

vUSAF TYNDALL INFLIGHT GUIDE

This publication provides guidance to:

- a. Aircrews assigned and attached to 53WEG
- b. Units TDY to Tyndall AFB to participate in:
 - (1) Combat Archer/Combat Hammer
 - (2) Development and Testing programs
 - (3) DACT deployments hosted by ACC

Recommendations for changes, additions, and/or deletions should be submitted to vUSAF via AF Form 847, e-mail, or memo.

///SIGNED///17 JAN 2019///

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Director of Air and Space Operations (AF/A3)
The Pentagon, Washington DC.

Chg #	Date Posted	Affected Pages	Initials



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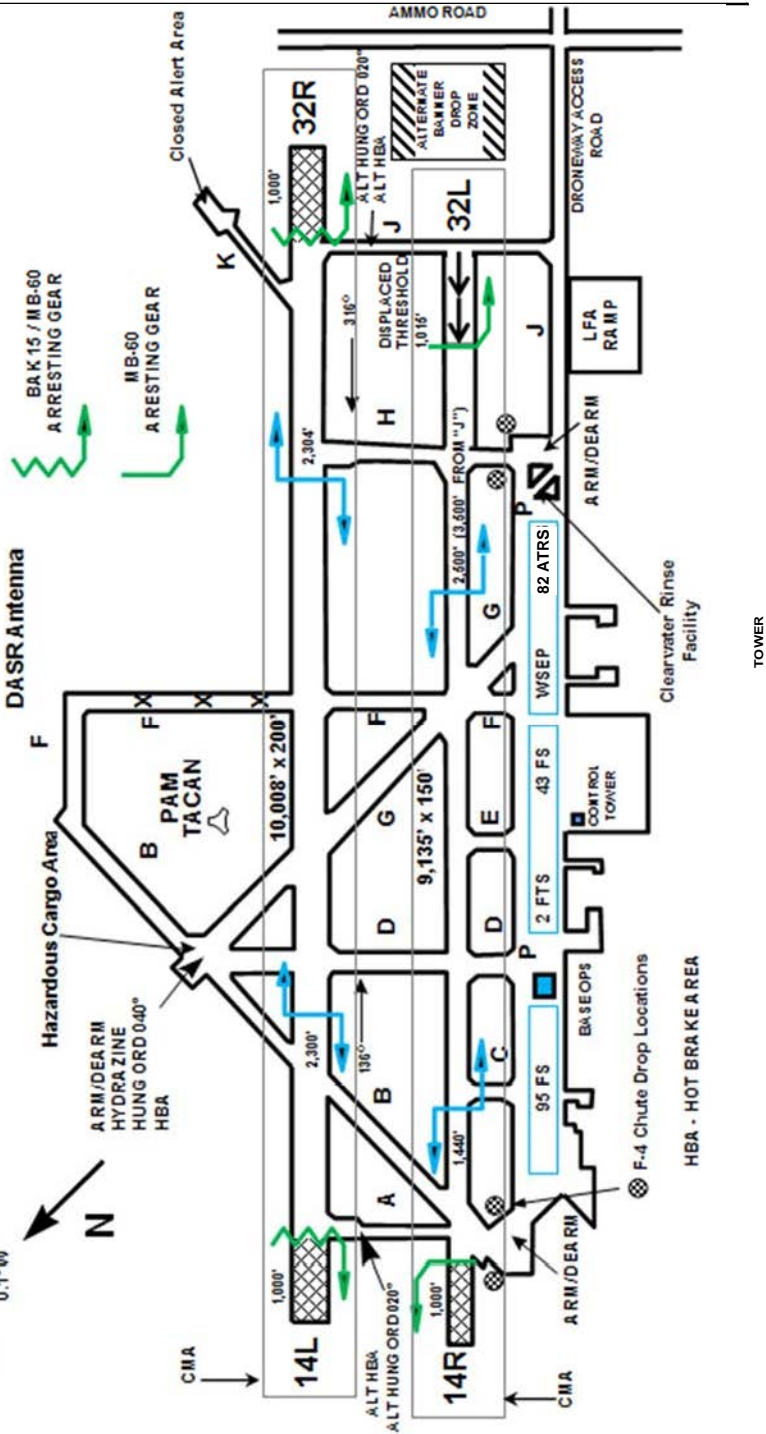
AIRFIELD DIAGRAM

AIRFIELD DIAGRAM

TYNDALL AFB (KPAM)

AIRFIELD ELEVATION 17 FT

ANNUAL RATE OF CHANGE
0.1"±W



TYNDALL FREQUENCY PLAN

Channel	UHF	VHF	Agency
1	256.05	140.125	82 nd "Drone" OPS
1	384.7		83 rd "Aces" OPS
2	259.3	121.9	Ground
3	263.15	133.95	Tower
4	363.125	124.15	Dept (S)
5	392.1		Dept (N)
6	338.35	124.15	Approach (S)
7	317.45	119.775	Arrival
8	397.85	118.050	RAPCON
9	354.15		RAPCON
10	254.4		ATIS
11	373.65	143.06	SOF
12	317.8		SFA
13	348.7		CLNC DEL
14	342.1	141.15	Eglin Mission
15	290.9		Eglin Mission
16	311.2		Hold
17	288.5		Subscale Shoot
18	308.9		Fullscale Shoot
19-20			OPEN

ADDITIONAL LOCAL FREQUENCIES

AGENCY	UHF	VHF
ACES OPS (83D)	384.7	N/A
DRONE OPS (82D)	256.05	140.125
43 FS	292.7	N/A
PAM METRO	290.625	N/A
PAM CLNC	348.7	118.05
PAM CP	381.3	N/A
HQ TOD	238.6	N/A
EGLIN ATIS	273.5	134.625
EGLIN APPR	278.45	125.1/132.1
EGLIN TWR	353.65	118.2
EGLIN GND	335.8	121.8
EGLIN SOF	264.6	N/A
ECP APPR (TYN)	379.3	124.15
ECP TWR	269.0	118.95
ECP GND	N/A	121.65
ECP ATIS	N/A	119.975
ACMI/BDT OPS	281.2	N/A

