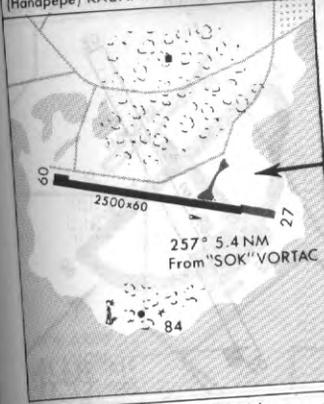


PORT ALLEN  
(Hanapepe) KAUAI I. HAWAII

1 NM SW  
ELEV 24



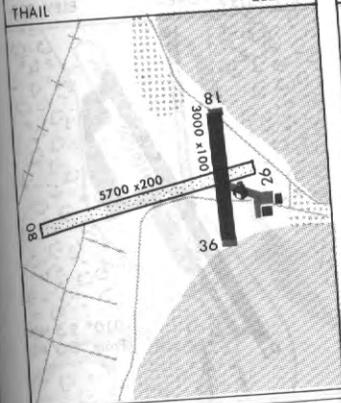
PRACHINBURI

ELEV 80



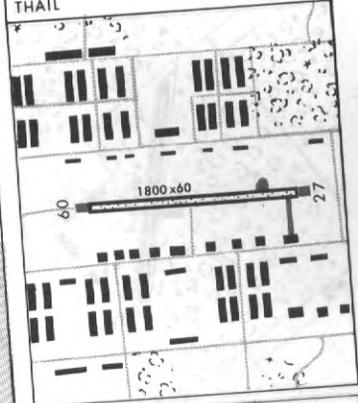
PRACHUAB KHIRI KHAN

ELEV 10



PRANBURI

ELEV 40



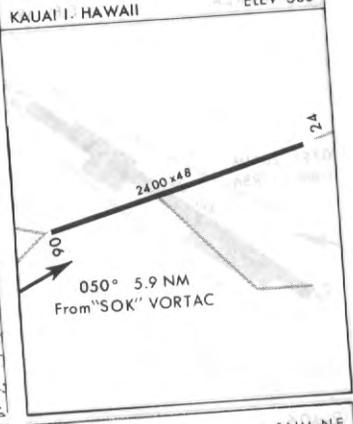
PUA PA

ELEV 650



PUHI AIRSTRIP

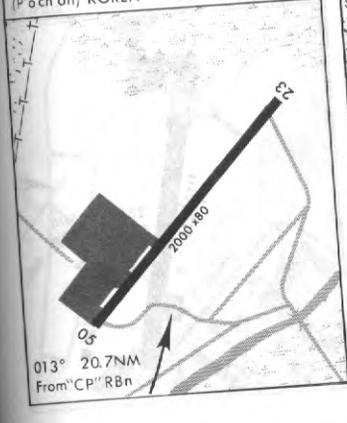
4 NM WSW  
ELEV 385



R-217

(P'och'on) KOREA

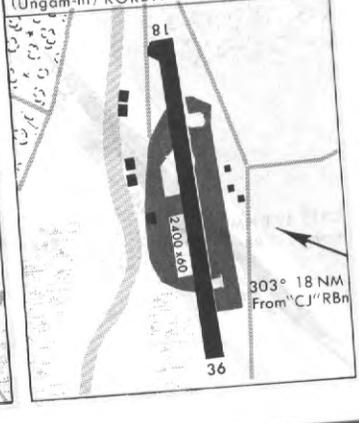
2 NM S  
ELEV 300

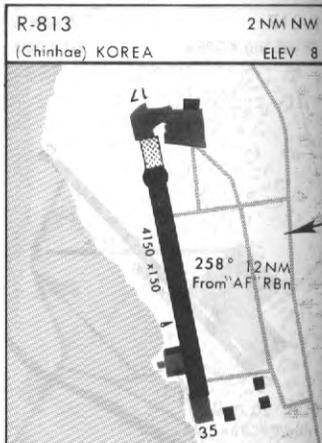
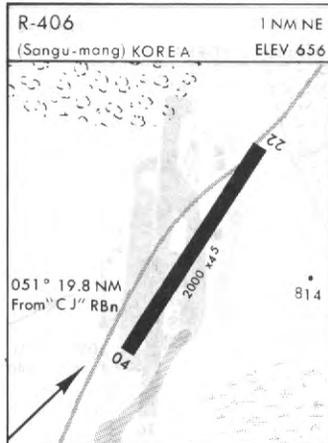
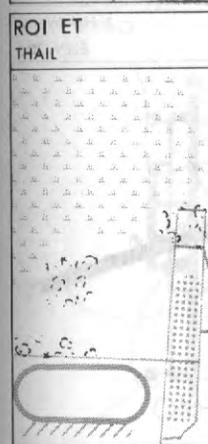
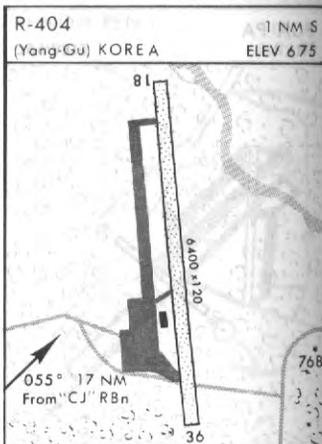
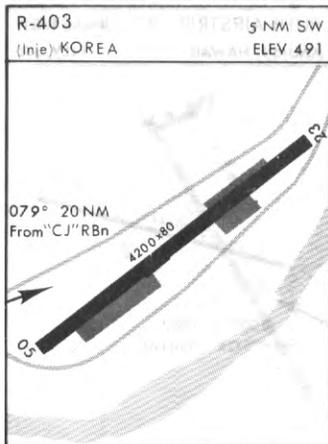
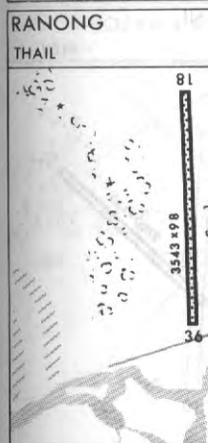
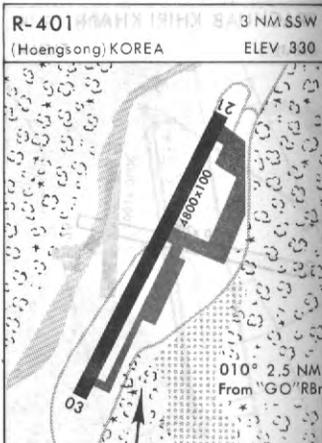
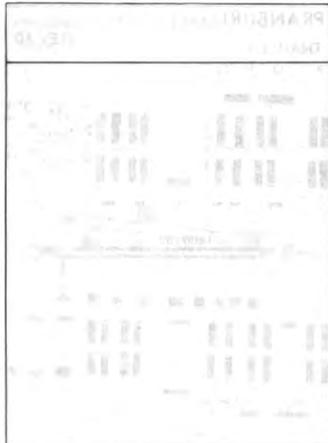
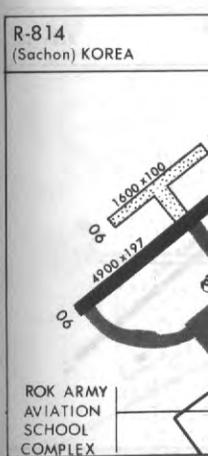
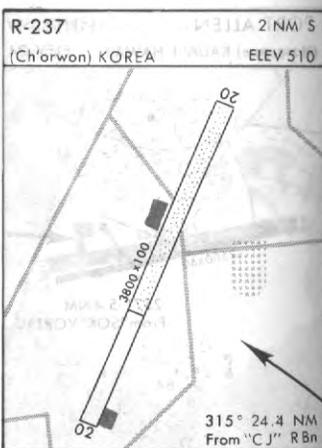
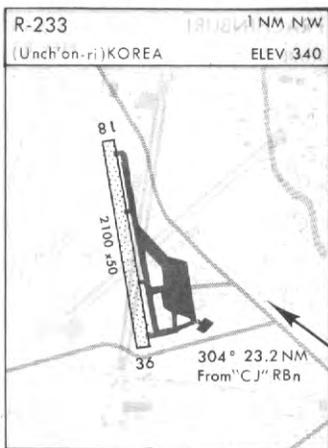


R-231

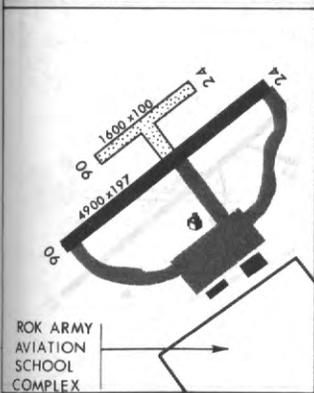
(Ungam-ni) KOREA

1 NM NE  
ELEV 425

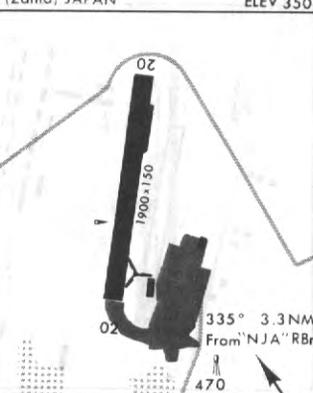




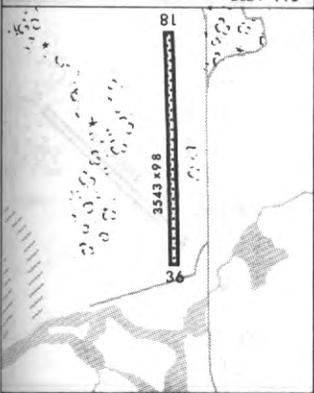
R-814  
(Sachon) KOREA 1 NM NW  
ELEV 25



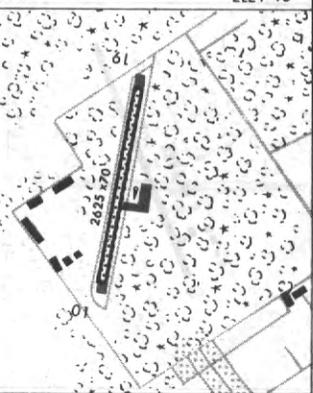
RANKIN  
(Zama) JAPAN 3 NM SW  
ELEV 350



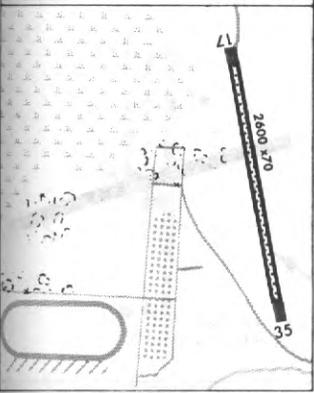
RANONG  
THAIL 36 ELEV 115



RAT BURI  
THAIL 37 ELEV 40



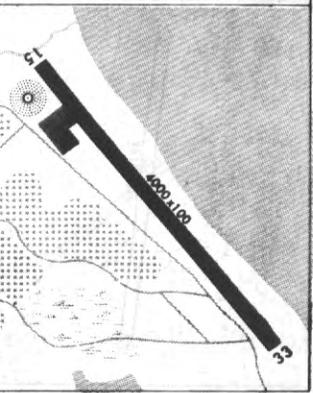
ROI ET  
THAIL 38 ELEV 459



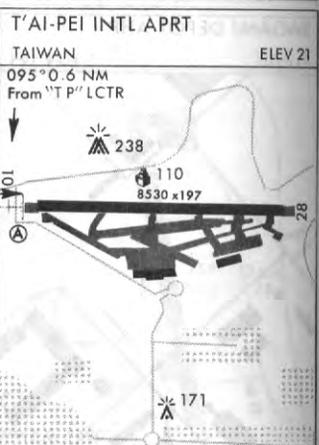
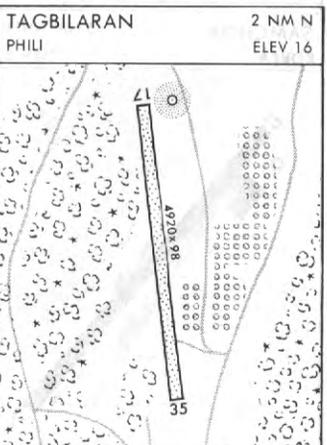
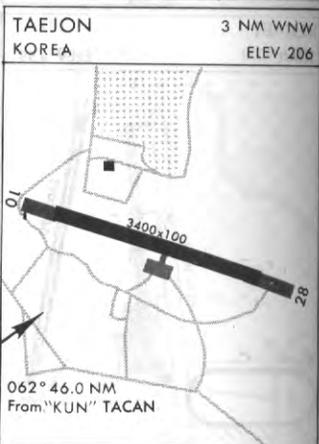
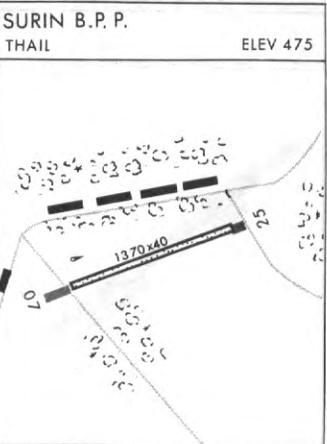
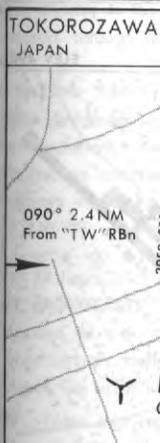
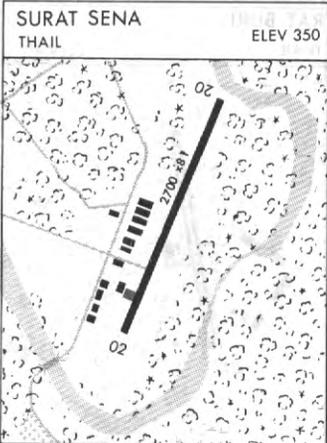
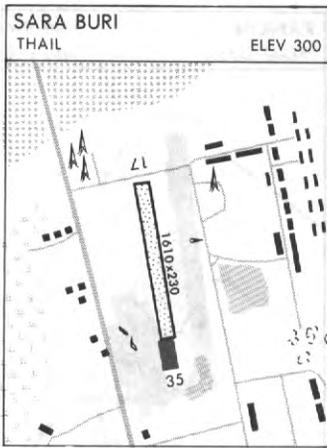
SAGAMI DEPOT AHP  
JAPAN 39 ELEV 395



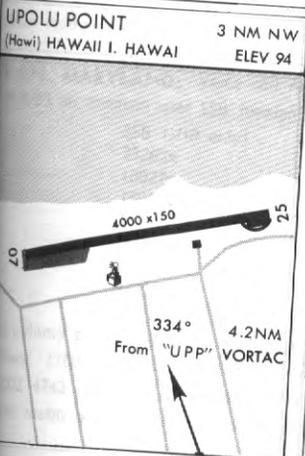
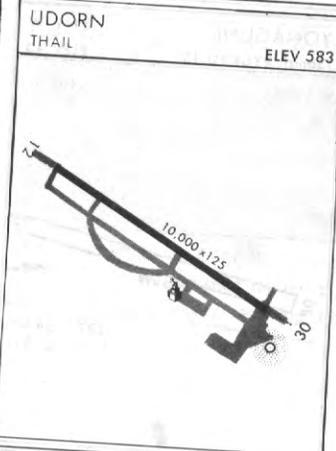
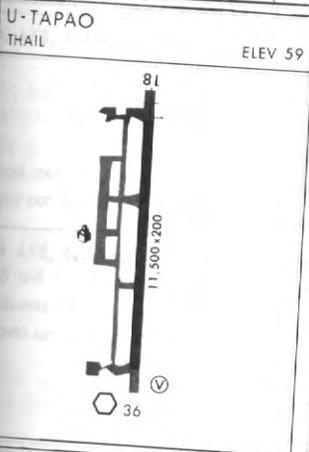
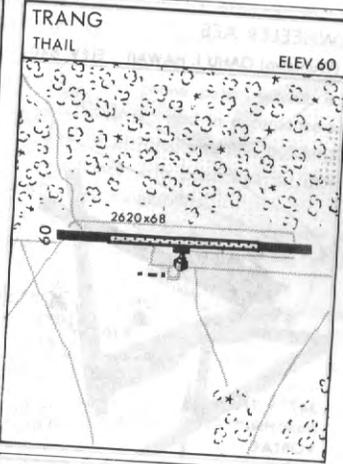
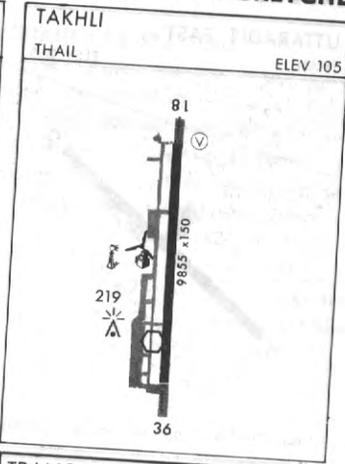
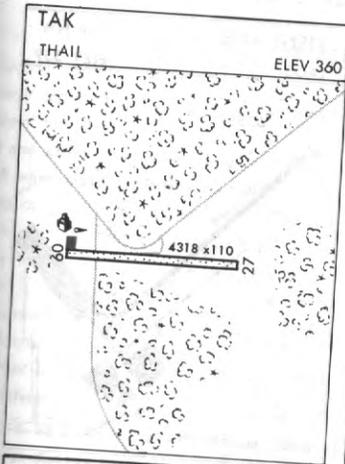
SAMCHOK  
KOREA 40 5 NM NNW  
ELEV 8

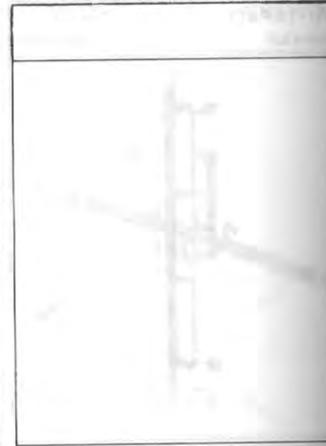
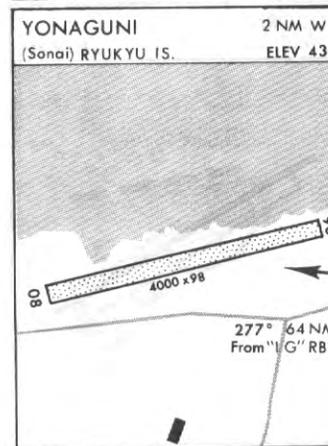
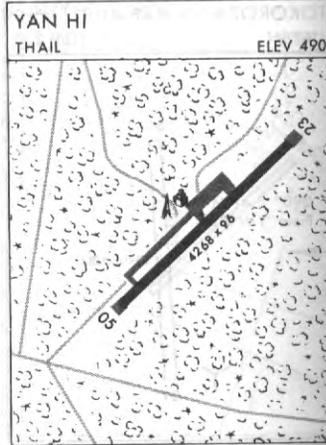
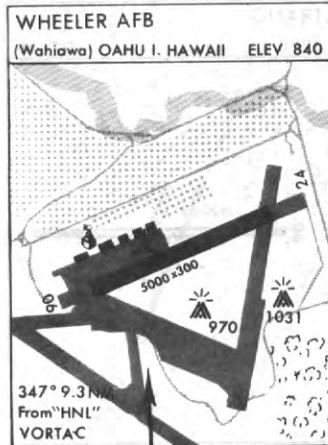
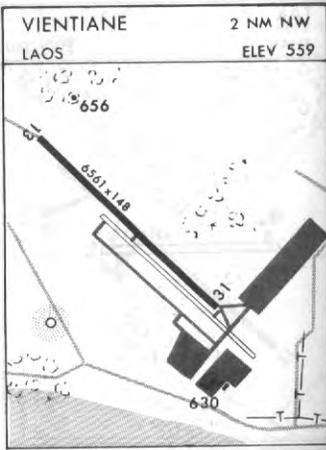
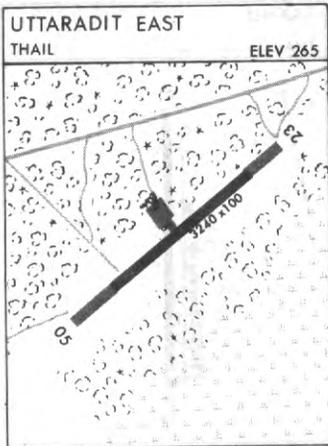


# 204 AERODROME SKETCHES



# AERODROME SKETCHES 205





**USAF**  
Air/Ground stations of the point relay capability. Position the system that has contact and utilize the USAF CTA/FIR when making position these stations. All position Flight Information Center. boundary will be addressed whichever is applicable, aircraft guard responsibility for the a

- Aircraft Identification
- Point of departure
- Destination

If there is no USAF air/gro will be made directly to the A may be relayed through any procedures).

