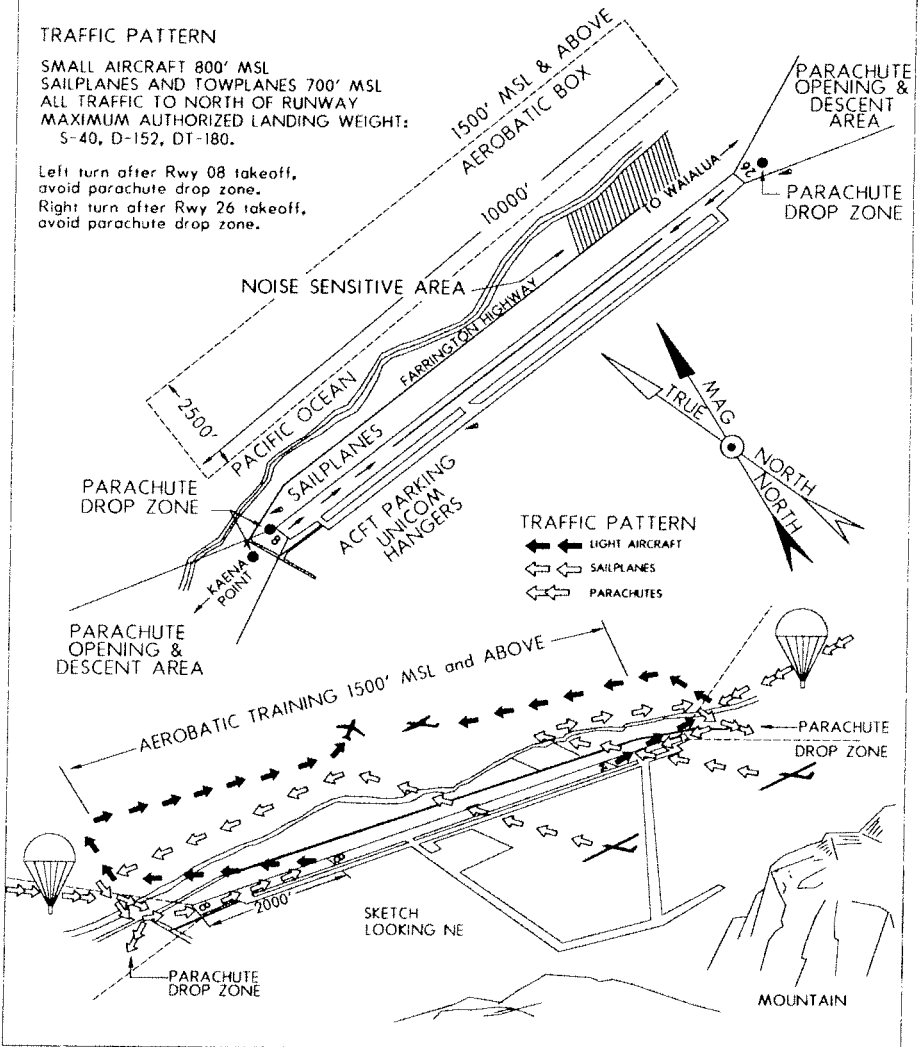
Glider Operations: Gliders are normally air-towed and routinely depart the traffic pattern to the South. (Right turn after takeoff Rwy 08, left turn after takeoff Rwy 26.) Gliders normally fly the ridge line to the south of the airport, within 5 NM. Most gliders are not radio equipped. The powered aircraft towing the gliders have radios and routinely use the glider traffic pattern, entering the traffic pattern from the South.

Sky Dive Operations: Extensive parachute operations occur daily at 16,000' and below. Parachutists normally exit the aircraft upwind of the airport and during strong winds may exit as far as 3 NM from the drop zone. Parachutes are usually opened between 2,000' and 4,500' altitude, and then flow to the drop zone entering an abbreviated left traffic pattern (Rwy 08) or right traffic pattern (Rwy 26). During light and no wind conditions, the parachutes may open directly above the airport and adjacent beach area.