TYNDALL RAMP COORDINATES

WSEP RAMP CENTER COORDINATES N3003.9 W8534.7 18'					
ROW A (FRONT ROW NEAREST RUNWAY)					
SPOT	N	W	SPOT	N	W
A35	3004.034	8534.758	A48	3003.903	8534.598
A36	3004.027	8534.747	A49	3003.895	8534.588
A37	3004.017	8534.733	A50	3003.884	8534.578
A38	3004.009	8534.723	A51	3003.874	8534.566
A39	3004.002	8534.712	A52	3003.861	8534.549
A40	3003.994	8534.705	A53	3003.854	8534.539
A41	3003.984	8534.693	A54	3003.847	8534.532
A42	3003.970	8534.681	A55	3003.838	8534.522
A43	3003.962	8534.670	A56	3003.825	8534.509
A44	3003.952	8534.656	A57	3003.815	8534.500
A45	3003.942	8534.644	A58	3003.804	8534.488
A46	3003.929	8534.629	A59	3003.799	8534.476
A47	3003.912	8534.608	A60	3003.793	8534.471
ROW B (BACK ROW NEAREST OPS)					
B33	3004.012	8534.785	B46	3003.878	8534.625
B34	3004.004	8534.774	B47	3003.869	8534.614
B35	3003.997	8534.766	B48	3003.856	8534.603
B36	3003.986	8534.755	B49	3003.848	8534.591
B37	3003.972	8534.741	B50	3003.842	8534.583
B38	3003.963	8534.731	B51	3003.831	8534.571
B39	3003.955	8534.720	B52	3003.820	8534.554
B40	3003.947	8534.708	B53	3003.813	8534.549
B41	3003.938	8534.699	B54	3003.804	8534.539
B42	3003.929	8534.685	B55	3003.797	8534.528
B43	3003.916	8534.669	B56	3003.789	8534.516
B44	3003.911	8534.666	B57	3003.778	8534.506
B45	3003.886	8534.637	B58	3003.771	8534.497
EOR: 14L-N3004.5 W8535.3; 14R-N3004.5 W8535.4; 32R-N3003.6 W8533.8; 32L-N3003.6 W8534.3					

LOCAL AREA FIXES

FIX	TAC/CH	FIX	APPCH/SID	COORDINATES	
BAITE	PAM/64	122/12		N2856.0	W8331.0
BELLE	VAD/80	007/16	TCN 18L	N3113.6	W8310.3
CARLO	VAD/80	173/15	TCN 36R	N3042.8	W8308.6
CESUN	PAM/64	302/10	PHIPS-ONE	N3009.3	W8544.4
CHEAF	DWG/2	207/32		N3002.0	W8648.0
CIGAR	SRQ/99	300/95		N2729.6	W8447.0
CLRRK	SZW/122	235/22		N3021.3	W8443.8
CLUBB	MXF/97	330/35	15 @ KMXF	N3254.0	W8641.0
CORRL	PAM/64	164/11		N2815.0	W8458.0
COTBI	PAM/64	141/10	OYSTE-ONE	N2957.1	W8526.5
COVIA	MCF/47	300/95		N2756.2	W8444.2
DEFUN	PAM/64	327/53	DEFUN-ONE	N3048.9	W8607.9
ENDOW	VAD/80	360/16	TCN 18R	N3113.6	W8312.6
EQUIP	VAD/80	183/16	ILS 36R	N3041.6	W8311.6
FELEX	PAM/64	139/27		N2944.0	W8514.0
GRUPR	PAM/64	139/12		N2831.0	W8403.0
GULFF	PAM/64	238/26		N2950.0	W8600.0
HISEA	DWG/2	180/20	30/12/19	N3008.8	W8631.3
HOTSO	PAM/64	140/3		N3002.1	W8532.1
KAMPP	DWG/2	360/20	30/01	N3058.8	W8631.2
LOMAX	MXF/97	335/35	28/10 MGM	N3255.8	W8636.0
MILNE	MCF/47	220/15	04	N2740.3	W8241.9
NENCY	PAM/64	360/15	14L/R	N3019.5	W8534.3
NINNA	PAM/64	148/40	SPLSH-THREE	N2930.4	W8510.0
OYSTE	PAM/64	137/44		N2932.0	W8500.0
OZONA	MCF/47	053/10	22	N2757.6	W8221.7
PHIPS	PAM/64	302/23	PHIPS-ONE	N3016.3	W8556.6
PRAUN	PAM/64	105/85		N2942.0	W8400.0
RANDA	VAD/80	004/16	ILS 18L	N3113.6	W8311.3
RUFFF	PAM/64	132/14		N2824.0	W8331.0
SANDA	SZW/122	148/30	ILS 36	N3007.3	W8405.1
SNAPR	PAM/64	158/84		N2846.0	W8458.0
SPLSH	PAM/64	284/15		N3008.1	W8551.1
SUSIE	PAM/64	100/20	32L/R	N3000.9	W8511.7
TEKAY	DWG/2	180/25	01	N3003.6	W8631.2
TOSKE	PAM/64	327/21	DEFUN-ONE	N3022.1	W8547.6
TROWT	PAM/64	143/52		N2922.0	W8458.0
WADOR	PAM/64	308/3		N3006.3	W8537.1
WEEMS	VAD/80	190/15	TCN 36L	N3042.7	W8313.7
WEWAH	PAM/64	062/10		N3009.1	W8524.2
WUKAS	PAM/64	295/15	DEFUN-ONE	N3010.8	W8550.0
ZATVI	PAM/64	179/10	TROWT-ONE	N2954.4	W8533.4