**PHONE PATCH:** Facilities at most USAF air/ground stationing Service regulations. Violation will be reported as directed by patch procedures will assist in

**RADIO TELETYPE:** Air/ground Radio teletype is 100 WPM request with 24 hours prior notice

**FOXTROT BROADCASTS:** Scheduled nautical stations for one minute transmissions from aircraft during broadcast times are listed where

**UHF/VHF:** These frequencies are used for communications within the terminal

**ALBROOK AFB, CANAL ZONE**

SSB	SSB
17972	1324
13244	9014
9014	6738

**PSV:** Howard metro available  
Radio teletype not available.

**ANDERSEN AFB, GUAM:** V broadcasts H + 05 and H + 37 on S5  
Foxrot Broadcasts and Special

will be assigned upon initial contact

SSB	AM
11176	11226
9869	5710
6738	3144
4729	

**PSV:** Andersen metro available

**ANDREWS AFB, MARYLAND**  
broadcasts H + 05 on common us

SSB	SSB (
17972	23265
13201	18027
11176	15011
6738	13247
4742	9023
	6756
	4721x
	3071x

SSB equipped military aircraft en ment as follows: 1100Z to 2300 2300Z to 1100Z 4742 (primary),

**PSV:** McGuire metro available t

**USAF GLOBAL HF AERONAUTICAL STATIONS**

Air/Ground stations of the USAF HF Aeronautical Communications System have fast point-to-point relay capability. Position reports and messages may be relayed through any station within the system that has contact with your primary station. **HF equipped USAF/USN aircraft will contact and utilize the USAF air/ground station designated as primary guard for the appropriate CTA/FIR when making position reports beyond UHF/VHF range.** US Army aircraft may also utilize these stations. All position reports will be addressed to the appropriate Area Control Center or Flight Information Center. Position reports within 90 minutes prior to crossing an inter-center boundary will be addressed to both centers. After take-off or 15 minutes prior to CTA/FIR, whichever is applicable, aircraft should establish contact with the USAF air/ground station having primary responsibility for the area in which the aircraft will be flying and report the following:

- a. Aircraft Identification
- b. Point of departure
- c. Destination
- d. ETA first CTA/FIR reporting point.

If there is no USAF air/ground station listed as primary guard for the CTA/FIR, position reports will be made directly to the ACC/FIC radio station. Under abnormal circumstances, position reports may be relayed through any ICAO station (See FLIP Planning, Section III for detailed ICAO procedures).

**PHONE PATCH:** Facilities for providing official air/ground phone patch service is available at most USAF air/ground stations. Phone patch service will be provided in accordance with existing service regulations. Violations and unauthorized use of air/ground phone patching facilities will be reported as directed by these regulations. Compliance with prescribed air/ground phone patch procedures will assist in reducing air/ground frequency congestion.

**RADIO TELETYPE:** Air/ground radio teletype is available on request unless otherwise indicated. Teletype is 100 WPM (850 cycle shift 2 kHz center frequency). 60 WPM available on request with 24 hours prior notice.

**FOXTROT BROADCASTS:** Scheduled high priority foxtrot broadcasts are made by certain aeromobile stations for one minute periods. Unscheduled broadcasts may also be expected. Transmissions from aircraft during these periods are limited to emergency traffic only. Scheduled broadcast times are listed where applicable.

**UHF/VHF:** These frequencies are available for initial HF frequency assignment and other communications within the terminal area.

**ALBROOK AFB, CANAL ZONE:** Voice call Albrook, primary guard Panama CTA/FIR.

SSB (VIP)	AM	UHF/VHF
13247x	5710	323.9/135.9

Howard metro available through phone patch.  
Teletype not available.

**ANDERSEN AFB, GUAM:** Voice call Andersen, primary guard Guam CTA/FIR. Foxtrot broadcasts H+05 and H+37 on SSB frequencies. Listed frequencies will be used for initial contact, Foxtrot Broadcasts and Special Customer Support. Primary and Secondary reporting frequencies assigned upon initial contact.

AM	UHF
11226	292.1
5710	
3144	

Andersen metro available through phone patch.

**ANDREWS AFB, MARYLAND:** Voice call Andrews, primary guard New York CTA/FIR. Foxtrot broadcasts H+05 on common user SSB frequencies.

SSB (VIP only)	AM	UHF
23265x	15036x(72 hrs)	292.1
18027x	13215.5x(72 Hrs)	
15011x	11228	
13247	6730.5	
9023	5710.5	
6756	3144	
4721x		
3071x		

Unmanned military aircraft entering New York CTA/FIR contact Andrews for frequency assignment follows: 1100Z to 2300Z 11176 (primary), 13201 (secondary), and 6738 (alternate); 2300Z to 1100Z 4742 (primary), 6738 (secondary), and 11176 (alternate).

McGuire metro available through phone patch.

**CLARK AB, PHILIPPINES:** Voice call Clark, primary guard Manila CTA/FIR. Foxtrot broadcasts H + 39 on SSB frequencies.

Listed frequencies will be used for initial contact, Foxtrot Broadcasts and Special Customer Support. Primary and Secondary reporting frequencies will be assigned upon initial contact.

SSB	AM	UHF
11247	11226	292.1
8993	6730	
6753	3144	
4732		

**PFSV:** Clark metro available through phone patch.

**CROUGHTON, UK:** Voice call Croughton, Radio primary guard Shanwick Oceanic (Shannon/Prestwick) CTA/FIR. Foxtrot broadcasts H + 41 on SSB frequencies.

SSB	AM	UHF
15015x (4 Hrs)	15036	323.9
13214	6757	
11179	4724.5	
6731		
3067		

**PFSV:** South Ruislip metro available through phone patch.

**DON MUANG (BANGKOK), THAILAND:** Voice call Don Muang, primary guard Bangkok FIR. SSB

11176  
8967

Radio teletype not available.

**ELMENDORF AFB, ALASKA:** Voice call Elmendorf, primary guard Anchorage CTA/FIR. Foxtrot broadcasts H + 07 on SSB frequencies.

SSB	AM	UHF
13201	11226	292.1
11236	5710	
8989	3144	
6738		
5703x		

**PFSV:** Elmendorf metro and Travis metro available through phone patch.

**FUCHU AS (TOKYO), JAPAN:** Voice call Fuchu, primary guard Tokyo CTA/FIR. Foxtrot broadcasts H + 09 on SSB frequencies.

Use 292.1 for departure contact. Primary and secondary reporting frequencies will be assigned upon initial contact. Listed frequencies will be used for normal communications, Foxtrot bests and Special Customer Support.

SSB	AM	UHF
11236	13215	292.1
8967	5710	
6712	3144	
3043		

**PFSV:** Yokota metro available through phone patch.

**HICKAM AFB, HAWAII:** Voice call Hickam, primary guard Honolulu CTA/FIR. Foxtrot broadcasts H + 11 on SSB frequencies.

Listed frequencies will be used for initial contact, Foxtrot Broadcasts and Special Customer Support. Primary and Secondary reporting frequencies will be assigned upon initial contact.

SSB	AM	UHF
13201	17993	292.1
11176	11226	
6715	8967	
4729	5710	

**PFSV:** Hickam metro available through phone patch.

**INCIRLIK (ADANA), TURKEY:** Voice call Incirlik airways. Foxtrot broadcasts H + 37.

SSB	AM	UHF
15015 Standby	11180.5	323.9
13215	6715.5	
11229	4724.5	
3137		

Radio teletype not available.

**PFSV:** Incirlik metro available through phone patch.

**KADENA AB, OKINAWA:** Voice call Kadena, primary guard Manila CTA/FIR. Foxtrot broadcasts H + 35 on SSB frequencies.

Listed frequencies will be used for initial contact, Foxtrot Broadcasts and Special Customer Support. Primary and Secondary reporting frequencies will be assigned upon initial contact.

SSB	AM	UHF
13204	11226	292.1
8993	6730	
6738	3144	
4729		

**PFSV:** Kadena metro available through phone patch.

**LAJES FIELD, AZORES:** Voice call Lajes, primary guard Lajes CTA/FIR. Foxtrot broadcasts H + 11 on SSB frequencies.

SSB	AM	UHF
11271	11226	292.1
6750	6757	
6738	4724.5	
4746		

**PFSV:** Lajes metro available through phone patch.

**LORING AFB, MAINE:** Voice call Loring, primary guard Loring CTA/FIR. Foxtrot broadcasts H + 35 on SSB frequencies.

SSB	AM	UHF
13201	11226	292.1
3078	5710	
6715	3144	
11236		

Radio teletype not available.

**PFSV:** McGuire metro available through phone patch.

**MAC DILL AFB, FLA:** Voice call Mac Dill, primary guard Mac Dill CTA/FIR. Foxtrot broadcasts H + 39 on SSB frequencies.

SSB	AM	UHF
13244	11226	292.1
11246	6757	
8993	3144	
6750		

**PFSV:** McGuire metro available through phone patch.

**MC CLELLAN AFB, CALIF:** Voice call McClellan, primary guard McClellan CTA/FIR. Foxtrot broadcasts H + 41 on SSB frequencies.

SSB	AM	UHF
11176	11226	292.1
3989	6757	
6738	5710	
4746	3144	

**PFSV:** Travis metro available through phone patch.

**PESHAWAR, PAKISTAN:** Voice call Peshawar, primary guard Peshawar CTA/FIR. Foxtrot broadcasts H + 37 on SSB frequencies.

SSB	AM	UHF
13214	11226	292.1
5707	6757	
	3144	

Radio teletype not available.

# USAF GLOBAL HF AERONAUTICAL STATIONS 209

Foxtrot broadcasts  
Customer Support  
ct.

**KADENA AB, OKINAWA:** Voice call Kadena, primary guard Okinawa CTA/FIR. Foxtrot broadcasts H + 35 on SSB frequencies.

Listed frequencies will be used for initial contact, Foxtrot broadcasts and special customer support. Primary and Secondary reporting frequencies will be assigned upon initial contact.

UHF  
292.1

SSB	AM	UHF
13204	11226	292.1
8993	8967	
6738	5710	
6729		

NSV: Kadena metro available through phone patch.

Oceanic (Shannon/

UHF  
323.9

**LAJES FIELD, AZORES:** Voice call Lajes, primary guard Lisbon Oceanic CTA/FIR. Foxtrot broadcasts H + 11 on SSB frequencies.

SSB	AM	UHF
11271	11226	323.9
6750	4731	
6738	3067	
6746		

NSV: Lajes metro available through phone patch.

guard Bangkok FIR.

e CTA/FIR. Foxtrot

**LORING AFB, MAINE:** Voice call Loring, primary guard Gander CTA/FIR. Foxtrot broadcasts H + 35 on SSB frequencies.

SSB	AM	UHF
6201		
6738		
6715		
6296		

Radio teletype not available.

NSV: McGuire metro available through phone patch.

CTA/FIR. Foxtrot

**MAC DILL AFB, FLA:** Voice call Mac Dill, primary guard Miami and Houston CTA/FIR. Foxtrot broadcasts H + 39 on SSB frequencies.

SSB	AM	UHF
6244	11228	292.1
6746	8967	
6993	3144	
6750		

NSV: McGuire metro available through phone patch.

FIR. Foxtrot broad-

**McCLELLAN AFB, CALIF:** Voice call McClellan, primary guard Oakland CTA/FIR. Foxtrot broadcasts H + 41 on SSB frequencies.

SSB	AM	UHF
6776	11226	292.1
6789	6730	
6738	5710	
6746	3144	

NSV: Travis metro available through phone patch.

casts H + 37.

**PESHAWAR, PAKISTAN:** Voice call Peshawar Airways.

SSB	AM	UHF
6314	15036x	
6707	13205.5	
	11180.5	
	3137x	

Radio teletype not available.

# 210 USAF GLOBAL HF AERONAUTICAL STATIONS

**SAN PABLO, SPAIN:** Voice call San Pablo. Foxtrot broadcasts H + 07 on SSB frequencies.

SSB	AM	UHF
15015x	6753	323.9
13214	4724.5	
11229		
6731		
4744		

**PFVS:** Torrejon metro available through phone patch.

**SCOTT AFB, ILLINOIS:** Voice call Scott.

SSB
15018
11233
6727
2078

Radio teletype not available.

**TAN SON NHUT (SAIGON), VIETNAM:** Voice call Tan Son Nhut, primary guard Saigon FIR.

USB
11223
8989
6738
4732

Radio teletype not available.

**PFVS:** Tan Son Nhut metro available through phone patch.

**THULE AB, GREENLAND:** Voice call Thule, primary guard Sondrestrom CTA/FIR. Foxtrot broadcasts H + 09.

SSB	AM	UHF
11227	15016x	292.1
6715	13215x	
	11228	
	6715 USB	
	5710	
	4731	
	3144	

Radio teletype not available.

**WHEELUS AB, LIBYA:** Voice call Wheelus.

SSB	AM
15015x	15036
13214	11180.5
11229	6753
6731	
3137	

**CW Call**

<b>H</b>	
<b>HSC5</b>	<b>Chiang</b>
<b>K</b>	
<b>KEA20</b>	<b>Wake</b>
<b>M</b>	
<b>MEO</b>	<b>Singapo</b>
<b>N</b>	
<b>NCP</b>	<b>Cubi Po</b>
<b>NGF</b>	<b>Kaneho</b>
<b>NJA</b>	<b>Atsugi</b>
<b>NPO 5</b>	<b>Sangley</b>
<b>NRV4</b>	<b>Angaur</b>
<b>P</b>	
<b>POJ</b>	<b>Makassa</b>
<b>POM</b>	<b>Mapang</b>
<b>PON</b>	<b>Polonia</b>
<b>POX</b>	<b>Pitu</b>
<b>R</b>	
<b>RSC</b>	<b>Udorn</b>
<b>V</b>	
<b>VPW</b>	<b>Singapo</b>
<b>X</b>	
<b>XUI</b>	<b>Phnom</b>

## CW CALL SIGNS (Alphabetical Listing)

CW Call	Station	CW Call	Station
H	<b>Chiang Mai</b>		
HSC5			
K	<b>Wake</b>		
KEA20			
M	<b>Singapore</b>		
XEO			
N	<b>Cubi Point NAS Kaneohe Bay MCAS Atsugi NAS Sangley Point Angaur Is.</b>		
NCP			
NGF			
NJA			
NPO 5			
NRV4			
P	<b>Makassar Mapanget Polonia Pitu</b>		
POJ			
POM			
PON			
POX			
R	<b>Udorn</b>		
RSC			
V	<b>Singapore</b>	<b>4YN</b>	<b>Ocean Stations</b>
VPW		<b>4YP</b>	<b>November</b>
X	<b>Phnom Penh</b>	<b>4YV</b>	<b>Papa</b>
XUI			<b>Victor</b>