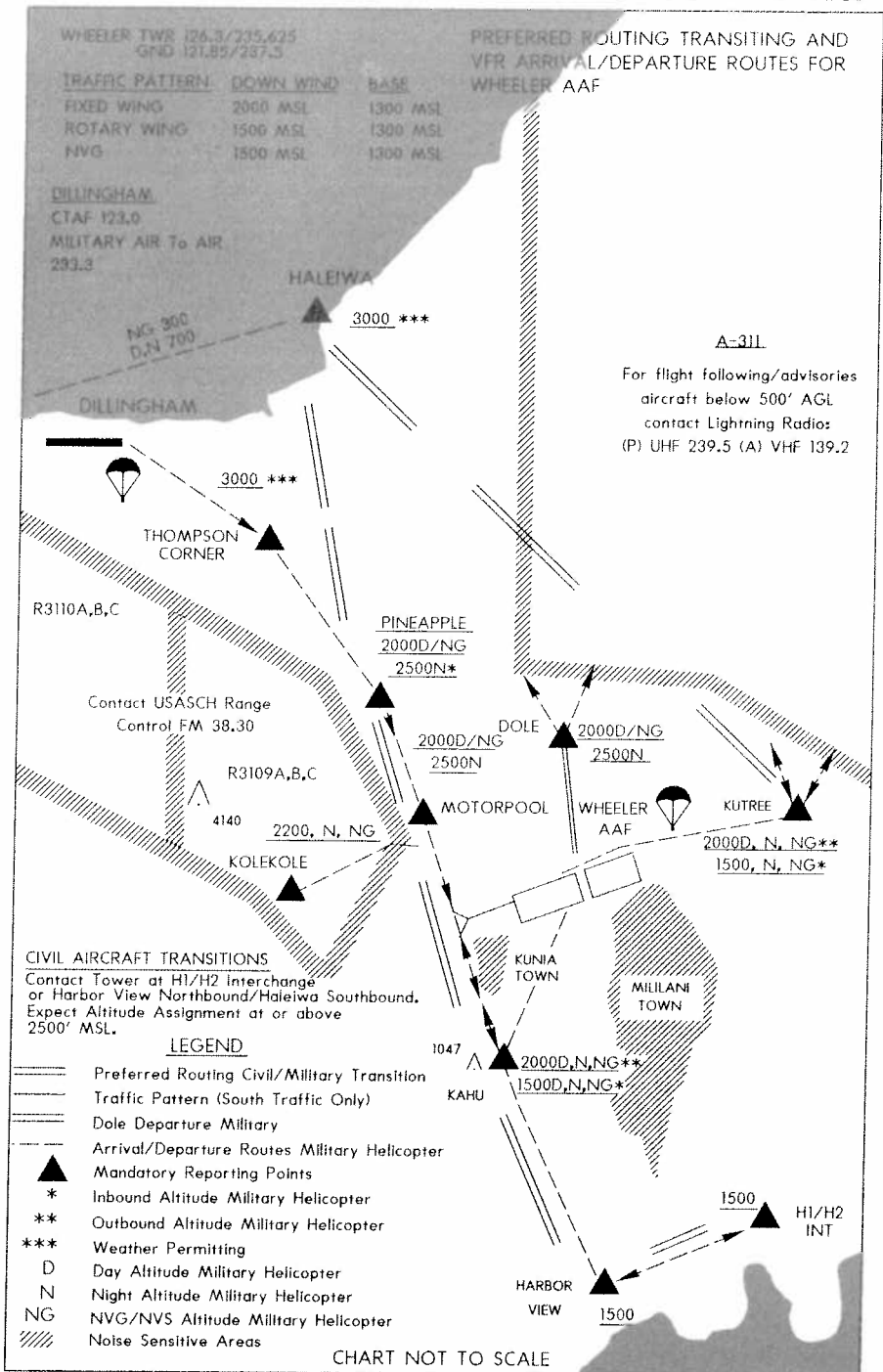
TRAFFIC PATTERN

SMALL AIRCRAFT 800' MSL
SAILPLANES AND TOWPLANES 700' MSL
ALL TRAFFIC TO NORTH OF RUNWAY
MAXIMUM AUTHORIZED LANDING WEIGHT:
S-40, D-152, DT-180.