LOCAL AREA TACAN DATA

TCN STATION	CH	LAT	LONG	EL	MVAR
TYNDALL (PAM)	64X	3004.5N	8534.4W	17'	E000.0
WARRINGTON (DWG) [Eglin]	02X	3028.7N	8631.3W	77'	E000.0
MOODY (VAD)	80X	3058.1N	8311.6W	233'	E300.0
EUFALA (EUF)	29X	3157.0N	8507.8W	280'	E200.0
MACDILL (MCF)	47X	2751.7N	8230.8W	14'	E100.0
WIREGRASS (RRS)	53X	3117.1N	8525.9W	360'	E200.0
CRESTVIEW (CEW)	106X	3049.6N	8640.8W	254'	E300.0
JAX (CRG)	92X	3020.3N	8130.6W	40'	W300.0
CROSS CITY (CTY)	57X	2935.9N	8302.9W	30'	W200.0
MAXWELL (MXF)	97X	3222.8N	8622.1W	169'	E300.0
SEMINOLE (SZW)	122X	3033.4N	8422.4W	178'	E200.0
MONTGOMERY/DANNELLY (MGM)	58X	3213.3N	8619.2W	270'	E300.0

TYNDALL STEREO ROUTES

PAM5	OYSTE / TROWT	230	PAM PAM089/033 (D0+30) W470 (D0+25) PAM	FLA A/W470/151
PAM8	OYSTE / TROWT	170	PAM PAM098/034 (D0+15) PAM REMARKS: CARRABELLE 090B370	CARRABELLE AREA
PAM8T	OYSTE / TROWT	90	PAM PAM098/034 (D0+10) PAM096/037 SANDA TLH (D0+20) SZW PAM069/045 PAM REMARKS REQ 170 TO CARRABELLE	CARRABELLE THEN PLA TLH
PAM8V	OYSTE / TROWT	170	PAM PAM098/034 (D0+25) PAM PHIPS VPS (D0+20) PHIPS PAM REMARKS FL220 TO VPS PLA	CARRABELLE THEN PLA VPS
PAM8M	OYSTE / TROWT	170	PAM PAM098/034 (D0+15) VAD PAM REMARKS: CARRABELLE 090B370 VAD (PLA) PAM	CARRABELLE THEN PLA VAD
PAM15	RIVER (14) MYERS (32)	170	PAM PAM022/030 (D0+20) PAM REMARKS COMPASS LAKE	COMPASS LAKE
PAM15T	RIVER (14) MYERS (32)	170	PAM PAM022/030 (D0+20) PAM097/065 SANDA TLH (D0+20) SZW PAM069/045 PAM	COMPASS LAKE THEN PLA TLH
PAM15V	RIVER (14) MYERS (32)	170	PAM PAM022/030 (D0+20) PAM PHIPS VPS (D0+20) PHIPS PAM REMARKS D0+20 COMPASS LAKE REQ FL220 TO VPS PLA	COMPASS LAKE THEN PLA VPS
PAM15M	RIVER (14) MYERS (32)		PAM PAM 022/030 (D0+15) VAD PAM REMARKS: COMPASS LAKE VAD (PLA) PAM	COMPASS LAKE THEN PLA VAD
PAM22	OYSTE / TROWT	210B 230	PAM OYSTE COVIA W470 (D0+30) OYSTE PAM REMARKS DELAY RAPTOR ATCAA/W470	W-470 RAPTOR ATCAA
PAM86	DEFUN	180	PAM PAM292/022 W-151 (D0+35) PAM REMARKS W151W	W-151A/C
PAM151	OYSTE / TROWT	180	PAM W-151B (D0+25) PAM	W-151B
PAM470	OYSTE / TROWT	210B 230	PAM W-470 (D0+20) PAM REMARKS W470	W-470