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Ident	Name	Ident	Name	Ident	Name
	<b>A</b>	CHI	Chia-I (TACAN)	HN	Ban Hua Hin (RB)
AA	Miri (RBn)	CHM	Chiang Mai (TACAN)	HN	Honolulu (Lctr)
AB	Kwang-Ju (RBn)	CHO	Chitose (VOR)	HNH	Honolulu (VORTA)
AC	An Loc (RBn)	CHU	Chu Lai (TACAN)	HP	Hanamaki (RBn)
AF	Kimhae (RBn)	CHU	Chu Lai (RBn)	HSU	Hsin-Chu (TACAN)
AFM	Hensel AAF (RBn)	CJ	Chun Chon (RBn)	HU	Hue (RBn)
AG	Atsugi (RBn)	CKH	Koko Head (VORTAC)	HU	Hyakuri (RBn)
AG	Ca Lu (RBn)	CKR	Clark (TACAN)	HUE	Hue (TACAN)
AGT	Nha Trang (TACAN)	CKR	Clark (VOR)	HUT	Hyakuri (TACAN)
AGY	Phu Cum (RBn)	CL	Tokyo (Lctr)	HVT	Hachinohe (TACA)
AH	Ashiya (RBn)	CM	Chiang Mai (RBn)	HW	Hakodate (RBn)
AHA	An Hoa (TACAN)	CN	Car Nicobar (RBn)	HYD	Dalat (RBn)
AJ	Iwakuni (RBn)	CNT	Chainat (VOR)		
AK	Akeno (RBn)	CP	Seoul (RBn)		<b>I</b>
AK	Anduki (RBn)	CR	Muang Chiang Rai (RBn)	IB	Dang Ha (RBn)
AKB	Akyab (RBn)	CRB	Cam Ranh Bay (TACAN)	IG	Ishigaki (RBn)
AL	Alabat (RBn)	CRB	Cam Ranh Bay (VOR)	IK	Ikishima (RBn)
AL	Amami (RBn)	CU	Cauayan (RBn)	IL	Manila (RBn)
AM	Malacca (Lctr)	CU	Otsu (RBn)	IL	Cam Ranh Bay (R)
AN	Antipolo (RBn)			IM	Izumo (RBn)
AN	Kuching (RBn)		<b>D</b>	IP	Tulihal (RBn)
ASM	Tan Son Nhut (TACAN)	DA	Davao (RBn)	IP	Ipoh (Lctr)
AT	Agartala (RBn)	DA	Davao (VOR)	ITA	Itazuke (TACAN)
AT	Akita (RBn)	DAG	Danang (TACAN)	ITO	Hilo (VORTAC)
AT	Alor Star (RBn)	DAN	Danang (VOR)	IWO	Kuga (VOR)
AT	Danang (Lctr)	DC	P'ing-Tung (Lctr)	IWO	Iwo Jima (TACAN)
AU	Okuma (RBn)	DF	Zama (RBn)	IZ	Itazuke (RBn)
AV	Phan Rang (RBn)	DGO	Fukuoka (VOR)		
AW	Asahikawa (RBn)	DL	Dalat (RBn)		<b>J</b>
AWK	Wake I. (RBn)	DLT	Dalat (TACAN)	JA	Kanoya (RBn)
AWK	Wake I. (VORTAC)	DMZ	Dong Ha (TACAN)	JB	Omura (RBn)
AXX	Wake I. (RBn)			JB	Johore Bahru (RBn)
AY	Kang-Shan (Lctr)	EG	Chittagong (RBn)	JC	Hachinohe (RBn)
AY	Kumagaya (RBn)	EG	Chittagong (VOR)	JD	Nikko (RBn)
		EL	Kimpo (Lctr)	JE	Miho (RBn)
	<b>B</b>	ENI	Eniwetok Aux AF (TACAN)	JKT	Komatsu (TACAN)
BA	Bien Hoa (RBn)	EV	Hue (RBn)	JN	Kota Kinabalu (RE)
BB	Basa (RBn)			JN	Matsushima (RBn)
BC	Bacolod (RBn)		<b>F</b>	JNT	Matsushima (TACA)
BH	Bhamo (RBn)	FH	Taegu (RBn)	JO	Jomalig (VOR)
BHT	Binh Thuy (TACAN)	FK	Fu-kuei Cape (RBn)	JON	Johnston I. (TACA)
BK	Bangkok (Lctr)	FL	Phu Loi (RBn)	JON	Johnston I. (RBn)
BKK	Bangkok Intl (VORTAC)	FM	Hofu (RBn)	JL	Kota Kinabalu (Lc
BKK	Bangkok Intl (RBn)	FQ	Fukui (RBn)		<b>K</b>
BM	Ma-Kung (Lctr)	FSS	French Frigate Shoals (RBn)	K	Kure (RBn)
BMT	Ban Me Thout East (TACAN)	FU	Fukue (RBn)	KAD	Kadena (VOR)
BN	Brunei (Lctr)	FV	Phuoc Vinh (RBn)	KAN	Kangnung (TACAN)
BN	Bancasi (RBn)			KB	Kota Bahru (RBn)
BNH	Bien Hoa (TACAN)		<b>G</b>	KC	Kwang-Ju (RBn)
BNH	Bien Hoa (VOR)	GA	Suwon (RBn)	KC	Nagoya (RBn)
BP	Batu Pahat (RBn)	GF	Kuantan (RBn)	KCT	Nagoya (TACAN)
BS	Bassein (RBn)	GG	Maui (Lctr)	KD	Kadena (RBn)
BS	Sha-T'ou (RBn)	GM	T'ao-Yuan (Lctr)	KG	Kagoshima (RBn)
BT	Butterworth (RBn)	GN	Tan Son Nhut (Lctr)	KG	Kengtung (RBn)
BTR	Butterworth (TACAN)	GO	Daigo (RBn)	KG	Kuching (RBn)
BU	Bintulu (RBn)	GO	Hoengsong (RBn)	KH	Kao-Hsiung (Lctr)
BU	Bukit Timah (RBn)	GOE	Daigo (RBn)	KH	Kuching (Lctr)
BUT	U-Tapao (TACAN)	GT	Niigata (RBn)	KH	Kushimoto (RBn)
BUT	U-Tapao (VOR)	GTC	Niigata (VORTAC)	KH	Nha Trang (RBn)
BW	Chungju (RBn)	GUM	Agana (VORTAC)	KHE	Kimhae (TACAN)
		GUM	Guam (RBn)	KHO	Kushimoto (VOR)
	<b>C</b>	GY	Eniwetok (RBn)	KIM	Kimpo (TACAN)
CB	Cabanatuan (RBn)			KJ	Komatsu Jima (RB)
CB	Coxs Bazar (RBn)	HB	Hiroshima (RBn)	KK	Bangkok (Lctr)
CC	Cheung Chau (RBn)	HC	Hachijo-Jima (RBn)	KK	Kong Kong (RBn)
CCK	Ching-Chuan Kang AB (TACAN)	HCN	Heng-Ch'un (VOR)	KL	Cu Chi AAF (RBn)
CCK	Ching-Chuan Kang AB (VOR)	HE	Heho (RBn)	KL	Kuala Lumpur (RB)
CD	Cheju (RBn)	HF	Hiroshima (RBn)	KA	Dong Tam (RBn)
CE	Cebu (VOR)	HGU	Mingaladon (VOR)	KA	Kalemyo (RBn)
CE	Cebu (RBn)	HK	Kagoshima (RBn)	KA	Komatsu (RBn)
CE	Kuala Lumpur (RBn)	HKC	Kagoshima (VORTAC)	KN	Kuantan (Lctr)
CET	Mactan (TACAN)	HKG	Cape D'Aguiar (RBn)	KO	Kimpo (RBn)
CG	Cagayan De Oro (RBn)	HLN	Hua-Lien (TACAN)	KO	Kokura (RBn)
CG	Cagayan De Oro (VOR)	HLN	Hua-Lien (VOR)	KDA	Kona (VORTAC)
CH	Changi (RBn)	HM	Haneda (RBn)	KPO	P'ohang (TACAN)
CHE	Cheju-Do (TACAN)			KR	Kailashahar (RBn)





Name	Ident	Name
Kimpo (Lctr)	TU	Kuala Trengganu (Lctr)
Seoul (VOR)	TUO	Tobetsu (VOR)
Danang (RBn)	TW	Tawau (RBn)
Tan Son Nhut (Lctr)	TYN	T'ao-Yuan (TACAN)
Shimofusa (RBn)	TW	Tachikawa (RBn)
Shimofusa (TACAN)	TW	Tarawa (RBn)
San Jose (RBn)	TY	Tavoy (RBn)
Sinjan (VOR)	TY	Sakura (RBn)
Sinjan (RBn)	TYE	Sakura (VOR)
Quang Ngai (RBn)		<b>U</b>
Shinoda (RBn)	UA	Andersen (RBn)
Sangkha (RBn)	UAM	Andersen (TACAN)
Shinoda (VORTAC)	UAM	Andersen (VOR)
Sandakan (Lctr)	UB	Ube (RBn)
Seletar (Lctr)	UB	Muang Ubun (RBn)
Seletar (RBn)	UBL	Muang Ubun (TACAN)
Kuala Lumpur (Lctr)	UBL	Muang Ubun (VOR)
Saipan (RBn)	UD	Udorn (RBn)
Sandakan (Lctr)	UDN	Udorn (TACAN)
Soc Trang (RBn)	UPP	Upolu Point (VORTAC)
Soc Trang (TACAN)	UT	Bintulu (RBn)
South Kauai (VORTAC)	UT	P'Ohang (RBn)
Sapporo (RBn)	UT	U-Tapao (RBn)
Singapore (Lctr)		<b>V</b>
Shimizu (RBn)		
Sibu (RBn)	VK	Tuy Hoa North (RBn)
Savannakhet City (RBn)	VL	Vinh Long (RBn)
Tan Son Nhut (RBn)	VP	Victoria Point (RBn)
Phu Cat (RBn)	VTN	Vientiane (RBn)
Sempang (Lctr)		<b>W</b>
Suwon (RBn)		
T'ai-pei (Lctr)	WK	Dau Tieng (RBn)
Suwon (TACAN)	WK	Wakkanai (RBn)
Mazin (RBn)	WKN	Wakkanai (TACAN)
Sylhet (RBn)	WNT	Wanon Niwat (TACAN)
	WR	Long Thanh North (RBn)
<b>T</b>		<b>X</b>
Oita (RBn)	XA	P'ing-Tung (Lctr)
Telok Anson (RBn)	XA	Oshima (RBn)
Taegu (TACAN)	XAC	Oshima (VORTAC)
Memambetsu (RBn)	XK	Kontum (RBn)
Tuy Hoa (TACAN)	XM	Kowa (RBn)
Tateyama (TACAN)	XMO	Kowa (VOR)
Taegu (RBn)	XS	An Khe (RBn)
Toungoo (RBn)	XUI	Phnom Penh (RBn)
A-112 (RBn)	XUJ	Siemreab (RBn)
Tuy Hoa (RBn)	XUP	Phnom Penh (VOR)
Harumi (RBn)	XV	Saint Jacques (RBn)
Tathong Point (VOR)	XVH	Tan Son Nhut (VOR)
Kidjang (RBn)	XVJ	Danang (RBn)
Tanegashima (RBn)	XVK	Qui Nhon (TACAN)
Kanoya (TACAN)	XVK	Qui Nhon (RBn)
Takunoshima (RBn)	XVL	Vung Tau (RBn)
Truk (RBn)	XWI	Wake I. (VORTAC)
Takhli (TACAN)		<b>Y</b>
Takhli (VOR)	YM	Mineyama (RBn)
Takhli (RBn)	YO	Yao (RBn)
Tengah (RBn)	YOK	Yakota (TACAN)
Tengah (TACAN)	YP	Yap (RBn)
T'ai-Nan (TACAN)	YU	Hua-Lien (RBn)
T'ai-Nan (VOR)	YU	Yokosuka (RBn)
Toyama (RBn)	YZ	Yaizu (RBn)
T'ai-pei (Lctr)		<b>Z</b>
Tathong Point (RBn)		
T'ai-pei (VOR)	ZA	Tsushima (RBn)
Tsuiki (RBn)	ZA	Zamboanga (VOR)
Tsuiki (TACAN)	ZA	Zamboanga (RBn)
Tottori (RBn)	ZG	Taiping (Lctr)
Tokushima (RBn)	ZM	Yamagata (RBn)
Tokushima (TACAN)	ZY	Kuma (RBn)
Tuguegarao (RBn)	ZYT	Chitose (TACAN)

**MARINE RADIO BEACONS**

Chuk-Do Light House	WL	Waglan Island
Komun-Do Light House	Z	Maikapuu Point
Horsburgh Light		

## ARMED FORCES BROADCASTING STATIONS

Name	Freq	Location	Chart No.
Chitose AFRS	1570	42°48'N 141°40'E	3
Chunchon AFRS	1040	37°52'N 127°43'E	4
Clark AFRS	1520	15°13'N 120°33'E	T2
Eniwetok AFRS	1385	11°20'N 162°25'E	T2
Itazuke AFRS	1550	33°32'N 130°28'E	4
Iwakuni AFRS	1580	34°09'N 132°14'E	4
Johnston AFRS	1250	16°45'N 169°30'W	T2
Kunsan AFRS	1440	35°55'N 126°38'E	4
Kwajalein AFRS	1220	08°43'N 167°44'E	T2
Midway AFRS	920	28°12'N 177°22'W	T2
Misawa AFRS	1580	40°41'N 141°22'E	3
Munsan AFRS	580	37°51'N 126°48'E	4
Okinawa AFRS	650	26°16'N 127°43'E	5
Osan AFRS	1360	37°03'N 127°02'E	4
Punsan AFRS	780	35°15'N 129°10'E	4
Saigon AFRS	540	10°46'N 106°39'E	T1
Seoul AFRS	560	37°33'N 127°00'E	4
Seoul FM	102.7MHz	37°34'N 127°00'E	4
Subic Bay AFRS	1300	14°49'N 120°17'E	T2
Taegu AFRS	580	35°51'N 128°38'E	4
Taejon AFRS	1480	36°18'N 127°27'E	4
Taiwan AFRS	1560	25°03'N 121°27'E	5
Tokyo AFRS	810	35°47'N 139°37'E	T2
Tongduchon AFRS	1200	37°54'N 127°05'E	4
Unchon AFRS	1400	38°06'N 127°16'E	4
Wake AFRS	1490	19°17'N 166°39'E	T2
Wakkanai AFRS	1580	45°22'N 141°49'E	3

Aeronautical Radio Incorporated frequencies are listed below together with frequencies are for use only in emergency on military air/ground frequencies

### CENTRAL EAST PACIFIC (NORTH)

Honolulu (ARINC)  
San Francisco (ARINC)  
Seattle (ARINC)

### CENTRAL EAST PACIFIC (SOUTH)

Honolulu (ARINC)  
San Francisco (ARINC)

### SOUTH PACIFIC

Honolulu (ARINC)

### CENTRAL WEST PACIFIC

Honolulu (ARINC)  
Okinawa (ARINC)ⓐ  
T'ai-pei (Ministry of Communications)  
Hong Kong (Ministry of Civil Aviation)

Manila (PCAA)

Seoul (Korean Government)  
Tokyo (JCAB)

### NORTH PACIFIC

Tokyo (JCAB)

**NOTE: Underlined 5 MHz frequencies**  
ⓐ Phone patch capability through pilots and ARTCC.



## OCEAN STATION VESSELS

a. **Procedures.** All aircraft flying in the vicinity (150 mi radius recommended) of an ocean station vessel should report the following information to that vessel. Normally this report should be VHF. If VHF communication is unsatisfactory, contact should be established on HF or UHF.

- (1) Aircraft identification or radio call sign as shown in flight plan.
- (2) Position and time of position or a request for a radar fix.
- (3) Altitude.
- (4) Estimate of either:
  - (a) Time (GMT) over next reporting point in minutes past the hour or
  - (b) Position and time at next routine position report.
- (5) Point of first intended landing.
- (6) The following optional data may be reported:
  - (a) Estimate of time (GMT) at point of first intended landing.
  - (b) Endurance (Wt or Hrs.)
  - (c) Course.
  - (d) Speed.
  - (e) Wind Factor.
  - (f) Point and time of departure.

b. **Services.** Ocean station vessels provide the following services to aircraft:

- (1) Routine information given on request.
  - (a) Continuous Beacon.
  - (b) Radar Fixing and course and speed check.
  - (c) Winds aloft.
  - (d) Dog value. (Differences between pressure altitude and absolute altitude) for altitudes between 7000' and 23,000'.
    - (e) Surface Weather.
    - (f) Other Weather.
    - (g) Wind factor.
- (2) **Meteorology.**
  - (a) Transmission of meteorological information upon request in plain language.
  - (b) Aircraft contemplating ditching may request and receive reports concerning the following elements in the order given:
    1. Unless previously established, position of the ship degrees and minutes of latitude and longitude, at the time the observation was taken;
    2. Sea level pressure;
    3. Surface wind direction in degrees true;
    4. Surface wind speed in knots;
    5. Swell intensity, length, height and direction from which they are moving;
    6. State of sea;
    7. Visibility;
    8. Amount and height above the sea of base of low cloud (both main layer and any scattered cloud below);
    9. Present weather;
    10. Remarks.

(3) **Search and Rescue.**

- (a) Ocean station vessels will assist aircraft in distress by furnishing:
  1. Meteorological information;
  2. DF bearings;
  3. Beacon transmissions;
  4. Radar plotting;
  5. Relaying of information;
  6. Alerting of Search and Rescue facilities;
  7. Laying flare path or directing searchlights;
  8. Advising of other planes or ships in the area;
  9. Smoothing of sea;
  10. Actual search and rescue or direction thereof.

\* (4) **Navigational and Communications Aid.**

- (a) U. S. ocean station vessels maintain communication watches on:
  1. MF channel (500 kHz) for distress, urgency and safety traffic;
  2. HF voice channel (2182 kHz);
  3. VHF voice channels (121.5, 126.7 MHz);
  4. UHF voice channels (243.0, 272.7 MHz).
- (b) Subject vessels will handle messages concerning:

1. Position reports, urgent NOTAMS, urgent meteorological messages, important operational messages and when contact cannot be made with aeronautical land stations. The heading of such messages will carry adequate routing instructions to insure proper relay.

(c) **Caution:** U. S. Pacific ocean station vessels periodically conduct gunnery and pyrotechnic exercises.

A NOTAM is issued prior to each exercise advising:

1. Type of exercise.
2. Danger radius in yards.
3. Danger altitude in feet.
4. Date and time the operation will be conducted.
5. That radar surveillance of air traffic is maintained.

Safety precautions observed include:

1. Safety messages transmitted one half hour in advance of exercise, repeated at half hour intervals until conclusion, on 3023.5 kHz and 121.5, 126.7, 243, and 272.7 MHz.
2. Visual sky scan for aircraft.
3. Increased radar vigilance and radar plot for all aircraft throughout exercise.
4. Cease firing whenever an aircraft enters the danger area.

\* Radio beacon operates four times hourly 24 hours daily for 5 minute periods commencing at 05, 20, 35 and 50 minutes past the hour and on request.

1. After initial contact has been requested. Position of aircraft on this page and will be indicated.

A. Identification (two letters) transmitted when the beacon is used. Ocean station vessels shall maintain whenever possible a grid may be applied to all stations. (1) Under this system: 7 nautical miles.

2. Using ocean station vessel grid (within cross-hatched square).

(a) Ship in center square of grid. Sequence repeated for each station vessel.

(b) Ship out of center square of grid. (Y.N. IM...). If ship is on station, and that ship is first, longitude (across) of center of cross-hatched square. (Y.N. IM...). If center of above mentioned square bears 56°30' true from station vessel bears 56°30' true from center of cross-hatched square (ten nautical miles). If center of ship bears 56°30' true, 37 nautical miles from center of cross-hatched square.

(c) Ship within limits of grid. (Y.N. ZZ, YP ZZ, etc.,) will be maintained in order not to affect special request beacon service or affecting rendezvous. Call for five minutes only unless a longer time would be kept to a minimum.

(d) Ship off station grid, position maintained in order not to affect special request beacon service or affecting rendezvous. Call for five minutes only unless a longer time would be kept to a minimum.