Left turn after Rwy 08 takeoff,
avoid parachute drop zone.
Right turn after Rwy 26 takeoff,
avoid parachute drop zone.



ARRIVAL/DEPARTURE GRAPHICS



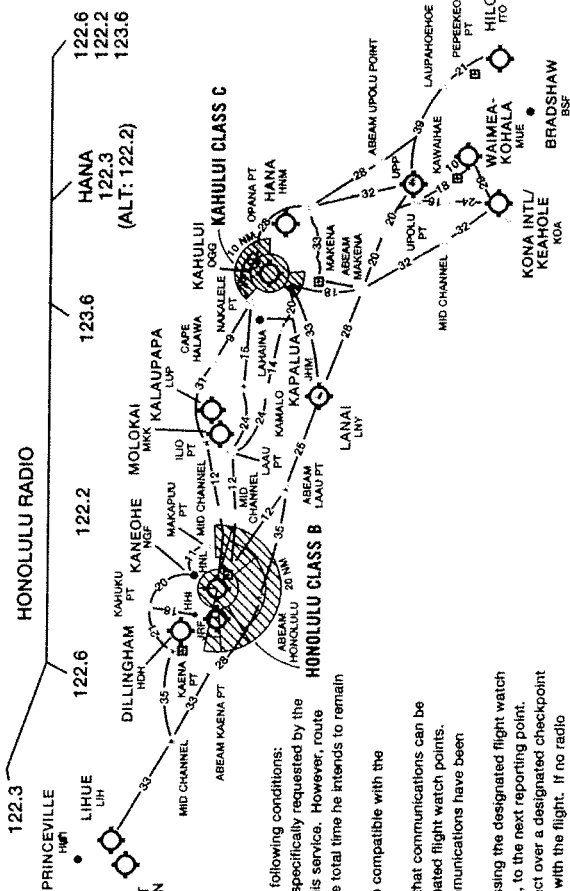
HAWAIIAN ISLAND REPORTING SERVICE FLIGHT WATCH STATION AND CHECK POINTS

Legend

CHECK POINTS

- PUBLIC AIRPORTS (STATE)
- PRIVATE/MILITARY AIRPORTS
- LANDMARKS

Consult appropriate NOTAMS and Pacific Chart Supplement for additional data, conditions and current information.



Island Reporting Service is available to all civil pilots under the following conditions:

- (1.) A VFR flight plan is filed and Island Reporting Service is specifically requested by the pilot. Stopover flight plans will not be accepted under this service. However, route diversions are acceptable provided the pilot indicates the total time he intends to remain in a specified area enroute on his flight plan.
- (2.) The aircraft is equipped with a functioning two-way radio compatible with the communication outlets to be used.
- (3.) The flight route and proposed cruising altitude are such that communications can be established with the flight watch stations over the designated flight watch points.
- (4.) Island Reporting Service begins after two-way radio communications have been established between the pilot and Honolulu AFSS.
- (5.) The pilot makes enroute radio contacts when over or passing the designated flight watch points. Pilots also provide an estimated time, in minutes, to the next reporting point.
- (6.) After these arrangements have been made, if radio contact over a designated checkpoint is missed, FAA facilities will attempt to establish contact with the flight. If no radio contact is made within fifteen minutes and other stations have no information, the aircraft will be considered overdue and Search and Rescue will be alerted.
- (7.) In case of aircraft radio failure, the pilot should land at the nearest airport and notify the nearest FAA station by telephone.
- (8.) Island Reporting Service is optional with the pilot and does not relieve him of his basic responsibility for the safe conduct of the flight.
- (9.) Island Reporting Service is not available between Hilo and Kona via South Cape Hawaii, and along the north shore of Kauai.

NOTE:
NOT TO SCALE -
NOT INTENDED FOR NAVIGATION