TYNDALL STEREO ROUTES CONTINUED

PAM2	OYSTE / TROWT	210B 230	PAM W-151D (D0+25) PAM	W-151D
PAM9	RIVER	230	PAM PAM066/040 SZW VAD240/022 MDY1/(D0+20) SZW PAM	MOODY MOA1
PAM10	RIVER	230	PAM PAM066/040 PZD240/030 MDY3/(D0+20) PAM	MOODY MOA3
PAM11	RIVER	230	PAM PAM066/040 GEF125/030 LVOAK(D0+20) PAM066/040 PAM	LIVE OAK MOA
PAM12	OYSTE / TROWT	170	PAM PAM098/034 (D0+20) PAM	CARA / E MOA 300'-FL230
PAM13	OYSTE / TROWT	70	PAM PAM098/034 (D0+45) PAM REMARKS LOW LEVEL/CARRABELLE/ACMI	C/D/E MOA/ACMI/ CARRABELLE (WILLIAM TELL)
PAM16	DEFUN	220	PAM DEFUN PAM338/081 (D0+20) PAM REMARKS ROSEHILL MOA	ROSE HILL
PAM38A	DEFUN	200	PAM DEFUN MGM KMGD DO+15 MGM DEFUN PAM	PLA MGM
PAM38B	DEFUN	50	PAM PHIPS VPS DO+15 DWG PHIPS PAM	PLA VPS
PAM38C	RIVER	80	PAM PAM066/040 SZW TLH DO+20 SZW PAM	PLA TLH
PAM151F	OYSTE / TROWT	300	PAM W-151B (D0+25) PAM REMARKS FCF REQ QUICK CLIMB	W-151B
PAM155	DEFUN	200B 220	PAM PHIPS DWG180/008 DWG236/017 CHEAF (D0+20) DWG236/017 DWG180/008 PHIPS PAM	W-155A
PAM155G	DEFUN	200B 220	PAM DWG 180/008 DWG 236/017 CHEAF (D0+45) DWG 236/017 DWG 180/008 PHIPS PAM	W-155 and WHODAT
PAM470F	OYSTE / TROWT	300	PAM W-470 (D0+30) PAM REMARKS FCF REQ QUICK CLIMB	W-470
PAM470M	OYSTE / TROWT	210B 230	PAM W-470 (D0+20) VAD PAM REMARKS W470 Then VAD RTB PAM	W-470 THEN PLA VAD
PAM470T	OYSTE / TROWT	210B 230	PAM W-470 (D0+10) PAM104/050 PAM097/065 SANDA TLH (D0+20) SZW PAM 069/045 PAM	W-470 THEN PLA TLH
PAM470V	OYSTE / TROWT	210B 230	PAM W-470 (D0+10) PAM PHIPS VPS (D0+20) PHIPS PAM REMARKS FL220 TO VPS PLA	W470 THEN PLA VPS
PAMLOW	OYSTE / TROWT	70	PAM PAM098/034 (D0+35) PAM REMARKS LOW LEVEL	C/D/E MOAs
PAMLOW4	OYSTE / TROWT	40	PAM PAM098/034 (D0+35) PAM REMARKS C/D/E MOA	C/D/E MOA
PAMHILOW	OYSTE / TROWT	170	PAM PAM098/034 (D0+40) PAM REMARKS D0+15 CARRABELLE D0+25 LOW LEVEL	CARRABELLE C/D/E MOA
PAMIFR14	RIVER	70	PAM NENCY PAM	LCL INST
PAMIFR32	TROWT	70	PAM SUSIE PAM	LCL INST
PAMAIAK	HUREVAC	190	PAM PZD MCN IRQ AIK	AIK
PAMBAD	HUREVAC	200	PAM DEFUN CEW MCB AEX BAD	BAD
PAMCWF	HUREVAC	260	PAM DEFUN CEW SJI BTR LCH CWF	CWF
PAMFFO	HUREVAC	410	PAM PAM062040 SZW J43 VXV CVG BRYNN KEKEE FFO	FFO
PAMHOP	HUREVAC	180	PAM DEFUN CEW J39 BNA AIRBE HOP	HOP
PAMLFI	HUREVAC	410	PAM MCN IRQ SDZ RDU TYI CVI DRONE LFI	LFI
PAMMGE1	HUREVAC	210	PAM LGC MGE	MGE
PAMRND	HUREVAC	400	PAM DEFUN CEW J2 IAH IDU.MARCS RND	RND
PAMSKF	HUREVAC	400	PAM DEFUN CEW J2 IAH IDU.MARCS SKF	SKF
PAMSPS	HUREVAC	400	PAM DEFUN CEW J50 AEX J58 SPS	SPS
PAMSSC	HUREVAC	230	PAM PAM062040 SZW AMG CAE SSC	SSC
PAMTIK	HUREVAC	400	PAM DEFUN CEW JAN J20 IRW TIK	TIK
PAMTYS	HUREVAC	210	PAM LGC RMG GQO TYS	TYS
PAM47A	DIVERT MCF	400	W-470 BAITE PIE MCF	470A to MCF
PAM47B	DIVERT MCF	400	W-470 BAITE PIE MCF	470B to MCF
PAM47C	DIVERT MCF	400	W-470 RUFFF PIE MCF	470C to MCF
PAM80A	DIVERT VAD	400	W-470 PRAUN OTK VAD	470A to VAD
PAM80B	DIVERT VAD	400	W-470 BAITE OTK VAD	470B to VAD
PAM80C	DIVERT VAD	400	W-470 GRUPR OTK VAD	470C to VAD

OYSTE-TWO DEPARTURE

OYSTE-TWO DEPARTURE

TYNDALL AFB (KPAM)

[USAF] SI-312

PANAMA CITY, FLORIDA

ATIS * 254.4
 CLNC DEL
 118.05 348.7
 GND CON
 121.9 259.3
 TYNDALL TOWER
 133.95 263.15
 TYNDALL DEP CON
 124.15 363.125

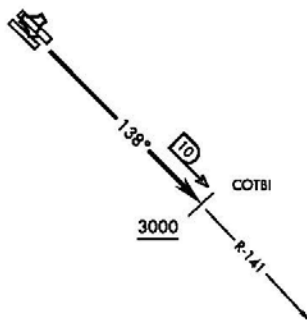
Rwy	Knots	60	120	180	240	300	360
14L	V/V(fpm)	331	662	993	1324	1655	1986
14R	V/V(fpm)	324	648	972	1296	1620	1944

ATC Climb Rate to 3000

431
 ▲

For 325th FW and
 53rd WEG use ONLY

TYNDALL
 Chan 64 PAM



RADAR REQUIRED

DEPARTURE ROUTE DESCRIPTION

▽ SEE VOL 19 or HI EAST

TAKE-OFF RWY 14L/R: Cross departure end of runway at or below 1000, climb on track 138°. Intercept the PAM TACAN R-141 to COTBI. Cross COTBI at or above 3000. Then via filed Stereo Routes.

OYSTE-TWO DEPARTURE

PUBLISHED BY NGA FOR USAF HQ ACC
 Comments/updates to acc.A3Aterps@us.af.mil

PANAMA CITY, FLORIDA

TYNDALL AFB (KPAM)

19 AUGUST 2016 to 18 AUGUST 2017

TROWT-ONE DEPARTURE

TROWT-ONE DEPARTURE

[USAF] SL-312

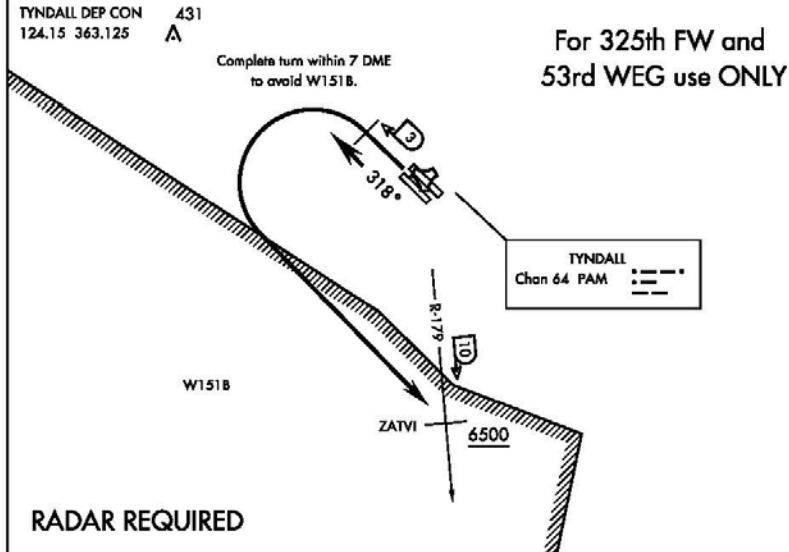
TYNDALL AFB (KPAM)