(e) Beacon service enroute request only, frequency 522 kHz.

### POSITION REPORT

	A	B	C	D	E	F	G
A							
B							
C							
D							
E							
F							
G							
H							
I							
J							
K	0	100	90	80	70		40
L							
M							
N							
O							
P							
Q							
R							
S							
T							
U							
V							
	A	B	C	D	E	F	G



USE OF GRID

After initial contact has been made with vessel, its present position (co-ordinates) should be requested. Position of all vessels will be given in relation to the grid as noted on this page and will be indicated by beacon transmission divided into the following components:

A. Identification (two letters). B. Position group (two letters). C. Twenty-second dash (not transmitted when the beacon is of the modulated continuous-carrier type). (1) Ocean station vessels shall maintain whenever practicable a position within the center square of grid. (2) This may be applied to all stations. Considering center of cross-hatched square as published position of ocean station. (3) Use center of squares for all computations. (4) Maximum error under this system: 7 nautical miles; average probable error: 4 nautical miles.

Using ocean station vessel November as an example, beacon transmission would therefore be:  
 (a) Ship in center square of grid: YN OS (20 second dash or continuous carrier) YN OS ..... sequence repeated for five minutes, interpreted to mean that ship is in center of grid (within cross-hatched square) use position 30°00'N 140°00'W for position of ocean station vessel.

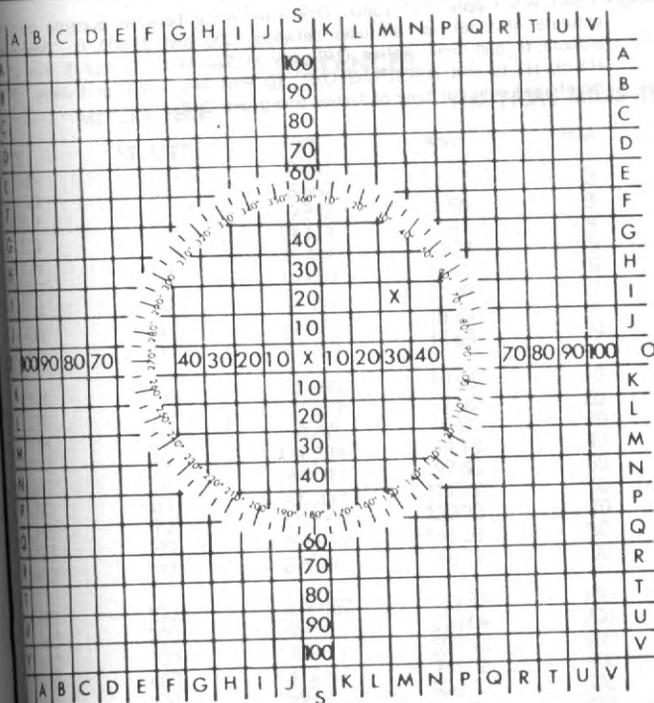
(b) Ship out of center square, but still on station grid: YN IM (20 second dash or continuous carrier) YN IM ..... sequence repeated for five minutes, interpreted to mean that ship is on station, and that ship's navigation places her grid square IM (Note: read latitude first, longitude (across) second). By using straight edge, extended to compass rose, through center of cross-hatched square and center of square IM it is determined that ocean station vessel bears 56°30' true from published position. Using dividers, measure distance between center of above mentioned squares, then read distance along any line (sides of small square = ten nautical miles). It can then be determined that the new position of ship is 37 nautical miles from center of cross-hatched square. Therefore, from above computations, it is determined that ship bears 56°30' true, 37 nautical miles from 30°00'N 140°00'W.

(c) Ship within limits of grid, position uncertain: If ship cannot determine her position within a probable error of 10 miles, scheduled beacon service will be maintained but call sign YN ZZ, YP ZZ, etc., will be used.

(d) Ship off station grid, proceeding on distress mission: No scheduled beacon service will be maintained in order not to cause interference with other radio communication channels. Special request beacon service will be furnished to search planes for purpose of aiding search affecting rendezvous. Call sign YN ZZ, YP ZZ, etc., will be used and beacon will transmit for five minutes only unless a new request is made. To avoid beacon interference these requests should be kept to a minimum.

(e) Beacon service enroute to and returning from all stations; beacon service will be on request only, frequency 522 kHz.

POSITION REPORTING GRID SYSTEM FOR OCEAN STATION VESSELS



↑ READ LATITUDE DESIGNATOR FIRST

of an ocean port should HF or UHF.

altitude) for

language. concerning the and minutes of

are moving;

main layer and

g:

n: ffic;

messages, important land stations. The proper relay. conduct gunnery and

exercise, repeated at and 272.7 MHz.

t throughout exercise. periods commencing at

**OCEAN STATION NOVEMBER (CG)** 30°00'N 140°00'W

Chart 1

NAV AIDS

RbN① YN② 335

D/F 4YN 250-30,000 (Calibrated for Aero Beacon and 2-3 MHz bands)

AIR/GROUND

**VOICE, CALL OCEAN STATION NOVEMBER** - 126.7 272.7 2182 (E)

**CW, CALL 4YN** - 8364③ 500

**RADAR** - O/R

**REMARKS** - Vessel will supply "D" values O/R (difference between pressure altitude and absolute altitude) for altitudes between 7000 and 23,000 ft. Beacon service enroute to and from station O/R only in 522 kHz. ① Opr 5 min at H+05, H+20, H+35 and H+50 and O/R. ② Plus two letter grid code. ③ Watch maintained only dur time of known emerg and O/R.

mb	0	1
940	27.76	27.79
950	28.05	28.08
960	28.35	28.38
970	28.64	28.67
980	28.94	28.97
990	29.23	29.26
1000	29.53	29.56
1010	29.83	29.85
1020	30.12	30.15
1030	30.42	30.45
1040	30.71	30.74
1050	31.01	31.04

**OCEAN STATION PAPA (DOT)** ③ 50°00'N 145°00'W

Chart 1

NAV AIDS

RbN① YP 388

HF/DF - 2182 5680 8364

MF/DF - 500 Use 500 kHz for initial call and then change to 410 for brg

**VOICE, CALL OCEAN STATION PAPA** - 126.9 286.6 2987 5680 5521.5 8364

8939 13274.5 (E)

**CW, CALL 4YP** ① - 500 2182

**RADAR** - O/R

**REMARKS** - ① 3023.5 VOICE and CW aval dur Air Sea Rescue Ops. ② Cont ex when inter would be caused to other ship facs. ③ Dept of TRANS CANADA.

°C	°F	°C	°F	°C
-40	-40.0	-28	-18.4	—
-39	-38.2	-27	-16.6	—
-38	-36.4	-26	-14.8	—
-37	-34.6	-25	-13.0	—
-36	-32.8	-24	-11.2	—
-35	-31.0	-23	-9.4	—
-34	-29.2	-22	-7.6	—
-33	-27.4	-21	-5.8	—
-32	-25.6	-20	-4.0	—
-31	-23.8	-19	-2.2	—
-30	-22.0	-18	-0.4	—
-29	-20.2	-17	1.4	—

**OCEAN STATION VICTOR (CG)** 34°00'N 164°00'E

Chart 1

NAV AIDS

RbN① YV② 391

D/F, 4YV 250-30,000 (calibrated for Aero Beacon and 2-3 MHz bands)

AIR/GROUND

**VOICE, CALL OCEAN STATION VICTOR** - 272.7 126.7 2182 (E)

**CW, CALL 4YV** - 8364③ 500

**RADAR** - O/R

**REMARKS** - Vessel will supply "D" values O/R (difference between pressure altitude and absolute altitude) for altitudes between 7000 and 23,000 ft. Beacon service enroute to and from station O/R only in 522 kHz. ① Opr 5 min at H+05, H+20, H+35 and H+50 and O/R. ② Plus two letter grid code. ③ Watch maintained only dur time of known emerg and O/R.

MTR	FT-MTR
0.305	1
0.610	2
0.914	3
1.219	4
1.524	5
1.829	6
2.134	7
2.438	8
2.743	9
3.048	10
6.096	20
9.144	30
12.192	40
15.240	50
18.290	60
21.340	70
24.380	80
27.430	90
30.480	100
60.960	200
91.440	300
121.920	400
152.400	500
304.800	1000
609.600	2000
914.400	3000
1219.200	4000
1524.000	5000

HERMO

METERS FEET

MILLIBARS TO INCHES

Chart 1 (KOSN)	INCHES									
	0	1	2	3	4	5	6	7	8	9
940	27.76	27.79	27.82	27.85	27.88	27.91	27.94	27.96	27.99	28.02
950	28.05	28.08	28.11	28.14	28.17	28.20	28.23	28.26	28.29	28.32
960	28.35	28.38	28.41	28.44	28.47	28.50	28.53	28.56	28.58	28.61
970	28.64	28.67	28.70	28.73	28.76	28.79	28.82	28.85	28.88	28.91
980	28.94	28.97	29.00	29.03	29.06	29.09	29.12	29.15	29.18	29.21
990	29.23	29.26	29.29	29.32	29.35	29.38	29.41	29.44	29.47	29.50
1000	29.53	29.56	29.59	29.62	29.65	29.68	29.71	29.74	29.77	29.80
1010	29.83	29.85	29.88	29.91	29.94	29.97	30.00	30.03	30.06	30.09
1020	30.12	30.15	30.18	30.21	30.24	30.27	30.30	30.33	30.36	30.39
1030	30.42	30.45	30.47	30.50	30.53	30.56	30.59	30.62	30.65	30.68
1040	30.71	30.74	30.77	30.80	30.83	30.86	30.89	30.92	30.95	30.98
1050	31.01	31.04	31.07	31.10	31.12	31.15	31.18	31.21	31.24	31.27

THERMOMETER SCALES IN DEGREES

Chart 1 (PHSV)	THERMOMETER SCALES IN DEGREES														
	°C	°F	°C	°F	°C	°F	°C	°F	°C	°F	°C	°F			
40	-40.0	-28	-18.4	-16	3.2	-4	24.8	8	46.4	20	68.0	32	89.6	44	111.2
49	-38.2	-27	-16.6	-15	5.0	-3	26.6	9	48.2	21	69.8	33	91.4	45	113.0
58	-36.4	-26	-14.8	-14	6.8	-2	28.4	10	50.0	22	71.6	34	93.2	46	114.8
67	-34.6	-25	-13.0	-13	8.6	-1	30.2	11	51.8	23	73.4	35	95.0	47	116.6
76	-32.8	-24	-11.2	-12	10.4	0	32.0	12	53.6	24	75.2	36	96.8	48	118.4
85	-31.0	-23	-9.4	-11	12.2	1	33.8	13	55.4	25	77.0	37	98.6	49	120.2
94	-29.2	-22	-7.6	-10	14.0	2	35.6	14	57.2	26	78.8	38	100.4	50	122.0
103	-27.4	-21	-5.8	-9	15.8	3	37.4	15	59.0	27	80.6	39	102.2		
112	-25.6	-20	-4.0	-8	17.6	4	39.2	16	60.8	28	82.4	40	104.0		
121	-23.8	-19	-2.2	-7	19.4	5	41.0	17	62.6	29	84.2	41	105.8		
130	-22.0	-18	-0.4	-6	21.2	6	42.8	18	64.4	30	86.0	42	107.6		
139	-20.2	-17	1.4	-5	23.0	7	44.6	19	66.2	31	87.8	43	109.4		

DISTANCES

MTR	METERS FEET		NAUTICAL MILES TO		
	FT-MTR	FT	KM	NM	SM
0.305	1	3.281	1.85	1	1.15
0.610	2	6.562	3.71	2	2.30
0.914	3	9.842	5.56	3	3.46
1.219	4	13.123	7.41	4	4.61
1.524	5	16.404	9.27	5	5.76
1.829	6	19.685	11.12	6	6.91
2.134	7	22.966	12.97	7	8.06
2.438	8	26.247	14.83	8	9.21
2.743	9	29.528	16.68	9	10.36
3.048	10	32.809	18.53	10	11.52
6.096	20	65.617	37.06	20	23.03
9.144	30	98.426	55.60	30	34.55
12.192	40	131.234	74.13	40	46.06
15.240	50	164.043	92.66	50	57.58
18.290	60	196.852	111.19	60	69.10
21.340	70	229.660	129.72	70	80.61
24.380	80	262.469	148.26	80	92.13
27.430	90	295.278	166.79	90	103.64
30.480	100	328.087	185.32	100	115.2
60.960	200	656.1	370.64	200	230.3
91.440	300	984.3	555.96	300	345.5
121.920	400	1312.3	741.28	400	460.6
152.400	500	1640.4	926.60	500	575.8
182.880	600	1968.5	1111.92	600	691.0
213.360	700	2296.7	1297.24	700	806.1
243.840	800	2624.8	1482.56	800	921.3
274.320	900	2952.9	1667.88	900	1036.4
304.800	1000	3281.0	1853.2	1000	1151.6

**RADAR ADVISORY SERVICE**

1. The radar net exists primarily for the air defense system. The services outlined here-in are of secondary importance and when necessary will be discontinued without prior notice in order to perform the primary mission. Under no circumstances should the radar advisories be construed as air traffic control. The assistance provided will be informative in nature and will not relieve the pilot of responsibility for safety of flight.

2. Aircraft desiring assistance from the radar system will request the necessary service from the nearest radar station. The individual call sign will be used as indicated. If contact cannot be established with the individual call sign, the collective call sign "Star Gazer" should be used.

3. Initial contact by military aircraft will be made on 278.4 except Guam use 118.5 or 255.4 Civil aircraft will use the emergency frequencies of 243.0 MHz (UHF) or 121.5 MHz (VHF). Ground controllers may request use of other frequencies for further transmission.

4. After contact is established, aircraft will give station:

- a. Approximate position.
- b. Magnetic heading.
- c. Altitude.
- d. Assistance required. (If emergency, so state)

(1) Interceptor aircraft and GCI-GCA letdowns are available in the 5th AF Area at: Chitose, Itazuke, Miho, Misawa, Kimpo, Osan, Kadena and Naha.

(2) Interceptor aircraft and GCI-GCA letdowns are available in the Taiwan Area at: Hsin-Chu, T'ai Nan, T'ao-Yuan, Ching-Chuan Kang.

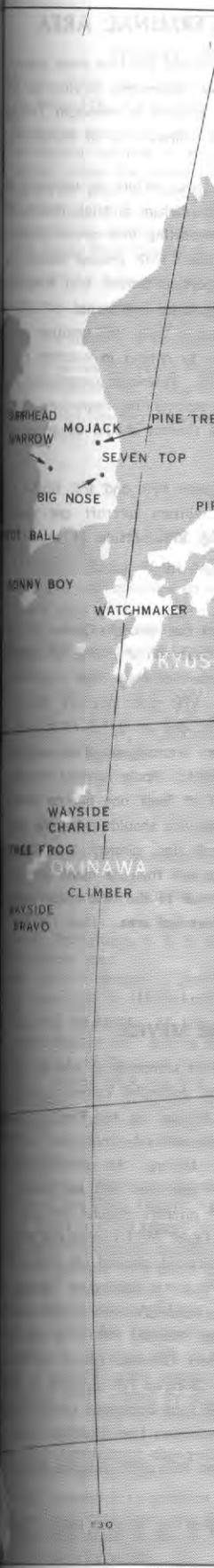
(3) ARTC clearance must be obtained prior to GCI-GCA letdowns.

5. The pilot must be responsible for obtaining changes in ARTC clearance. Ground stations will assist in obtaining clearances when necessary, and will control aircraft requiring assistance around other aircraft as necessary within radar capabilities.

6. Distress procedures remain unchanged.

7. If, for any reason, assistance requested cannot be provided, the radar will transmit "UNABLE". No explanation will be given.

8. Bearing or "Pigeons" received from GCI sites are not corrected for wind effect and should not necessarily be used as a compass heading unless specifically informed otherwise.





## RADAR SERVICE PROGRAM HONOLULU TERMINAL AREA

1. The VFR Radar Service Program in the Honolulu Terminal Area includes full time radar advisory service for VFR aircraft in the Honolulu Terminal Area and radar sequencing service for VFR aircraft arriving Honolulu Airport. Pilots of VFR aircraft arriving airports in Honolulu Terminal area should contact Honolulu Approach Control when 25 miles out. Aircraft W of Victor 9 use 118.3 or 269.0 MHz. Aircraft E of Victor 9 use 119.1 or 353.7 MHz.

Approach control will issue runway, wind, and traffic information and vectors as necessary for proper sequencing with other arriving aircraft at primary airport. 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 ground control and advise direction of flight. Tower will advise when to contact departure control and frequency. Since this is a voluntary program, the procedures to be used 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 minimum required by FAR 91.105. Whenever compliance with an assigned route or heading is likely to compromise said pilot responsibility respecting terrain and obstruction clearance and weather minima, Honolulu Approach Control should be so advised so that the heading may be revised, as appropriate.

2. To decrease frequency of reported near mid/air collisions between VFR and IFR flights and eliminate mid/air collision potential in Hawaiian Islands area, military aircraft are strongly encouraged to take one of two courses of action when operating VFR outside of warning or restricted areas.

a. File an IFR flight plan prior to departure.

b. Take advantage of the VFR radar advisory service provided by the Honolulu Center.

The area of greatest concern is the heavily used climb/descent airspace on V4, V12, V8, and V2 north and east of the Koko Head VORTAC. Safetywise, it is essential that high performance military aircraft operating VFR in this area take advantage of the VFR radar advisory service by contacting Honolulu Center on 291.6 MHz prior to crossing V4/V12 and on 317.5 MHz prior to crossing V8/V2 north and east of the Koko Head VORTAC. Military aircraft operating northwest, west and southwest of Oahu should contact the center on 269.4 MHz. Radio contact should be established with ARTCC as soon as practicable and in any event at least one minute prior to entering controlled airspace. Flights desiring VFR radar advisory service should make the statement "request VFR radar advisory service" and then give voice call sign, aircraft type, altitude and position with respect to nearby VORTAC. Radar identification will then be made and radar advisories issued until they are no longer required. **This is in addition to the VFR radar advisory service provided by Honolulu APP CON for flights to the Honolulu terminal area.** (Jun 1967)

## OKINAWA

## ENROUTE RADAR AIR TRAFFIC CONTROL SERVICE

Enroute Radar Air Traffic Control service, utilizing radar separation standards is applied within the Okinawa FIR continuously within areas where direct pilot to controller communications are possible. Separation minima applied is as specified in US/FAA Manual of Air Traffic Control Procedures. These procedures were implemented in accordance with authority contained in ICAO PANS/PAC/DOC 4444 RAC/501/9/Part III/Reduction in Separation Minima. All aircraft inbound via airways A82/B62/G81 and JG81 and JR83 from the southwest and west will be directed to change over to radar control by Okinawa Flight Following. All jet aircraft inbound R84 and R85 from the southeast contact Okinawa Center on frequencies 279.2/124.6/or 246.1 twenty-five minutes prior to estimate for the Kadena VOR/TACAN. All conventional aircraft inbound via R83 or R84 from the southeast will contact Okinawa Center 10 minutes prior to points Herring or Thresher on frequencies 279.2/124.6 or 246.1. All aircraft inbound via A85/A86/A82/J75V/JG81 or G81 contact Okinawa Center on frequencies 279.2/246.1 or 124.6 upon entering Okinawa FIR from the north and northwest. All aircraft on A1 at FL 180 or above will contact Okinawa Center on 124.6/246.1/or 279.2 at Blenny or Tuna East. All aircraft transiting the Okinawa FIR via A90 in either direction contact Okinawa Center on Frequencies 279.2/124.6/or 246.1 at Barracuda and Marlin. Required routing for all aircraft above FL 190 overflying Okinawa to and from Southeast Asia:

1. Southwest bound from Tokyo FIR: "JG81 Cockle direct Okino RBn JR95 Miyako RBn JGR Heng-Chun/or B62 Gurnet."

2. Northeast bound from T'ai-pei FIR or Manila FIR with routing via Miyako RBn: "Miyako RBn JR95 Okino RBn direct Cockle." (May 1968)

## ENROUTE RA

Enroute Radar Air Traffic Control service in the Taegu FIR at and above FL 100. Separation Minima are applied in the control function in the Taegu FIR under the jurisdiction of the Taegu FIR. Concurrent with the inauguration of the Taegu FIR must have a procedure while operating at or above 10000 from Taegu High Control flight following service.

1. The controllers workload is reduced.
2. The aircraft is equipped with a Mode S transponder.
3. If on an IFR Flight Plan, the aircraft is tracked simultaneously; i.e., Taegu High Control will provide preferential routing between Taegu and Seoul (Mar 1969)

## RADAR AD

1. T'ai-pei Radar Flight Following service is provided in the T'ai-pei FIR and operated on a 24-hour basis. The area of coverage is from 120°E to 120°W, 21°N to 25°N, RED 71, or GREEN 81 to the T'ai-pei FIR boundary to NOOK. All aircraft inbound to the T'ai-pei FIR, RED 71, or GREEN 81 should contact the T'ai-pei FIR prior to points MARLIN, NOKK, or TAI-PEI FLIGHT FOLLOWING. Contact other agencies.

Initial contact will be made on the voice call "Star Gazer." Service is provided to Honolulu VORTAC. For emergency.

NOTE: Paragraphs 1, 4, 5, 6, and 7 of this advisory service are not applicable to the Hawaiian area.

Radar advisory service is provided in the Hawaiian Islands at flight levels 240 to 410 inclusive.

**HAWAIIAN ISLANDS:** 16 SM easterly from Honolulu to the Hawaiian Islands. Sunrise Hawaii via V-14 to Dogwood Hawaii. Honolulu Hawaii VOR via V-9 to the Hawaiian Islands. Southgate Hawaii via V-10 to Crater, Hawaii DME fix. Hilo, Hawaii via V-10 to Crater, Hawaii DME fix. West Boundary.

Cell Name: "Honolulu Center" and "Honolulu Center on 126.5 (West), 118.5 (East)."

**MARIANA ISLANDS:** With the exception of the Hawaiian Islands, the side of the rhumbline between the Hawaiian Islands and the Mariana Islands shall communicate with Guam Center.

Procedures: The following procedures apply to the Hawaiian Islands:

1. Military and civil aircraft will be tracked in the Air Traffic Control system.

2. Aircraft operating VFR or VFR on a flight plan shall before entering the Hawaiian Islands contact the appropriate ARTCC center by direct communication with the controlling Air Defense facility.

3. Aircraft operating VFR or VFR on a flight plan shall obtain authorization to operate in the Hawaiian Islands areas maintaining appropriate altitude and direction of flight.

4. ATC clearance to climb or descend to a higher altitude does not constitute specific authorization to enter the Hawaiian Islands jet advisory areas.

5. Aircraft equipped with Mark X SIF or ATIS shall be tracked in the Hawaiian Islands jet advisory areas.

## MINIMAL AREA

full time radar advisory, sequencing service for VFR flights in Honolulu Terminal Area. Radar service for aircraft W of Victor 9 use vectors as necessary for when a pilot reports the need for VFR aircraft desiring to operate with ground control and frequency. This is interpreted as relieving the pilot of the basic VFR weather conditions. Remain in weather conditions whenever compliance with visibility respecting terrain should be so advised.

VFR and IFR flights and other aircraft are strongly advised to remain outside of warning or

Honolulu Center.

on V4, V12, V8, and V2 that high performance radar advisory service by on 317.5 MHz prior to aircraft operating northwest. Radio contact should be established one minute prior to aircraft should make the state- aircraft type, altitude when be made and radar the VFR radar advisory area. (Jun 1967)

## ADVISORY

standards is applied within controller communications is of Air Traffic Control authority contained in ICAO. All aircraft inbound west will be directed to inbound R84 and R83. 16.1 twenty-five minutes inbound via R83 or R84 Herring or Thresher on VJVG81 or G81 contact Wa FIR from the north Hawaii Center on 124.6/ Wa FIR via A90 in either Barracuda and Marlin. from Southeast Asia: R95 Miyako RBn JG81

Miyako RBn: "Miyako

## KOREA

## ENROUTE RADAR AIR TRAFFIC CONTROL PROCEDURES

Enroute Radar Air Traffic Control Service utilizing radar separation standards is applied in the Taegu FIR at and above FL 240.

Separation Minima are applied as specified in US/FAA Manual of Air Traffic Control Procedures. The control function in the Taegu FIR has been divided at, FL 240 with operations above this altitude under the jurisdiction of Taegu High Control and below FL 240 Taegu Low Control. Concurrent with the inauguration of Radar Air Traffic Control Service, all aircraft operation in the Taegu FIR must have a functioning transponder (IFF/SIF). In the event of transponder failure while operating at or above FL 240, whether VFR or IFR, permission must be obtained from Taegu High Control flight in the high altitude structure.

Radar Flight Following Service is available below FL 240 under the following conditions:

1. The controllers workload will permit him to provide the service.
2. The aircraft is equipped with a functioning transponder.
3. If on an IFR Flight Plan, the aircraft must be capable of monitoring two radio frequencies simultaneously; i.e., Taegu High Control and Taegu Low Control.

Preferential routing between Korea and Japan is outlined under Korean Special Notices. (Mar 1969)

## TAIWAN

## RADAR ADVISORY FLIGHT FOLLOWING SERVICES

Tai-pei Radar Flight Following Services will be furnished in the southern portion of the Tai-pei FIR and operated on a 24 hour basis.

The area of coverage is from NOOK Intersection along the northwest boundary of Airway 71, GREEN 81 to the Tai-pei FIR boundary (EAGLE RAY), thence south and west along Tai-pei FIR boundary to NOOK Intersection.

All aircraft inbound to the Tai-pei FIR from the south, southwest, or northeast via Airway 91, RED 71, or GREEN 81 shall contact TAI-PEI FLIGHT FOLLOWING on 128.1 or 234.8 prior to points MARLIN, NOOK, or TROUT. Pilots are expected to make all position reports TAI-PEI FLIGHT FOLLOWING while in the area designated in para. 2 until instructed to contact other agencies.

## HAWAIIAN AREA

Radio contact will be made on 364.2 or any Honolulu Center freqs (243.0 and 121.5 available) by calling "Star Gazer." Services available are local storm advisory service and distance and time to Honolulu VORTAC. Flight plans or position reports will not be relayed except in emergency.

NOTE: Paragraphs 1, 4, 5, 6 and 7 of RADAR ADVISORY SERVICE on page 212 also apply to the Hawaiian area.

Radar advisory service is provided for jet flights operating along the following routes between alt levels 240 to 410 inclusive:

**HAWAIIAN ISLANDS:** 16 SM either side of the routes between Shark Hawaii Int via V-12 to Pearl and Hermes Hawaii Int via V-4 to South Port Allen Hawaii Int. Orchid Hawaii Int via V-14 to Dogwood Hawaii Int. South Kauai Hawaii VOR via V-15 to Vanda Hawaii Int. Honolulu Hawaii VOR via V-9 to South Honolulu Hawaii Int. Southgate Hawaii Int via V-8 to Hawaii Int. Southgate Hawaii Int via V-16 to Upolu Point Hawaii VOR then via V-18 to Hawaii DME fix. Hilo, Hawaii VOR via V-19 to Lobster, Hawaii DME fix. Hilo, Hawaii Int via V-10 to Crater, Hawaii DME fix. Hilo, Hawaii VOR via 069° radial to the Oceanic Control Boundary.

**Call Name:** "Honolulu Center" Air/ground frequencies; Jet aircraft communication with Honolulu Center on 126.5 (West), 118.5 (Northeast), and 119.3 (Southeast).

**MARIANA ISLANDS:** Within 100 NM of Agana VOR along the following routes: 16 SM either side of rhumbline between (1) Honolulu/Guam (2) Guam/Wake (3) Guam/Manila. Jet aircraft communicate with Guam Center on 118.5.

**Procedures:** The following procedures apply while operating into or within radar jet advisory areas: Military and civil aircraft with operational Mark X SIF or ATCRBS no change from procedures in the Air Traffic Control Radar Beacon System (ATCRBS).

Aircraft operating VFR or VFR-on-top IFR clearance, but not equipped with operational Mark X SIF or ATCRBS shall before entering a radar jet advisory area, obtain authorization from the appropriate ARTC center by direct communication with it or relay through the nearest FSS or the controlling Air Defense facility. In the event of two-way communications failure which precludes obtaining authorization to operate within radar jet advisory areas, the flight may proceed across those areas maintaining appropriate VFR cruising flight level as specified in FAR 91 or AFM 60-16 in the direction of flight.

ATC clearance to climb or descend in VFR conditions or ATC clearance to maintain VFR-on-top does not constitute specific authorization to operate within jet advisory areas. Aircraft equipped with Mark X SIF or ATCRBS are not required to obtain authorization for operation in jet advisory areas.

## THAILAND AREA

In the Thailand area, flight following is available during both IFR and VFR. Frequencies listed next to the site call signs are for tactical aircraft or non tactical code 7 or higher. All other aircraft will be handled on 278.4 and 135.9 MHz. However, if 278.4 is non-operational, aircraft will be accepted on tactical frequencies. All sites have IFF/SIF. Paragraphs 1, 2, 6, 7, & 8 of Radar Advisory Service on page 222 apply. Aircraft on IFR flight plan will maintain a listening watch on appropriate ATC frequency. See appropriate Aerodrome/Facility Directory listing for other services. All aircraft that are on an IFR flight plan must advise any TAC Radar Site the contact of this fact upon initial check-in.

GREEN HILLS	Dressy Lady	285.7
MUANG UBON	Lion	234.3
MUKDAHAN	Viking	314.7
NAKHON PHANOM WEST	Invert	265.5
PHITSANULOK	Dora	261.6
UDORN	Brigham	228.4

## VIETNAM AREA—TACTICAL AIR CONTROL SYSTEM

Within the Vietnam ADIZ, radar service is available during both IMC and VMC. Radar stations can be contacted on the frequencies listed below and can provide advisory service and available friendly artillery warnings. Pilot is responsible for requesting the type of service required.

## DEFINITIONS

**RADAR MONITORING:** A service provided by a radar facility to an aircraft when the primary means of navigation is being performed by the pilot. The pilot is informed of deviations from his intended flight path and potential hazards to flight. Terrain clearance is not provided except during a radar monitored approach. The availability of radar monitoring service is dependent upon the workload of the radar facility. This service is advisory and control is not exercised.

**RADAR CONTROL:** Includes all the services provided in radar monitoring plus control of the heading and altitude by radar controllers and standard separation is provided IAW joint host nations agreements. Paragraphs 1, 2, 6, 7 and 8 of Radar Advisory Service, page 222 also apply. When contacting radar stations for service, pilots shall identify type of flight plan upon which he is operating. IFR flights shall obtain Saigon ACC approval for any change in their flight plan, i.e., altitude or route of flight. UHF/DF service is available from Paris, Pyramid, Portcall and Waterboy. See appropriate Aerodrome/Facility Directory listings for other services.

DANANG	PANAMA	366.0	(Above FL195/Enroute and return to base)
		376.9	(Tactical Support acct FL110 and below)
SAIGON	PARIS	347.9	(020°-120° TSN)
		362.9	(120°-270° TSN)
		276.1	(270°-020° TSN)
		271.8	(Tactical jet recovery)
NHA TRANG	PORTCALL	342.4	133.2 (N of Nha Trang)
		378.9	133.2 (S of Nha Trang)
		233.2	(Recovery)
BINH THUY	PADDY	344.0	131.3 (340°-100° Binh Thuy)
		351.9	131.3 (100°-340° Binh Thuy)
BAN ME THUOT	PYRAMID	378.1	136.3 (FL 110 and above)
		225.7	136.3 (Below FL 110)
PLEIKU	PEACOCK	377.9	129.3 (N 2300-1200Z)
		363.9	120.0 (S 2300-1200Z)
		377.9	129.3 (N/S 1200-2300Z)
DONG HA	WATERBOY	278.4	133.2

**NOTE:** Common frequencies for all Vietnam GCI radars are 278.4 133.2.

## SAIGON F

## RADAR SEPARATION

- Horizontal separation minimum
- Radar separation may be
  - Radar identified aircraft
  - A radar-identified aircraft climbing or descending through the scope
    - The performance of the aircraft being displayed on the scope
    - The airspace in which the aircraft is being displayed on the radar display.
    - Flight data on the display is requested to give an adequate picture
    - The identified aircraft is a radar identified IFR aircraft before display
    - Radar separation is not required if non radar separation is established

## RADAR BEACON CODE ASSIGNED TO EQUIPPED AIRCRAFT:

- Code - 01: Enroute tower
- Code - 04: Terminal area
- Code - 06: Below FL 240
- Code - 07: Above FL 240
- Code - 10: Climbing for
- Code - 11: Below FL 240
- Code - 14: Descent code
- Code - 20: Climbing to
- Code - 21: At or above
- Code - 76: Airborne com
- Code - 77: Emergency (t

## IDENTIFICATION

The pilot will be advised as to the observed position of the aircraft.

## POSITION INFORMATION

- When under Radar control the pilot is requested to permit him to revert to VFR.
- Radar position report will be provided if the aircraft is at this time still displayed on the radar. The pilot will also be advised.
- If at any time, a pilot is requested to provide position information.

## TRAFFIC AND WEATHER ADVISORIES

Traffic and weather advisories will be provided by the radar air traffic control facility. The controller will refrain from providing them at the discretion of the controller. The controller possesses complete authority to provide any specific advisory.

## TRAFFIC INFORMATION

- Traffic information shall include:
- Bearing from the aircraft in question
  - Distance from the aircraft in question
  - Direction in which the unknown aircraft is moving

## SAIGON FIR ENROUTE RADAR AIR TRAFFIC CONTROL PROCEDURES

### GENERAL PROCEDURES

#### RADAR SEPARATION

- a. Horizontal separation minimum between radar identified aircraft 5 NM
- b. Radar separation may be applied between:
  - (1) Radar identified aircraft
  - (2) A radar-identified aircraft and an IFR aircraft not radar identified when the former climbing or descending through the altitude of the latter, and the following conditions exist:
    - (a) The performance of the primary radar system is adequate and primary radar targets being displayed on the scope being used.
    - (b) The airspace in which separation is applied is not less than 10 miles from the edge of the radar display.
    - (c) Flight data on the unidentified IFR aircraft indicates it is a type which can be expected to give an adequate primary return in the area where separation is applied.
    - (d) The identified aircraft is vectored on a flight path different from the route of the unidentified IFR aircraft before descent or climb.
    - (e) Radar separation is maintained from all observed primary and radar beacon targets when non radar separation is established from the unidentified aircraft.

#### RADAR BEACON CODE ASSIGNMENT TO MODE A/3 CODED BEACON TRANSPONDER EQUIPPED AIRCRAFT:

- Code - 01: Enroute tower control
- Code - 04: Terminal area Viet Nam
- Code - 06: Below FL 240 VFR
- Code - 07: Above FL 240 VFR
- Code - 10: Climbing for departures for aircraft below FL 240
- Code - 11: Below FL 240
- Code - 14: Descent code
- Code - 20: Climbing to above FL 240
- Code - 21: At or above FL 240
- Code - 76: Airborne communications failure
- Code - 77: Emergency (time permitting)

#### IDENTIFICATION

The pilot will be advised as soon as his aircraft has been radar identified and, if required, advised of the observed position of his aircraft.

#### POSITION INFORMATION

- a. When under Radar control the pilot will be advised of the position of his aircraft frequently enough to permit him to revert readily to pilot navigation in the event of Radar or Radio failure.
- b. Radar position report will always be given on termination of Radar service and if the aircraft is at this time still displaced from its current flight plan route the displacement distance shall be advised.
- c. If at any time, a pilot is not satisfied with his reported position he should request further clarification.

#### TRAFFIC AND WEATHER ADVISORIES:

Traffic and weather advisories are provided as "additional services" to the primary obligations of the radar air traffic control facility and are not mandatory. Many factors could prevent the controller from providing them at any given time. The controller possesses complete discretion for determining whether he is able to provide or refuse to provide any specific additional service.

#### TRAFFIC INFORMATION

Traffic information shall include the following concerning the unknown aircraft:

- Bearing from the aircraft in terms of the 12 hour clock.
- Distance from the aircraft in nautical miles (NM).
- Direction in which the unknown aircraft is proceeding.



SPECIAL NOTICES SECTION

Special Notices of a permanent nature will be carried for three issues and then incorporated in the appropriate section of the applicable FLIP product, however, operational requirements may necessitate certain notices being carried for a longer period. Notices of a temporary nature will be carried in this section for the life of the notice. New or modified notices are emphasized by an outline and the date of first issuance of the top of the notice. Outline will be eliminated from temporary notices after three issues and issuance date will be relocated at the end of the notice.

A Special Notices section concerning NEW FLIP FEATURES appears below and contains notices of new requirements or major modifications of existing FLIPs. New notices appearing for the first time shall be shown first. New features notices will be carried for three issues and then dropped. In the event there are no new FLIP features, the word "NONE" shall be centered within the new FLIP feature box.