PANAMA CITY, FLORIDA

ATIS ★ 254.4
 CINC DEL
 118.05 348.7
 GND CON
 121.9 259.3
 TYNDALL TOWER
 133.95 263.15
 TYNDALL DEP CON
 124.15 363.125

Rwy	Knots	60	120	180	240	300	360
32L	V/V(fpm)	360	720	1080	1440	1790	2150
32R	V/V(fpm)	360	720	1070	1430	1780	2140

ATC Climb Rate to 6500



RADAR REQUIRED

DEPARTURE ROUTE DESCRIPTION

▼ SEE VOL 19 or HI EAST

TAKE-OFF RWY 32L/R: Cross departure end of runway at or below 1000, climb on track 318°. When passing PAM TACAN 3 DME turn left direct ZATVI. Cross ZATVI at or above 6500. Then via filed Stereo Route.

TROWT-ONE DEPARTURE

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PANAMA CITY, FLORIDA

TYNDALL AFB (KPAM)

19 AUGUST 2016 to 18 AUGUST 2017

RIVER-ONE DEPARTURE

RIVER-ONE DEPARTURE

[USAF] SI-312

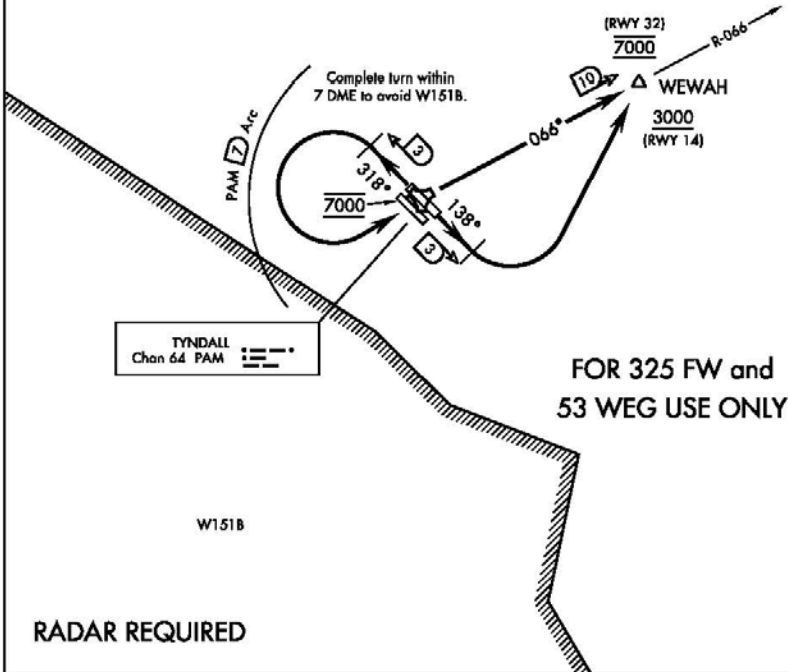
TYNDALL AFB (KPAM)

PANAMA CITY, FLORIDA

ATIS * 254.4
 CLNC DEL
 118.05 348.7
 GND CON
 121.9 259.3
 TYNDALL TOWER
 133.95 263.15
 TYNDALL APP COM
 124.15 338.35

Rwy	Knots	60	120	180	240	300	360
14L (a) V/V(fpm)	250	500	750	990	1240	1490	
14R (a) V/V(fpm)	240	480	720	960	1200	1440	
32L (b) V/V(fpm)	420	840	1260	1680	2090	2510	
32R (b) V/V(fpm)	400	800	1200	1600	1990	2390	

ATC Climb Rate (a) to 3000 (b) to 7000



**FOR 325 FW and
53 WEG USE ONLY**

DEPARTURE ROUTE DESCRIPTION

SEE VOL 19 or HI EAST

TAKE-OFF RWY 14: Cross departure end of runway at or below 1000', climb on track 138°. When passing PAM TACAN 3 DME turn left direct WEWAH. Cross WEWAH at or above 3000. Then via filed stereo route.

TAKE-OFF RWY 32: Cross departure end of runway at or below 1000', climb on track 318°. When passing PAM TACAN 3 DME turn left direct PAM. Cross PAM at 7000. Depart PAM on R-066 and maintain 7000 to WEWAH. Then via filed stereo route.

RIVER-ONE DEPARTURE

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 Comments/updates to acc.A3Aterps@us.af.mil

PANAMA CITY, FLORIDA

TYNDALL AFB (KPAM)

19 AUGUST 2016 to 18 AUGUST 2017

DEFUN-ONE DEPARTURE

DEFUN-ONE DEPARTURE

[USAF] SI-312

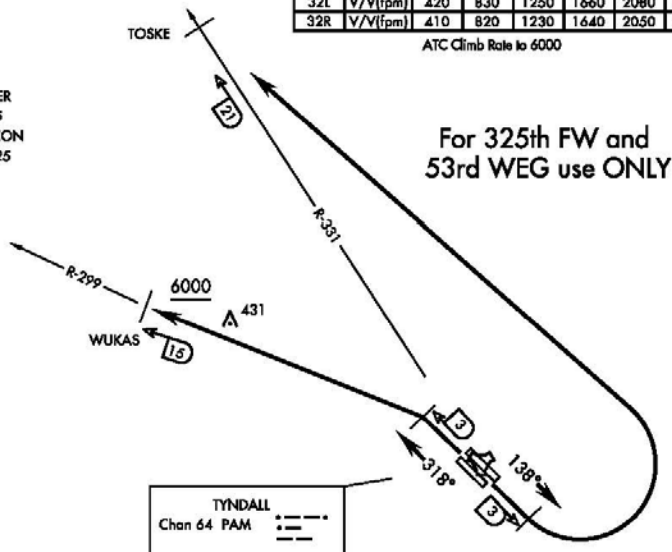
TYNDALL AFB (KPAM)

PANAMA CITY, FLORIDA

ATIS * 254.4
 CLNC DEL
 118.05 348.7
 GND CON
 121.9 259.3
 TYNDALL TOWER
 133.95 263.15
 TYNDALL DEP CON
 124.15 363.125

Rwy	Knots	60	120	180	240	300	360
32L	V/V(fpm)	420	830	1250	1660	2080	2490
32R	V/V(fpm)	410	820	1230	1640	2050	2460

ATC Climb Rate to 6000



RADAR REQUIRED

DEPARTURE ROUTE DESCRIPTION

▽ SEE VOL 19 or HI EAST

TAKE-OFF RWY 14L/R: Cross departure end of runway at or below 1000, climb on track 138°. When passing PAM TACAN 3 DME turn left direct TOSKE. Then via filed Stereo Route.

TAKE-OFF RWY 32L/R: Cross departure end of runway at or below 1000, climb on track 318°. When passing PAM TACAN 3 DME turn left direct WUKAS. Cross WUKAS at or above 6000. Expect RADAR vectors direct TOSKE. Then via filed Stereo Route.

DEFUN-ONE DEPARTURE

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PANAMA CITY, FLORIDA

TYNDALL AFB (KPAM)

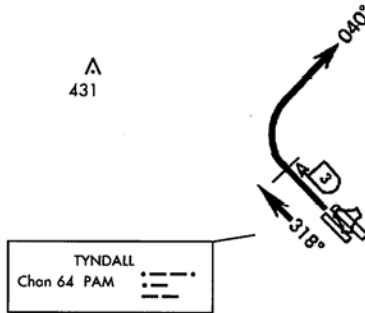
19 AUGUST 2016 to 18 AUGUST 2017

MYERS-ONE DEPARTURE

MYERS-ONE DEPARTURE

TYNDALL AFB (KPAM)
PANAMA CITY, FLORIDA

ATIS * 254.4
CLNC DEL
118.05 348.7
GND CON
121.9 259.3
TYNDALL TOWER
133.95 263.15
TYNDALL DEP CON
125.2 392.1



For 325th FW and
53rd WEG use ONLY

RADAR REQUIRED

DEPARTURE ROUTE DESCRIPTION

▼ SEE VOL 19 or HI EAST

TAKE-OFF RWY 32L/R: Cross departure end of runway at or below 1000, climb on track 318°. When passing PAM TACAN 3 DME turn right to heading 040°. Climb and maintain 17,000'. Then via filed Stereo Route.

MYERS-ONE DEPARTURE

PANAMA CITY, FLORIDA
TYNDALL AFB (KPAM)

PUBLISHED BY 325 OGI/OGV

HUREVAC-ONE DEPARTURE

HUREVAC-ONE DEPARTURE

[USAF] SI-312

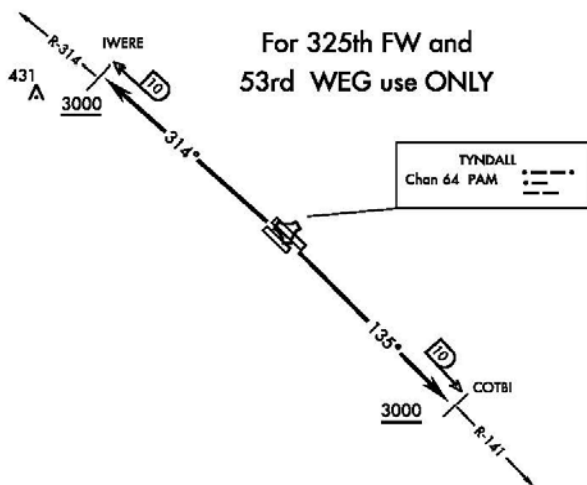
TYNDALL AFB (KPAM)

PANAMA CITY, FLORIDA

ATIS *254.4
 CLNC DEL
 118.05 348.7
 GND CON
 121.9 259.3
 TYNDALL TOWER
 133.95 263.15
 TYNDALL DEP CON
 124.15 363.125

Rwy	Knots	60	120	180	240	300	360
14L	V/V(fpm)	331	662	993	1324	1655	1986
14R	V/V(fpm)	324	648	972	1296	1620	1944
32L	V/V(fpm)	324	648	972	1296	1620	1944
32R	V/V(fpm)	322	644	966	1288	1610	1932

ATC Climb Rate to 3000.



RADAR REQUIRED

DEPARTURE ROUTE DESCRIPTION

▽ SEE VOL 19 or HI EAST

TAKE-OFF RWY 14 L/R: Cross departure end of runway at or below 1000, climb on track 135° and intercept the PAM R-141 to COTBI. Cross COTBI at or above 3000. Then via filed Stereo Route.

TAKE-OFF RWY 32 L/R: Cross departure end of runway at or below 1000, climb on track 314° to IWERE. Cross IWERE at or above 3000.