NEW FLIP FEATURES

DOD CATALOG OF AERONAUTICAL CHARTS and FLIGHT INFORMATION PUBLICATIONS

The DOD Catalog, Section III, now contains a complete rewrite of FLIP requisition and distribution procedures and a new Basis of Distribution Table, which will be used as a guide to determine the actual number of FLIPs required by all elements of the DOD. All individual procurement and basis of distribution instructions now contained in FLIPs will be replaced by a reference to the DOD Catalog. (Jan 1969)

SPECIAL VISUAL FLIGHT RULES

See page 259 for new Special Visual

Flight Rules Section. (Feb 1969)

CRUISING ALTITUDES

See new Cruising Altitude (MEA/MOCA) description in Procedure Section. (Mar 1969)

APPLICATION

July 1967

## SPECIAL NOTICE

A United States Standard for Terminal Instrument Procedures (TERPs) is the new approved criteria for formulating civil and military instrument procedures.

All instrument approach procedures will be revised to comply with this criteria.

Implementation of TERPs requires a change in the depiction of landing minima for instrument approach procedures. Figure 1 is a standard format that will be used to depict radar landing minima. When a procedure is developed or changed to comply with TERPs, the new format will be used.

## LANDING MINIMA FORMAT

As illustrated in Figure 1, the new format provides landing minima by approach categories and introduces several new terms.

RADAR	396.0	390.8	284.0	290.0	142.02	119.5	134.1	118.1	122.5R	121.1T	(E)
ASR	RWY	CATEGORY	MDA	RVR	HAA	CEIL-VIS	27	A, B, C, D, E	440/ 24	277	(300-1/2)
							09	A, B, C	540/ 24	377	(400-1/2)
							09	D, E	540/ 40	377	(400-3/4)
PAR	RWY	CATEGORY	DH	RVR	HAT	CEIL-VIS	27	A, B, C, D, E	265/ 16	100	(100-1/4) G.S. 2.5°
							09	A, B, C, D, E	365/ 24	200	(200-1/2) G.S. 3°
CIRC	RWYS	CATEGORY	MDA	VIS	HAA	CEIL-VIS	09-27	A	540-1	377	(400-1)
							09-27	B	620-1	457	(500-1)
							09-27	C	620-1 1/2	457	(500-1 1/2)
							09-27	D, E	720-2	557	(600-2)

FIG. 1—RADAR LANDING MINIMA

## EXPLANATION OF TERMS

**CATEGORY.** Five approach categories (A thru E) control landing minima for different types of aircraft. Landing minima for a particular type aircraft depends upon the category in which it is placed. Categories of U.S. military aircraft are listed in FLIP Planning. Except for certain military aircraft which are placed in a higher category for operational reasons, aircraft are categorized on the basis of speed and weight as follows:

## Approach Category

## SPEED/WEIGHT

A	Speed 50 - 90 Knots, weight 30,000 lbs or less.
B	Speed 91 - 120 Knots, or weight 30,001 - 60,000 lbs.
C	Speed 121 - 140 Knots, or weight 60,001 - 150,000 lbs.
D	Speed 141 - 165 Knots, or weight over 150,000 lbs.
E	Speed over 165 Knots, weight not considered.

**Note:** Speeds are based on 1.3 times the stall speed in the landing configuration at maximum gross landing weight. An aircraft shall fit in only one category, that being the highest category in which it meets either of the specifications. For example, a 30,000 pound landing weight aircraft with a computed speed of 130 knots fits into category C.

Landing minima will be listed only for those categories of aircraft authorized to make a particular approach. It should be noted, as in sample Figure 1, straight in landing minima for a specific approach is normally the same for all categories, however, circling minima is usually different for each category.

**DECISION HEIGHT (DH) and MINIMUM DESCENT ALTITUDE (MDA).** The term minimum altitude, associated with landing minima, has been replaced by the terms, Decision Height (DH), and Minimum Descent Altitude (MDA). DH applies to precision approaches (approaches with glide slope information). A MDA applies to non-precision approaches (approaches without glide slope information). **CAUTION: DH and MDA values are shown in feet above Mean Sea Level (MSL), and are the lowest altitude to which descent is authorized until the airport or runway environment is in sight.**

**HEIGHT ABOVE AIRPORT (HAA).** HAA indicates height of the MDA above the published airport elevation.

**HEIGHT ABOVE TOUCHDOWN (HAT).** HAT indicates the height of the DH above the highest runway elevation in the touchdown zone (first 3000 feet of runway).

**CEILINGS.** Ceiling values shown in parenthesis are for military use in accordance with directives of such service. A ceiling is expressed in feet above the published airport elevation, and is at or above the associated MDA or DH.

**VISIBILITY.** Visibility values are expressed as Runway Visual Range (RVR), Runway Visibility (RV), or prevailing visibility (PV). One of these values is shown with the lowest altitude DH or MDA authorized for the type approach. RVR will be shown in feet. (Example: 24 equals 2400 ft). RV will be shown in miles and fractions thereof. (Example 1 1/2 equals one and one-half miles). The visibility depicted immediately following the lowest altitude (DH, MDA) is the value to be used for determining if the field is above minimum for the type approach being flown. The visibility value shown in parentheses is for military pilots to use for the type of approach being flown when visibility values that follow the MDA/DH are not available.

## APPLICATION

Until all procedures are revised, both new and old minima formats will apply as published (July 1967)

## HAWAII

An oceanic organized route at altitudes FL 280 through FL 300.

Flights in the airspace above the route will be planned on a random basis.

Random flight plans may be filed with the option of ATC.

Transition between routes A and B will be starting and ending at a reported position.

Flight planning to join or leave the route (compulsory or non-compulsory) on published routes must be accomplished in accordance with the following:

Coded position reporting along the route will be reported as follows:

Standard position reporting procedure.

## HONOLULU FLIGHTS

1. TO AND FROM THE SAN FRANCISCO area: the primary oceanic route for the desired flight level is not used. The Northern Boundary between N and S is the same as for the Los Angeles area.

2. TO AND FROM THE LOS ANGELES area: the primary oceanic route for the desired flight level is not used. The Southern Boundary is the alternate route.

3. TO AND FROM THE SEATTLE area: Northwest area flights will finish at the desired flight level is not used. The main-stream of San Francisco Bay is the alternate route.

## HILO FLIGHTS

1. TO AND FROM THE SAN FRANCISCO area: will serve Hilo-San Francisco and Hilo and Agate.

2. TO AND FROM THE LOS ANGELES area: will serve Hilo-Los Angeles Area and Hilo departures and arrivals.

3. TO AND FROM SEATTLE area: will serve Hilo-Seattle area (Nov 1968)

## USAF

Information on the availability of weather data is contained in the Aerodrome Reference Manual. Utilize the services of USAF Air Weather Service (Aug 1968)

The new METAR and TAF codes will be used. Local observations and forecast data will be available. Be aware that two different data formats are used for the Pacific and Southeast Asia areas. The new Hourly/PLATF formats by NWS will be used. Local weather station data is being transmitted in metric units to aircrews and personnel. It is imperative that you be aware of the order which meteorological data is provided by other sources. The English-Metric conversion chart will provide approximately 6000 feet. (Feb 1968)

## HAWAIIAN DOMESTIC AND OCEANIC ROUTES

An oceanic organized route structure has been initiated between Hawaii and the Mainland at altitudes FL 280 through FL 390.

Flights in the airspace above, below and either side of the organized route structure may be planned on a random basis as heretofore.

Random flight plans may be filed within the route structure itself and may be cleared at the option of ATC.

Transition between routes ALPHA and BRAVO must be accomplished within a 5 degree zone starting and ending at a reporting meridian (compulsory or noncompulsory).

Flight planning to join or leave routes ALPHA and BRAVO must do so at a reporting meridian (compulsory or non-compulsory), the transition between the area boundaries and the two established routes must be accomplished within no more than 5° of longitude.

Coded position reporting along routes ALPHA and BRAVO will be every 10° of longitude and will be reported as follows: "ALPHA 130" or "BRAVO 130", etc.

Standard position reporting procedures will be used on all other flights.

## HONOLULU FLIGHTS

1. TO AND FROM THE SAN FRANCISCO AREA. Alpha Route between Agate and Apricot is the primary oceanic route for Honolulu-San Francisco flights at FL 280 through FL 390. When the desired flight level is not available on Alpha Route, pilots will be offered or may request the Southern Boundary between Neptune and Maple.

2. TO AND FROM THE LOS ANGELES AREA. Bravo Route between Banana and Cypress is the primary oceanic route for Honolulu-Los Angeles flights at FL 280 through FL 390. The Southern Boundary is the alternate for the Bravo Route.

3. TO AND FROM THE SEATTLE AND PACIFIC NORTHWEST AREA. Seattle and Pacific Northwest area flights will find it to their advantage to flight plan over Neptune. This is outside the main-stream of San Francisco area traffic and will greatly facilitate optimum altitude assignment.

## HILO FLIGHTS

1. TO AND FROM THE SAN FRANCISCO AREA. Alpha Route between Agate and Apricot will serve Hilo-San Francisco area flights. Foxtrot and Alpha Routes should be filed between Hilo and Agate.

2. TO AND FROM THE LOS ANGELES AREA. Southern Boundary between Schooner and Yucca will serve Hilo-Los Angeles Area flights. Sierra route between Schooner and Hilo will serve both departures and arrivals.

3. TO AND FROM SEATTLE AND PACIFIC NORTHWEST AREA. Agate will be the primary ingress/egress fix for these flights. Alpha and Foxtrot Routes will be used between Agate and Hilo (Nov 1968)

## USAF AIR TRAFFIC CONTROLLERS

Information on the availability of USAF Air Traffic Controllers at foreign airbases and facilities is contained in the Aerodrome/Facility Directory of the FLIP Supplement. USAF pilots should utilize the services of USAF Air Traffic Controllers when and where they are available. (Aug 1968)

## METAR CODE

The new METAR and TAF codes have been in use for transmission on longline exchange of surface observations and forecasts since 1 January 1968 outside CONUS, Alaska and Canada. The quantity of the technical data included precludes explanation in this Notice. Pilots should be aware that two different formats are being used by U. S. military weather activities in the Pacific and Southeast Asia areas: METAR/TAF formats by U. S. Force units and the Air Force Hourly/PLATF formats by Navy and Marine units. This has created some confusion to pilots in their use. Local weather stations will provide briefings on request. Although the METAR code is being transmitted in metric units, all information provided by U. S. military weather facilities to aircrews and personnel in support of aircraft operations will be in English dimensional units. It is imperative that pilots become familiar with the new format to eliminate confusion in the order which meteorological parameters are being transmitted in this new format. Weather data provided by other than U. S. facilities may be in metric units. To assist aircrews, an English-Metric conversion chart will be published in each FLIP Terminal as required. A simple 1 to 1 conversion will provide approximate information. For example, 2000 meters will equate to approximately 6000 feet. (Feb 1969)

## RUNWAY EDGE LIGHTS

HQ USAF has directed that the distances between the runway edge lights and the edge of the usable runway surface be indicated in the Aerodrome Remarks whenever this distance exceeds the criteria (10 ft) established in AFM 88-14. This is applicable to Air Force, Air National Guard and Air Force Reserve Bases, and those joint use airfields on which they are tenant. It is the responsibility of the appropriate commanders to submit this information for inclusion in the Aerodrome Remarks. (Aug 1967)

JANUARY 1969

## IFF/SIF SERVICE AVAILABILITY

IFF/SIF Service is considered to be an integral part of the radar system. Since nearly all radar installations have this capability, the remarks "IFF/SIF svc aval" have been removed from the RADIO/NAV REMARKS in individual listings in this directory. Where the capability does not exist, the RADIO/NAV REMARKS will include the statement, "IFF/SIF svc not aval". Restrictions to this service will continue to be published.

JANUARY 1969

## PILOT TO DISPATCHER (PTD)

The improper use of air traffic control frequencies to perform additional functions not directly concerned with the control of air traffic is a continuing factor in reducing the effectiveness of control tower operation. Pilot to Dispatcher (PTD) facilities were established during 1962 to satisfy a valid requirement for communications between aircrew members and base operations regarding aircraft and manifest changes, servicing, transportation, maintenance, quarters, VIP information, miscellaneous information intended for agencies other than ATC facilities, etc. Some PTD facilities also incorporated a telephone patch feature to the base switchboard allowing aircrews to make direct connections for official business. Locations providing PTD service are currently indicated in the FLIP Enroute Supplement directory listing by placing the abbreviation PTD and frequency on the COMMUNICATIONS subheading line. The voice call normally will be (name) Base Ops.

In the interest of eliminating non-ATC messages from ATC frequencies and improving control tower operations, request established PTD facilities be used for passing non-ATC information to Base Operations.

JANUARY 1969

## CRASH POSITION INDICATOR

The pilot of an aircraft experiencing inadvertent Crash Position Indicator deployment will report the deployment location and time to the nearest GCI site or the Air/Ground station servicing the FIR.

JANUARY 1969

## NEAR MID-AIR COLLISION STUDY

The DOD is supporting the study of near mid-air collisions established by the FAA. FLIP Planning Section II provides complete details of this study. To facilitate enroute reporting, initial reporting procedures are outlined below.

**INITIAL REPORT.** Each person who wishes to report an occurrence as a near mid-air collision should notify an air traffic facility (controlling if appropriate) via radio; "I wish to report a 'NEAR MID-AIR COLLISION' " and then give:

1. Time of Incident
2. Location and Altitude
3. Reporting aircraft's identification, type and destination
4. Available information on other aircraft
5. Weather Conditions
6. Approximate courses and flight altitude of both aircraft
7. Closest proximity horizontally and vertically between aircraft

**NOTE:** It is desirable to have the initial report by radio when time and frequency congestion permit in order to initiate action to identify the other aircraft involved.

All USAF base operations  
TERMINAL APPROACH PRO  
for approval prior to public  
(Aug 1968)

AIRWAY R  
HO

Airways R-71, W-30 and  
military and military cont  
emergencies or mission div  
airways and tracks in order

All flight levels, on R-71  
controlled and available throug  
440. FL 350 is also exclude

Preferential altitudes have  
who desire to file airspeed d  
will utilize preferential alti

Communications: Communica  
intersection can be establish  
ACC between BLACKFISH a  
and 6673; Secondary 13312  
681, R-71, and Track 200 a

Aircraft will not fly below 60  
(44°51'E, 4.7 NM NW of appr

The VFR Radar Service Progra  
Service for VFR aircraft in the  
arriving Andersen Airport. Pilot  
contact Guam Approach Control  
or 119.7 MHz. Approach Contr  
necessary for proper sequencing  
reports the aircraft he is to  
aircraft desiring traffic inform  
Andersen Ground Control or Na  
when to contact Departure Cont  
to be used are not to be inter  
other traffic operating in bas  
obstruction clearance, or to re  
required by FAR 91.105. When  
compromise said pilot responsi  
 minima, Guam Approach Contr  
appropriate. (Sep 1968)

All aircraft proceeding into the  
mation Region should file by or  
Flight Level 410 via 14°40'N 1  
level 280 through Flight Level  
Billis. North Route Flight Level  
10 VOR or A82, A83 Cabanatu  
y Guam Center. (Nov 1968)

## TERMINAL APPROACH PROCEDURES

All USAF base operations officers are requested to send changes to RADAR MINIMUMS and TERMINAL APPROACH PROCEDURES to their respective numbered Air Forces (5AF, 7AF, 13AF) for approval prior to publication in FLIP. This is in accordance with AFR 60-27/PACAF Sup-1. (Aug 1968)

FEBRUARY 1969

AIRWAY R-71 AND SOUTHEAST ASIA TRACKS/SAIGON,  
HONG KONG, MANILA AND T'AI-PEI FIR

Airways R-71, W-30 and Track 200 have been established as preferential routing for U. S. military and military contract aircraft in support of Southeast Asia. Except for weather, emergencies or mission diversions, all military and military contract flights will utilize these airways and tracks in order to insure maximum safety of flight.

All flight levels, on R-71 and Track 200, from altitude 4500 ft to unlimited shall be controlled and available through T'ai-pei ACC 24 hours daily, excluding FL 310/330 and FL 430/440. FL 350 is also excluded from use between 0900-1300Z daily.

Preferential altitudes have been established to include FL 190 through 240 for those aircraft who desire to file airspeed of no less than 280 KTS and no more than 295 KTS. C-130 aircraft will utilize preferential altitudes when routing includes R-71 to facilitate traffic separation.

Communications: Communications with T'ai-pei ACC between EAGLE RAY and BLACKFISH intersection can be established on VHF 126.7 and UHF 308.4. Communications with T'ai-pei ACC between BLACKFISH and SANDY intersection can be established on SSB-Primary 10081 and 6673; Secondary 13312 and 8868. NOTICE: USAF Controller available T'ai-pei ACC for 0801, R-71, and Track 200 air traffic **only**, 24 hours daily.