HUREVAC-ONE DEPARTURE

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PANAMA CITY, FLORIDA

TYNDALL AFB (KPAM)

19 AUGUST 2016 to 18 AUGUST 2017

SPLSH-THREE ARRIVAL

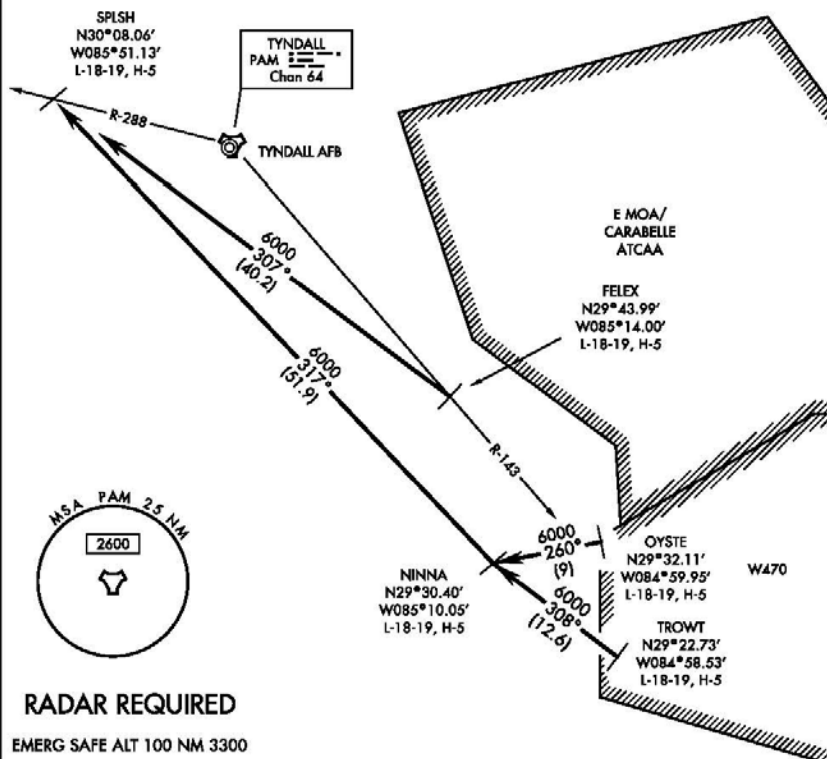
SPLSH THREE ARRIVAL

[USAF] ST-312

TYNDALL AFB
PANAMA CITY, FLORIDA

ATIS * 254.4
TYNDALL APP CON
317.45

For 325th FW and 53rd WEG Use Only.



RADAR REQUIRED

EMERG SAFE ALT 100 NM 3300

ARRIVAL DESCRIPTION

FELEX TRANSITION: Depart FELEX direct SPLSH. Descend and maintain 6000. Thence...

OYSTE TRANSITION: Depart W470 at OYSTE direct NINNA. After NINNA proceed direct SPLSH. Descend and maintain 6000. Thence...

TROWT TRANSITION: Depart W470 at TROWT direct NINNA. After NINNA proceed direct SPLSH. Descend and maintain 6000. Thence...

SPLSH THREE ARRIVAL: From SPLSH expect approach clearance or radar vectors, maintain 6000.

LOST COMMUNICATION: After SPLSH execute HI-TACAN RWY 14L or HI-ILS or LOC RWY 14L.

SPLSH THREE ARRIVAL

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PANAMA CITY, FLORIDA
TYNDALL AFB

19 AUGUST 2016 to 18 AUGUST 2017

FELEX-ONE ARRIVAL

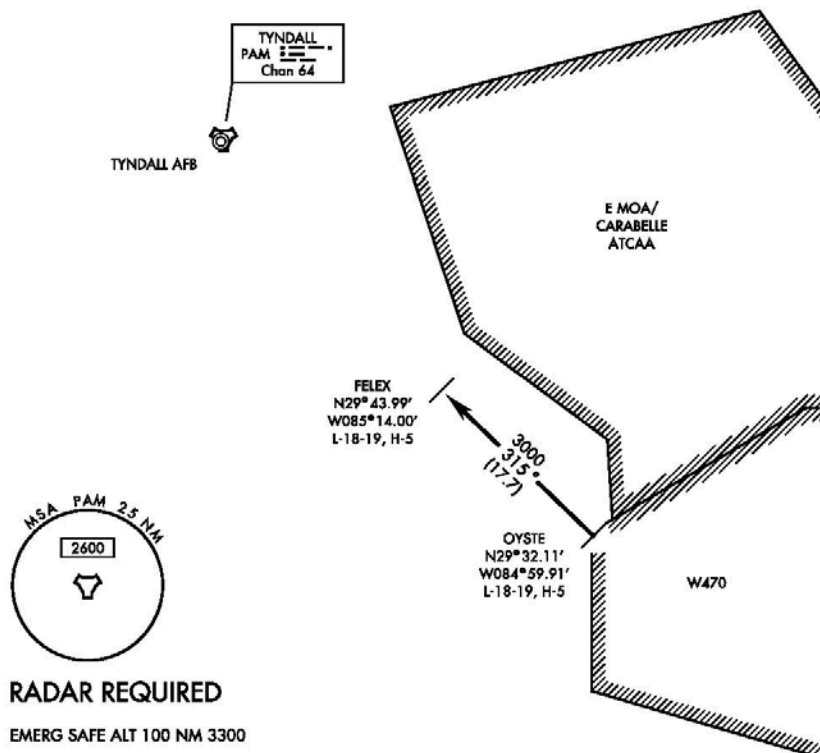
FELEX ONE ARRIVAL

[USAF] ST-312

TYNDALL AFB
PANAMA CITY, FLORIDA

ATIS * 254.4
TYNDALL APP CON
317.45

For 325th FW and 53rd WEG Use Only.



ARRIVAL DESCRIPTION

FELEX ONE ARRIVAL: From FELEX expect approach clearance or radar vectors, maintain 3000.

LOST COMMUNICATION: After FELEX execute HI-TACAN RWY 32R or HI-ILS or LOC RWY 32R.