## GUAM

## ANDERSEN AFB

Aircraft will not fly below 6000' one NM radius of Satellite Tracking Station located 13°37'N 145°1'E, 4.7 NM NW of approach end to Runway 06R. (Sep 1968)

## TERMINAL RADAR SERVICE

The VFR Radar Service Program in the Guam Terminal Area provides full time Radar Advisory Service for VFR aircraft in the Guam Terminal Area and radar sequencing service for VFR aircraft arriving Andersen Airport. Pilots of VFR aircraft arriving airports in Guam Terminal Area should contact Guam Approach Control when 25 miles from Agana VORTAC. All aircraft use 269.0 MHz 119.7 MHz. Approach Control will issue runway, wind, and traffic information, and vectors as necessary for proper sequencing with other arriving aircraft at Andersen Airport. When a pilot starts 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 Navy 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 to be used 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 91.105. Whenever compliance with an assigned route or heading is likely to compromise said 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. (Sep 1968)

## GUAM FIR/MANILA FIR

Aircraft proceeding into the Manila Flight Information Region from the Guam Flight Information Region should file by one of the following routes: South Route Flight Level 390 through Flight Level 410 via 14°40'N 130°00'E direct 14°40'N 126°00'E direct Dillis G67 JO VOR. Flight Level 280 through Flight Level 370 on or South of 14°40'N 130°00'E, 14°40'N 126°00'E direct to the North Route Flight Level 350 and above, 20°00'N 130°00'E direct 19°20'N 124°15'E, A82 JO VOR or A82, A83 Cabanatuan RBN. Aircraft not filing as specified above will be rerouted to Guam Center. (Nov 1968)

## HAWAII

## HONOLULU VORTAC

The TACAN portion of the Honolulu VORTAC will be out of service on or about 2 Dec 68 to on or about 31 Mar 69. During this period use temporary TACAN ETT Channel 55. The exact date at this change will be issued by NOTAM. (Mar 1969)

## RAMP SILENCE AT HICKAM AFB

Ramp Silence will be implemented on DV request for planeside news conferences at Hickam. A minimum of 12 hours notification required. (Sep 1968)

## CONSTRUCTION AT HICKAM AFB

Extensive ramp and taxiway construction will be in progress on all portions of Hickam AFB until 1 July 1969. Aircraft parking space will be extremely limited in the area reserved for aircraft carrying material defined as "Dangerous" cargo (as defined in AFR 55-14) and in all other parking areas. Aircraft not carrying dangerous cargo and other transients may be required to park aircraft at some distance from Hickam on the South Ramp at Honolulu International. Required servicing and maintenance for these aircraft may be delayed. During the construction period, all aircraft operators are requested to (1) Schedule operations through Hickam only when absolutely necessary, and (2) When Hickam must be used as an enroute stop plan itineraries so that aircraft will be scheduled for minimum ground time (no more than 15 hours). (Jan 1969)

## HONOLULU INTERNATIONAL AIRPORT/HICKAM AFB

Noise abatement for Honolulu, Hawaii. All, repeat all, operators of C, EC, or KC-135 aircraft (water-augmented engines) must obtain prior permission from Commander or Deputy Commander for Operations, Hickam, before using Honolulu International Runways 04L or 04R for take-off. (Sep 1968)

## PROXIMITY OF HONOLULU/BARBERS POINT AERODROMES

All pilots are reminded of the proximity of Honolulu airport and Barbers Point airport. Exercise caution when approaching for Honolulu airport as both fields have parallel runways 04. Several landings and attempted landings have been made at Barbers Point by pilots mistaking it for Honolulu airport. Minimum IFR altitude for aircraft overflying Barbers Point NAS 2200'. Pilots arriving Honolulu Intl Apt under VFR should maintain 2500' until abeam midfield Barbers Point NAS to provide additional vertical separation above 1500' VFR traffic pattern W of Barbers Point. (Aug 1968)

Pilots of all military aircraft entering, departing or transiting within 25 NM of Honolulu Intl. VFR will request VFR traffic advisories. (Aug 1968)

Hazardous operations to 1822 daily. (Dec 1968)

Caution is advised in the use of particular VHF may be weak

Numerous tethered balloons Effective Altitude - To 2000'

Limited BOQ/BARRACKS av

Flight plans for departure with time. (Mar 1969)

Intensive jet aircraft operations except airways and restricted BE DELETED FROM THE APRIL

"Noise abatement procedure 15 NM out and 3000' MSL

Arriving multi-engine turbo landing during hours 1300-21

## HONG KONG

## HAZARDOUS OPERATIONS

hazardous operations to 1822' West of a line joining Ap Li Chau and Victoria Peak 0001-0900Z daily. (Dec 1968)

## INDONESIA

caution is advised in the usage of all Indonesian information as published in DOD FLIPs. In particular VHF may be weak and intermittent and RBn operating hours may vary. (Oct 67)

## JAPAN

MARCH 1969

## HAZARDOUS OPERATIONS

numerous tethered balloons within land areas of Japan. Acft advised to use extreme caution. Effective Altitude - To 2000'.

## ATSUGI NAS

limited BOQ/BARRACKS available for transient personnel. (Dec 1968)

## FLIGHT PLANS

flight plans for departure within Tokyo FIR should be filed 45 minutes prior to estimated departure time. (Mar 1969)

## JET AIRCRAFT OPERATIONS

extensive jet aircraft operations day and night in international airspace over the Sea of Japan. Restricted airways and restricted areas R-134 and KO/R-74. NOTE: THIS SPECIAL NOTICE WILL BE DELETED FROM THE APRIL ISSUE AND MOVED TO FLIP PLANNING SECTION II. (Mar 1969)

## YOKOTA AB

JANUARY 1969

## NOISE ABATEMENT

Noise abatement procedures in Yokota AB area require aircraft to maintain 5000' MSL until 5 NM out and 3000' MSL until 9.4 NM out.

single-engine turbo jet aircraft are expected to refrain from using reverse thrust after 1300-2100Z, except when required in the interest of safety. (Mar 1969)

## KOREA

FEBRUARY 1969

## H-201

No pilot will let passengers board any acft unless engine(s) and rotar blades have come to a complete stop. Pilots will not start acft until all passengers are on board and seat belts are fastened.

## TAEGU FIR

All aircraft within the TAEGU FIR are required to adjust transponder to appropriate Mode A: below FL 240 Code 1100; above FL 240 IFR Code 2100, VFR Code 0700 or as requested. IFR failure request permission to continue from ACC. (Mar 1969)

## PREFERENTIAL ROUTES

Taegu ACC requests all multi-engine aircraft utilize the preferential routes listed below for operations between Korea and Miho Japan.

## INBOUND TO KOREA

## 1. High Altitude Routes

## a. Miho-Kimpo

- (1) Via Miho-P'ohang TACAN-Kimpo TACAN.
- (2) Via Miho JG-93-BW RBn-Seoul VOR/EL RBn.

## b. Miho-Osan

- (1) Via Miho JG-95-JA-88-Osan TACAN.
- (2) Via Miho JG-93-BW RBn-RE RBn.

## c. Kimpo-Miho

- (1) JG-97

## 2. Low Altitude Routes

## a. Miho-Kimpo

- (1) Miho TACAN-P'ohang TACAN-Taegu TACAN-Osan TACAN-Kimpo TACAN.
- (2) Via Miho G93-Tiger Intxn-SE RBn.

## b. Miho-Osan

- (1) Via Miho G93-BW RBn-RE RBn.

## OUTBOUND FROM KOREA

## 1. High Altitude Routes

## a. Miho-Kimpo

- (1) Via Kimpo-JG97-Miho RBn.
- (2) Via Kimpo-Osan TACAN-JA88-JG95-Miho TACAN.
- (3) Via Osan-JA82-JG74-JG93-Miho RBn.

## 2. Low Altitude Routes

## a. Kimpo-Miho

- (1) Via Kimpo-W1-LC RBn.

## b. Osan-Miho

- (1) Via Osan-A82-W3-G93-Miho RBn.

**NOTE:** 1. No holding in the Seoul Approach Control Area within the high altitude structure or above 8000 ft at the SE RBn due to P-518 Restricted area and the DMZ.

2. In the event of lost communications while IFR inbound to Kimpo at an altitude where holding is prohibited, execute an immediate approach upon reaching the clearance limit/approach fix. (Mar 1969)

Overflights of KO/P-518 are p  
Approved flights into KO/P-518  
in aircraft not in radio contact  
use the following warning on  
RAPCON call sign on freq—  
will broadcast on VHF, UHF, g  
"MAG". All aircrews upon hearin  
"MAG" will verify their position  
lan, execute a turn to 180°  
identification with GCI/RAPCON  
observed to respond or radar

All aircrews filing into the Repu  
outlined in the 5th AF Supple  
uron, and Kimpo areas. (Mar

All pilots are cautioned to fam  
Korea, (SEE PLANNING SEC I  
NOT VIOLATE THIS AIRSPACE.

All US forces acft use extreme  
proper filtering of fuel has been

The Demilitarized Zone separati  
All Airport. EXTREME CAUTIO  
majority of acft who have penetr

## SEO

Lost communications procedure  
to 30 seconds. Disregard of t

Permanent Drop Zone HAPPY  
27°04'W. Drop Zone will be u

**KO/P-518**

Flights of KO/P-518 are prohibited without approval of Air Forces Korea 314th Air Division. Approved flights into KO/P-518 will be conducted IAW PACAF REG 60-8 as supplemented. When aircraft not in radio contact with GCI/RAPCON enters the prohibited area, the controller will broadcast the following warning on VHF, UHF guarded frequency "Quicksand Yellow". Contact GCI/RAPCON call sign on freq—. If the aircraft fails to respond the GCI/RAPCON controller will broadcast on VHF, UHF, grid location and/or coordinates and "DMZ warning heading 180°". All aircrews upon hearing the warning "Quicksand Yellow" or "DMZ warning heading 180°" will verify their position by any means possible. If any doubt exists concerning their location, execute a turn to 180° MAG, acknowledge the warning and attempt to establish positive identification with GCI/RAPCON site. DMZ warning will continue to be issued until the aircraft observed to respond or radar contact is lost. (Mar 1969)

**PROCEDURES**

Aircrews filing into the Republic of Korea will insure that crews have been briefed on procedures defined in the 5th AF Supplement to PACAF Regulation 60-8 prior to operating in the Osan, Ulsan, and Kimpo areas. (Mar 1969)

**CAUTION**

Pilots are cautioned to familiarize themselves with all the restricted and prohibited areas in Korea. (SEE PLANNING SEC IIB—SPECIAL USE AIRSPACE KOREA), particularly KO/P-73. DO NOT VIOLATE THIS AIRSPACE. (Mar 1969)

US forces acft use extreme caution at all airfields where ROKA refueling is utilized. Improper filtering of fuel has been noted and could be an extreme hazard to flight. (Mar 1969)

**DEMILITARIZED ZONE**

Demilitarized Zone separating North and South Korea is located approx 10 NM NW of Kimpo Airport. EXTREME CAUTION must be exercised to prevent overflights of this area. The majority of acft who have penetrated the DMZ area in the past have been fired upon. (Mar 1969)

**TAEGU FIR****JANUARY 1969****SEOUL RADAR APPROACH CONTROL**

Radio communications procedures while in the Seoul Approach Control pattern have been reduced to 30 seconds. Disregard of these procedures may result in violation of KO/P-518/DMZ.

**DROP ZONE**

Permanent Drop Zone HAPPY LANDING approx 500 meters in diameter established at 37°52'N 127°04'W. Drop Zone will be utilized for resupply training. (Dec 1968)

## HAZARDOUS OPERATIONS

Hazardous ops 35°11'N 128°56'E to 35°13'N 128°59'E to 35°13'N 129°05'E to 35°04'N 129°00'E to 35°04'N 127°57'E. Effective altitude - Surface to 4500'. Time - 0001-0800Z every Tuesday thru Sunday. Weather - VFR. NOTE: THIS SPECIAL NOTICE WILL BE DELETED FROM THE APRIL ISSUE AND MOVED TO FLIP PLANNING SECTION II. (Mar 1969)

## U. S. ARMY—KOREA

1. High tension cables crossing the primary helicopter route from Seoul to Uijongbu have recently been installed. These cables are mounted on steel towers. One tower, 450 feet high, is located at coordinates CS261572. The second tower is 300 feet high and is located at coordinates CS 268563. These towers and cables constitute a serious hazard to flight and all pilots are advised to mark the locations on navigation charts.

2. Unmarked Radio Tower 7 miles southwest of Seoul (1/8 mile west of railroad tracks), 600 feet high with unmarked guy wires.

3. Unmarked wire crossing Imjin River at CT152066. Wire approximately 60 ft high.

4. All acft will avoid flying over the area within 1 mile of ROK DIV HQ CS009485 below 1000' MSL.

5. Fixed wing acft prohibited 087 NM RAD of DS070378 to 2000'.

6. All acft will avoid flying over ROK War College CS115607.

7. Fixed balloon to 3000' 3.5 RAD of P-73. (Mar 1969)

## LAOS

All aircraft overflying Laos are advised to maintain at least 10,000 MSL due to possible ground fire (Oct 1968)

## OKINAWA

## FEBRUARY 1969

## OKINAWA CENTER

All aircraft inbound to the Okinawa FIR fr the west and southwest via Airways R83, G81, JG81, B62, and A82 shall contact Okinawa Center on 273.6 or 133.3 at or prior to points Grouper, Eagle Ray, White Fish, or King Crab. If unable to establish radio communications with Okinawa Center, contact Okinawa Flight Following on 261.0 or 123.7.

## JANUARY 1969

## AFR 55-20

Restrictions of U. S. Air Force Regulation 55-20 limit civil aircraft use of Kadena Air Base to approved selected carriers, emergencies, and official government community business. Landing approval will not be granted for any other reason. Procedures for requesting use approval are contained in U. S. Air Force Regulation 55-20 and must be strictly adhered too.

## KADENA AB

Arrival and departure acft should exercise caution due to extensive paradrop operations being conducted at Yontan airstrip which is located adjacent to Kadena Aerodrome and within the Kadena Airport traffic area can expect moderate turbulence due to jet test cell adjacent to app end Rwy 23L. (Oct 1968)

## PENET

All acft penetrating the /  
time over 04°00'N and Flig  
if contact with primary r  
through "Musketeer Radar"  
through "Backlash Radar"

1. Dates and hours:  
a. Scheduled firing date  
b. Supplementary firing  
1969.

Remarks: May be cancell  
firing has taken place on

c. Further proposed firin  
Remarks: May be cancell  
firing has taken place on  
2. Altitude: Unlimited.

3. Danger area: Defined b  
25°11'N 121°35'E, 26°  
121°25'E, to point of be

4. Detours: During the acti  
and FK NDB; and the hazo

Airways Hazardous S

Red 83 From GROU

Jet Red 85 From EEL to

Jet Green 87 From PIKE t

White 5 From MS ND

Jet Blue 91 From HLN V

White 4 From PO NDB

Amber 1 From BLENNY  
via TPE VOR

## PHILIPPINES

## PENETRATION OF MANILA FIR FROM THE SOUTH

Aircraft penetrating the Manila FIR from the South shall report to Manila ACC its estimated position over  $04^{\circ}00'N$  and Flight Level while approximately over  $02^{\circ}00'N$ . (Sep 1968)

Contact with primary report agency cannot be established for position report at Paro Point, relay through "Musketeer Radar" should be attempted. If contact cannot be established at Laooag, relay through "Backlash Radar" should be attempted. (Sep 1968)

## TAIWAN

MARCH 1969

## MISSILE FIRING

Dates and hours:

- a. Scheduled firing dates: Between 0100 and 1200 GMT on 4, 11, 18, and 25, April 1969.
- b. Supplementary firing dates: Between 0100 and 1200 GMT on 5, 12, 19, and 26 April 1969.

Remarks: May be cancelled by Class one NOTAMs prior to the effective dates when the firing has taken place on the scheduled dates.

- c. Further proposed firing dates: Between 0100 and 1200 GMT on 2, and 3, May 1969.
- Remarks: May be cancelled by Class one NOTAMs prior to the effective dates when the firing has taken place on the scheduled dates or supplementary dates.

Altitude: Unlimited.

Danger area: Defined by straight lines joining the following points in the order:  $25^{\circ}11'N$   $121^{\circ}35'E$ ,  $26^{\circ}57'N$   $122^{\circ}35'E$ ,  $27^{\circ}15'N$   $121^{\circ}04'E$ ,  $25^{\circ}25'N$   $120^{\circ}50'E$ ,  $25^{\circ}11'N$   $121^{\circ}25'E$ , to point of beginning.

Detours: During the active hours specified in item 1 above, aircraft are to avoid TPE VOR and PK NDB; and the hazardous segments of airways shall be detoured as follows:

Airways	Hazardous Segments	Detours Designated
Red 83	From GROUPER to TPE VOR	West bound aircraft from GROUPER to LU Locator; airway terminal shifted from TPE VOR to LU locator. East bound aircraft vice versa.
Red 85	From EEL to TPE VOR	West bound aircraft from EEL to LU Locator; Airway terminal shifted from TPE VOR to LU Locator. East bound aircraft vice versa.
Green 87	From PIKE to TPE VOR	West bound aircraft from PIKE to LU Locator; airway terminal shifted from TPE VOR to LU Locator. East bound aircraft vice versa.
White 5	From MS NDB to TPE VOR	North bound aircraft from MS NDB to LU locator; airway terminal shifted from TPE VOR to LU Locator. South bound aircraft vice versa.
Blue 91	From HLN VOR to TPE VOR	North bound aircraft from HLN VOR to LU Locator; airway terminal shifted from TPE VOR to LU Locator. South bound aircraft vice versa.
White 4	From PO NDB to TPE VOR	North bound aircraft from PO NDB to LU locator via GM Locator; airway terminal shifted from TPE VOR to LU Locator. South bound aircraft vice versa.
Number 1	From BLENNY to MKG VOR via TPE VOR	West bound aircraft from BLENNY to MKG VOR via LU, GM Locator and PO NDB. East bound aircraft vice versa.

prop operations being  
same and within the  
cell adjacent to

### T'AI-PEI RADAR FLIGHT FOLLOWING

Coverage: From NOOK Intersection along the north edge of airway R-71/G-81 to the T'ai-pei FIR boundary (EAGLE RAY), thence south and west along the T'ai-pei FIR boundary to NOOK Intersection.

Operational Procedures/Communications: All aircraft inbound to the T'ai-pei FIR from the south, southwest, and northeast via airways B-91, R-71, and G-81 shall contact T'ai-pei Flight Following on VHF 128.1 and UHF 234.8 at or prior to points MARLIN, NOOK, and EAGLE RAY. Pilots are expected to make all position reports to T'ai-pei Flight Following while in the area designated above until instructed otherwise.

**NOTICE:** USAF controllers available 24 hours daily. (Dec 1968)

### PENETRATION OF T'AI-PEI FIR FROM THE SOUTH

All aircraft departing aerodromes in the Manila FIR for destinations within T'ai-pei FIR are required to establish communications with T'ai-pei Radio for the purpose of forwarding departure messages including ETA for MARLIN prior to reaching Poro Point. Communications may be established with T'ai-pei Radio on frequencies 13354.5, 13215.5, 11228.0, 8862.5, 6730.5, 5506.5, 3144 or 2966 for wx info and messages concerning aircraft flight operations. (Dec 1968)

### T'AI-PEI INTERNATIONAL AIRPORT

No transient VFR flights authorized for non tactical aircraft.

Pilots of aircraft carrying VIP Code 7 or higher, ascertain that the agency being visited has been notified prior to your arrival. Open storage only.

A RAMP PASS **MUST** be obtained from Chinese Base Operations and must in turn be given to a Ramp Guard prior to taxiing. RAMP PASS VALID FOR A PERIOD OF ONE (1) HOUR PRIOR TO AND ONE (1) HOUR AFTER SCHEDULED TAKE-OFF. Clearance must be received from sentries stationed along the taxiways to taxi to the active runway. Sentries use red (STOP) and green (GO) flags or painted paddles during daylight hours and STOP and GO lighted signs at night to clear aircraft past recognition point. Should an aircraft fail to stop at the check point during daylight hours, a warning shot will be fired; during night hours a red warning shot will be fired in front of the aircraft. Failure to stop and hold for release will be cause for aircraft to be fired upon. This is a Chinese Air Force requirement. (Dec 1968)

Airspace blocked within Air

Aircraft on Airway Amber 8  
Airway Green 9 give 106E Rpt  
Amber 8 South, Green 9, Red  
Air or App Con. Dep and pos

Military acft flying to or from  
has been obtained as outlined

All air traffic in Thailand will  
artillery advisories. The RTAF  
maintain a listening watch on

Flight flying prohibited below  
14°24'N 104°51'E on Thai at  
101°09'E, 17°27'N 101°09'E or  
Cambodi border to point of b  
authorized in specific corridors  
The authorized corridors are as

#### 1. UDORN AREA

- A circular area 20 NM
- Corridors 10 NM wide c  
30° and 342°.

#### 2. NAKHON PHANOM WEST

- A circular area 20 NM
- A corridor 10 NM wide

#### 3. MUANG UBON AREA

- A semicircular area 30  
clockwise to the 090° radial.
- A semicircular area 20  
clockwise to the 270° radial.
- Corridors 10 NM wide c  
(Sep 1968)

All VFR acft avoid flying over

#### FLIG

Pilots will check latest NOTAM  
request GCI site and request he

CAUTION: All aircraft on VFR  
and Ban Saen (13°20'N 100°54'

## THAILAND

JANUARY 1969

## AIRWAY 30 BLOCKED AIRSPACE

Airspace blocked within Airway 30 from FL 300 to FL 420.

## AIRWAY AMBER 8

Aircraft on Airway Amber 8 contact Muang Ubun App Con on 119.7 within 100 NM. Acft on Airway Green 9 give 106E Rpt to Muang Ubun then ctc Bangkok Con on 118.9. Outbd acft on Airway Amber 8 South, Green 9, Red 68 and Bamboo Route ctc Bangkok Con on 118.9 after release from Tower or App Con. Dep and position rpts need not be repeated on 126.7 or HF. (Nov 1968)

## BANGKOK FIR

Military acft flying to or from Bangkok FIR will not overfly Cambodia unless diplomatic clearance has been obtained as outlined in the USAF Foreign Clearance Guide. (July 1968)

All air traffic in Thailand will contact the nearest GCI site ASAP for positive identification and advisory. The RTAF will intercept all unidentified aircraft. All IFR traffic must also maintain a listening watch on the appropriate ATC frequency. (Nov 1968)

Flight flying prohibited below 8000' within an area bounded by a straight line joining points 17°24'N 104°51'E on Thai and Cambi border to 15°49'N 104°09'E, 16°44'N 102°52'E, 17°16'N 101°09'E, 17°27'N 101°09'E on Thai Laotian border East along the Thai Laotian border to Cambi border to point of beginning. Flights originating or terminating within the area are authorized in specific corridors that will be provided by either terminal or tactical radar control. The authorized corridors are as follows:

## 1. UDORN AREA

- a. A circular area 20 NM in radius centered at the Udorn TACAN.
- b. Corridors 10 NM wide centered on each of the following radials of the Udorn TACAN: 090°, 180° and 342°.

## 2. NAKHON PHANOM WEST AREA

- a. A circular area 20 NM in radius centered at the Nakhon Phanom West TACAN.
- b. A corridor 10 NM wide centered on the 270° radial of the Nakhon Phanom West TACAN.

## 3. MUANG UBON AREA

- a. A semicircular area 30 NM in radius from the 270° radial of the Muang Ubun TACAN clockwise to the 090° radial.
- b. A semicircular area 20 NM in radius from the 090° radial of the Muang Ubun TACAN clockwise to the 270° radial.

- c. Corridors 10 NM wide centered on the 090° and 270° radials of the Muang Ubun TACAN. (Sep 1968)

## BEACH AREAS

VFR acft avoid flying over populated beach areas below 3000'. (Sep 1968)

## FLIGHTS INTO NORTHEAST THAILAND

Flights will check latest NOTAMs before flight. As soon as possible establish contact with the nearest GCI site and request headings to avoid active firing area. (July 1968)

## U-TAPAO AREA

NOTATION: All aircraft on VFR Flight plans will remain clear of Pattaya Beach (12°55'N 100°55'E) and Ban Saen (13°20'N 100°54'E) by 6 NM, 6000 ft. (Oct 1968)

## VIETNAM

MARCH 1969

## BIEN HOA AREA

Area in vicinity of Song Be and Dung Ngai River junction (YT1528) will not be used to test fire aerial weapons.

MARCH 1969

## BINH THUY

A hazardous situation exists at Binh Thuy due to congestion of airspace, twys and ramps because of the VNAF expansion program. Construction equipment and vehicles of all types operating on taxiways and ramps. Because of limited ramp space all aircraft may expect to hold or be diverted.

MARCH 1969

## HUE/PHU BAI CTZ

Due to extensive helicopter operations, no SVFR fixed wing operations authorized in control zone for transient aircraft.

MARCH 1969

## JETTISON AREA

Jettison area to 5000' in area bounded by: 10°28'N 105°55'20", 10°28'N 105°56'30"E, 10°26'50"N 105°56'30"E, 10°26'50"N 105°55'20"E to point of beginning.

MARCH 1969

## SAIGON FIR

Saigon ACC unable to accept traffic FL80 thru FL390 crossing W14 E of 110° without 1 hr PPR by Saigon ACC before crossing.

MARCH 1969

## SAIGON FIR PROHIBITED AREAS

1. Prohibited area to 2000' AGL as follows: A 1.6 NM corridor E of Cambodian border S from XT321130 XT351130 to XS308928 XS338928. Effective thru 30 September.
2. Prohibited area to 2000' MSL XS335928 XS325895 XS270915 XS180915 XS180950 along Cambodian Border. Effective thru 30 September.

FEBRUARY 1969

## SAIGON FIR

Saigon ACC unable to accept traffic FL 120 to FL 180 in area bounded by 09°48'N 106°50'E, 09°41'N 107°04'E, 08°58'N 106°39'E, 09°05'N 106°26'E. Effective through 19 June 69.

JANUARY 1969

## BLOCKED AIRSPACE

Airspace blocked as follows: FL 220 to FL 430 - 10°00'N 102°15'E, 10°09'N 102°18'E, 08°30'N 102°45'E, 09°30'N 103°30'E, 08°00'N 103°30'E, 08°00'N 102°45'E. FL 280 to FL 430 - 09°30'N 103°30'E, 08°30'N 104°40'E, 08°00'N 104°40'E, 08°00'N 103°30'E, FL 300 to FL 430 within VM/(R-32) North of Airway G9 and West of Airway A70.

JANUARY 1969

## SAIGON FIR

All aircraft operating within the Saigon FIR be constantly on the alert for possible anonymous control instructions and erroneous NAVAJD information.

for refueling operations are con  
13,000 and 33,000 feet und  
operating aircraft in this area  
control agencies to insure safe

A majority of the airfields in  
and/or construction. Use Cau  
airways. (Nov 1968)

Airspace blocked within Airway  
FL 240. (Jan 1969)

CAC-47 aircraft operating pri  
missions while monitoring area  
during night/reduced visibility  
minutes. Position and altitude o  
ite. (Sep 1968)

DEVI  
ZC1 controllers or co-located A  
to deviate IFR traffic from fil  
(Aug 1968)

Pure drop missions are flown in  
cases in terminal areas of Sou  
in tactical frequencies so flar  
because of this, landing and d  
proximity to aircraft in termina

Gun and Missile Firing to FL  
(Nov 1968)

All aircraft landing/overflying  
to be followed in the event H  
operations at last stop prior R  
(Sep 1968)

Aircraft are required to displ  
both Vietnam. (Sep 1968)

heavy movement of air traffic  
ion standards at some locatio  
wake turbulence at these loc  
reduced standards in effect.

Special VFR Procedures for op  
Directory, South Vietnam. Airc  
traffic in Vietnam, the VFR

During daylight hours numer  
Identify rwy before landing.

Artillery firing surface to 16,6  
13,000 ft 180-330 Rad 15 NM

Helicopters transiting Chu Lai  
150' MSL southbound, 300' MS

Gun and missile fire to 10,0  
13-20 NM. Depart Rwy 17L, 1

Dragon Mountain, 3373' MSL,  
mountain is a hazard to low  
highways 14 or 19 South of PL

**AIR REFUELING**

air refueling operations are continually being conducted in Southeast Asia between the altitudes of 13,000 and 33,000 feet under radar control and monitoring. It is imperative that all pilots operating aircraft in this area be visually alert and maintain continuous contact with appropriate control agencies to insure safe operation. (Sep 1968)

**AIRFIELD CONGESTION**

A majority of the airfields in South Vietnam are heavily congested due to extensive operations and/or construction. Use Caution as uncontrolled vehicles operate on or near taxiways and runways. (Nov 1968)

**AIRWAY W2 BLOCKED AIRSPACE**

Airspace blocked within Airway W2 from 35 NM N of Pleiku to 26 NM S of Danang from FL 160 to FL 240. (Jan 1969)

**C/AC-47 NIGHT OPERATIONS**

C/AC-47 aircraft operating primarily between 4000-8000 feet conduct continuous night air patrol missions while monitoring area DASC and GCI frequencies. All pilots exercise extreme caution during night/reduced visibility conditions, particularly during climb-out and descent along coastal routes. Position and altitude of orbiting aircraft can be obtained from appropriate DASC or GCI agencies. (Sep 1968)

**DEVIATIONS FROM FILED FLIGHT PLANS**

ATIS controllers or co-located ARTC controllers within the Republic of Vietnam are not authorized to deviate IFR traffic from filed flight plan until pilot has received approval from Saigon ACC. (Aug 1968)

**FLARE DROP MISSIONS**

Flare drop missions are flown in left hand traffic patterns at 4000 and 4500 feet MSL around airfields in terminal areas of South Vietnam from sunset to sunrise. Flare drop aircraft must remain on tactical frequencies so flares are dropped without advance warning to aircraft in the area. Because of this, landing and departing aircraft should be especially cautious about flying in close proximity to aircraft in terminal areas while below altitudes. (Sep 1968)

**GUN AND MISSILE FIRE**

Artillery and Missile Firing to FL 290 in area bounded by Airways A-8, W-2, G-9 and 106°00'E. (Nov 1968)

**HAWK CORRIDORS**

Aircraft landing/overflying Republic of Vietnam must obtain briefing on classified procedures. Briefings to be followed in the event HAWK corridors are implemented. Information available from base operations at last stop prior RVN and at each base in RVN. Briefing required before each flight. (Sep 1968)

**NAVIGATION LIGHTS**

Aircraft are required to display navigation lights during all phases of night operations within South Vietnam. (Sep 1968)

**REDUCED STANDARDS**

Heavy movement of air traffic has required the establishment and use of reduced runway separation standards at some locations. Pilots must be alert to traffic advisories and the possibility of increased turbulence at these locations. Refer to the A/D Rmks Section for the locations with reduced standards in effect. (Nov 1968)

**VFR PROCEDURES SOUTH VIETNAM**

Special VFR Procedures for operations in South Vietnam are contained in the Tactical Aerodrome Directory, South Vietnam. Aircrews are further cautioned that because of the heavy density of air traffic in Vietnam, the VFR procedures require careful consideration. (Nov 1968)

**CAM RANH BAY**

During daylight hours numerous aircraft have landed on West parallel taxiway. Use caution, identify runway before landing. (Oct 1968)

Artillery firing surface to 16,600 ft 10 NM radius Cam Ranh Bay 24 hours daily and surface to 10,000 ft 180-330 Rad 15 NM radius Cam Ranh Bay TACAN 24 hours daily. (Sep 1968)

**CHU LAI CTZ**

Aircraft transiting Chu Lai CTZ via Beach Route remain at least 50 yards seaward, maintain 300' MSL southbound, 300' MSL northbound, avoiding living areas. (Aug 1968)

**DANANG**

Artillery and missile fire to 10,000' 135-315 RAD Danang TACAN, 3-30 NM, and 315-340 RAD, 10 NM. Depart Rwy 17L, 17R, left turn within 2 NM and ctc Panama Control 367.8 for Save-the-Bay and clearance into area. (Aug 1968)

**DRAGON MOUNTAIN**

Dragon Mountain, 3373' MSL, is located 7 NM S of Pleiku AB, and 2 NM NW of Hensel AAF. This mountain is a hazard to low level, low visibility navigation. Use extreme caution when following Airways 14 or 19 South of Pleiku. (Sep 1968)

**HUE/PHU BAI**

Due to ramp congestion, parking limited to 45 minutes. For extended parking, pilots will contact Hue/Phu Bai Airbase Operations in person. (Oct 1968)

**SAIGON**

Saigon AFRS broadcasts on 540 kHz and FM 99.9. Stations broadcasting on 1330 and 3244 kHz should not be used for navigational purposes. (Nov 1968)

**SAIGON AREA**

Gun and missile firing 6 NM 10°04'N 106°52'E, 10°02'N 106°41'E to 17,000 ft. Cont. (Sep 1968)

**PLEIKU AREA**

All acft entering the Pleiku area can expect artillery, mortar, low alt air strikes, and high alt bombing. Acft should ctc the TOLLHOUSE station in the local area for advsy. If controlling station cannot be contacted, call TOLLHOUSE ZERO.

AREA A. From AR8066 S along Pleiku complex and 4th Inf Div to AR9025, E to BR2525, N to BR2565, W to AR8065. Ctc TOLLHOUSE CHARLIE 43.3.

AREA B. From YZ8490 N along border to YA5870, E to YA8970, S to YA9860, E to Pleiku, S along complex to AR7622, S to AQ7690, W to border. Ctc TOLLHOUSE HOTEL 43.3.

AREA C. A circle with a radius of 6 NM centered on AR8034. Ctc TOLLHOUSE ZERO 43.3.

AREA D. From YB6756 E to AS8056, S to AS8009, W to ZB1709, E to ZB1704, W to ZB0605, SW to ZB0004, W to YB9203, SW to YB8802, W to YB7001, along border to YB6756. Ctc TOLLHOUSE LIMA 37.4.

AREA E. From YB 7001 E to YB8401, NE to YB8501, E to YB8810, NE to YB9025, E to ZB0003, NE to ZB0604, E to ZB1705, N to ZB1709, E to AS8009, N to AS8010, E to BS1010, S to BR2565, W to AR8065, S to Pleiku and follow complex to ZA0960, W to YA9860, N to YA9870, W to border. Ctc TOLLHOUSE MIKE 37.4.

AREA F. A circle with a radius of 6 NM centered on AR8034. Ctc TOLLHOUSE ZERO 43.3. SIERRA 45.0.

AREA G. From YC8000 E to ZC1000, S to ZB1056, W to YB6756, N along border to YC8000. Ctc TOLLHOUSE ALPHA 45.0.

The area btwn Pleiku TACAN 315° RAD clkwz to 360° RAD beginning 2 NM fr TACAN and extending to 15 NM will be called THUNDERBOLT. Firing 1300-2330Z diy, O/T as announced. Advsy for THUNDERBOLT will be bcst by PEACOCK on 345.0/256.3. Artillery will fire without notice from BJ05 Gridline N and S 1 NM each side of Route 19 to Mang Yang Pass to 15,000' MSL (Sep 1968)

**YUNG TAU AREA**

Gun and missile firing to 6000' 24 hrs daily in area bounded by 10°27'38"N 107°03'21"E; 10°27'06"N 107°02'48"E; 10°26'03"N 107°03'21"E; 10°25'30"N 107°04'58"E; 10°26'03"N 107°05'18"E; 10°26'34"N 107°04'27"E then to point of beginning. (Nov 1968)

**WAKE ISLAND****DISTINGUISHED VISITORS**

Aircraft transporting Distinguished Visitors to/through Wake Island contact MAC ACP on 349.4 when within UHF range with details. If unable to contact ACP, forward information through Wake Tower. (Mar 1969)

**EXPLOSIVE CARGO**

All aircraft transporting Interstate Commerce Code Class A explosive cargo or other dangerous materials with similar quantity distance requirements and Class B explosive cargo through Wake Island will notify their Wake Servicing Office 12 hours prior to arrival at Wake Island. Approval for MAC aircraft will be obtained from MAC MPACP Hickam AFB. (Mar 1969)

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and 3244 kHz

t. (Sep 1968)

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BR2525, N to

E to Pleiku, S  
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ERO 43.3.

W to ZB0605,  
er to YB6756.

E to ZB0003,  
E to BS1010,  
W to YA9860,

ZERO 43.3.

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HUE/PHO AREA

1. All aircraft flying over the area of Hue/Pho must be in contact with the ATIS on 1330 and 1345.

SAIGON

1. All aircraft flying over the area of Saigon must be in contact with the ATIS on 1330 and 1345.

WU/GOV AREA

1. All aircraft flying over the area of Wu/Gov must be in contact with the ATIS on 1700 ft. Cont. 1345.

PLEIKU AREA

1. All aircraft flying over the area of Pleiku must be in contact with the ATIS on 1700 ft. Cont. 1345.

2. All aircraft flying over the area of Pleiku must be in contact with the ATIS on 1700 ft. Cont. 1345.

3. All aircraft flying over the area of Pleiku must be in contact with the ATIS on 1700 ft. Cont. 1345.

4. All aircraft flying over the area of Pleiku must be in contact with the ATIS on 1700 ft. Cont. 1345.

5. All aircraft flying over the area of Pleiku must be in contact with the ATIS on 1700 ft. Cont. 1345.

6. All aircraft flying over the area of Pleiku must be in contact with the ATIS on 1700 ft. Cont. 1345.

7. All aircraft flying over the area of Pleiku must be in contact with the ATIS on 1700 ft. Cont. 1345.

8. All aircraft flying over the area of Pleiku must be in contact with the ATIS on 1700 ft. Cont. 1345.

9. All aircraft flying over the area of Pleiku must be in contact with the ATIS on 1700 ft. Cont. 1345.

10. All aircraft flying over the area of Pleiku must be in contact with the ATIS on 1700 ft. Cont. 1345.

11. All aircraft flying over the area of Pleiku must be in contact with the ATIS on 1700 ft. Cont. 1345.

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YUNG TAU AREA

1. All aircraft flying over the area of Yung Tau must be in contact with the ATIS on 1700 ft. Cont. 1345.

WARE ISLAND

RESTRICTED VISITORS

1. All aircraft flying over the area of Ware Island must be in contact with the ATIS on 1700 ft. Cont. 1345.

EXPLOSIVE CARGO

1. All aircraft flying over the area of Ware Island must be in contact with the ATIS on 1700 ft. Cont. 1345.

(Mar 1985)

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