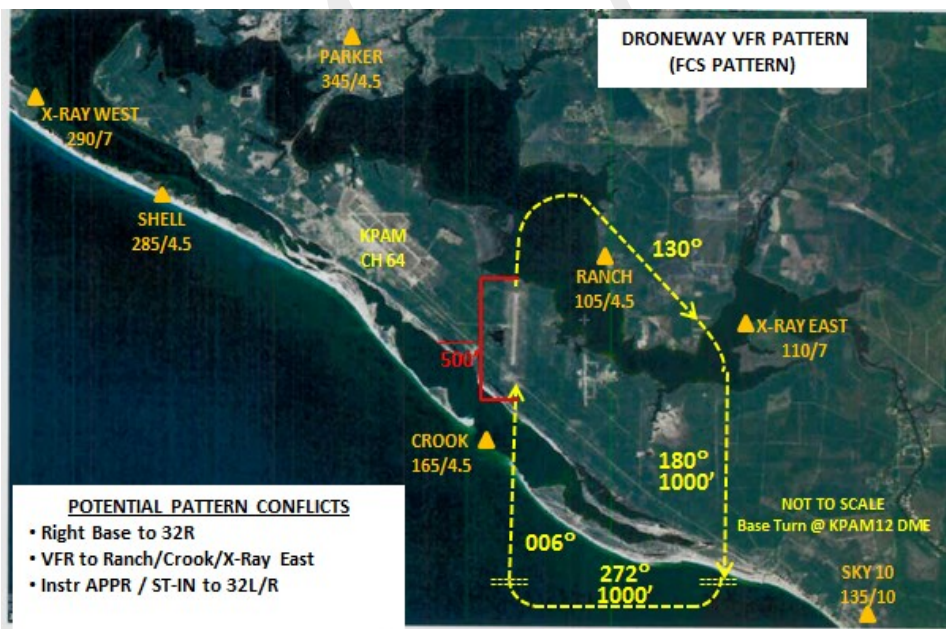
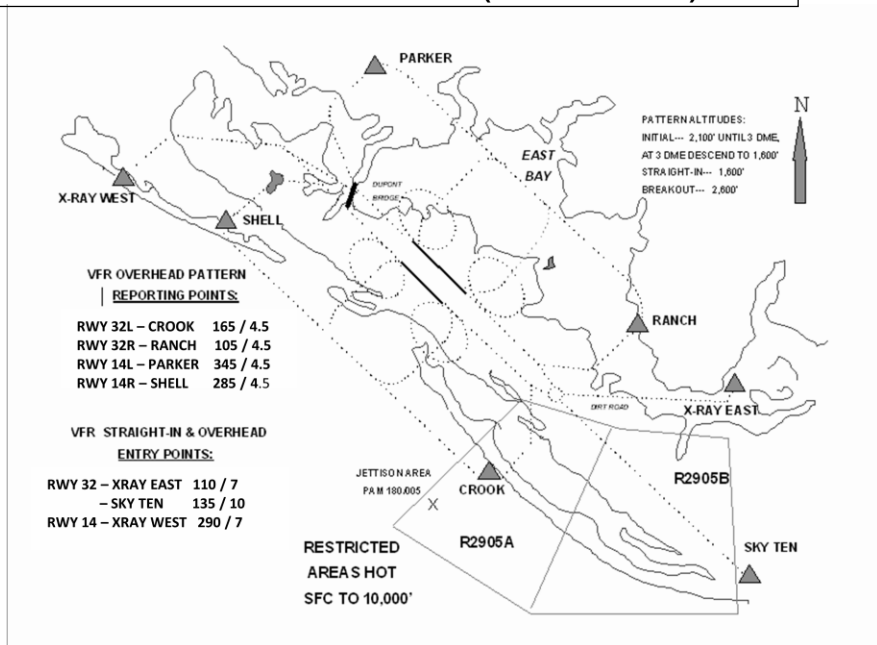
FELEX ONE ARRIVAL

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Comments/updates to acc.A3Aterps@us.af.mil

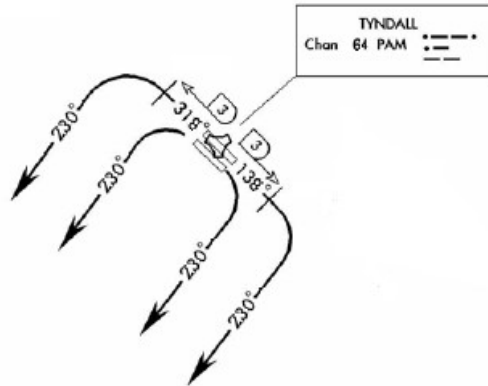
PANAMA CITY, FLORIDA
TYNDALL AFB

19 AUGUST 2016 to 18 AUGUST 2017

VFR PATTERN RUNWAY 14/32 (NOT TO SCALE)



LOCAL CLIMBOUT



DEPARTURE ROUTE DESCRIPTION

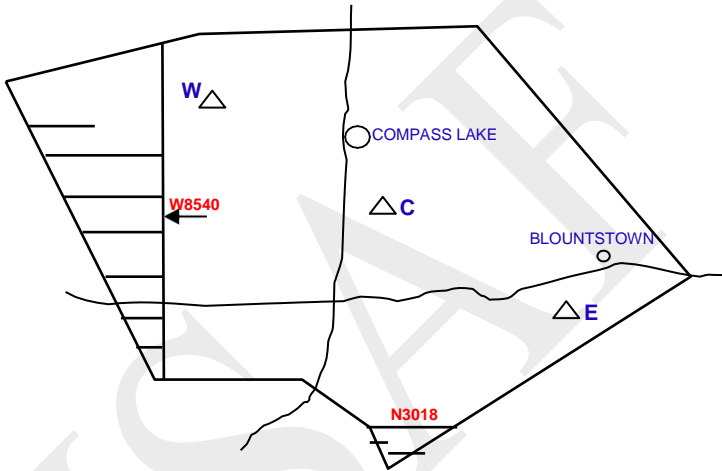
- RWY 14 L:** Fly runway heading until 3 DME, turn right heading 230°, cross departure end of runway at or below 1,000 feet, maintain 1,600 feet.
- RWY 14 R:** At departure end of runway, turn right heading 230°, cross departure end of runway at or below 1,000 feet, maintain 1,600 feet.
- RWY 32 R:** Fly runway heading until 3 DME, turn left heading 230°, cross departure end of runway at or below 1,000 feet, maintain 1,600 feet.
- RWY 32 L:** At departure end of runway, turn left heading 230°, cross departure end of runway at or below 1,000 feet, maintain 1,600 feet.

LOCAL CLIMBOUT

PANAMA CITY, FLORIDA
TYNDALL AFB

COMPASS LAKE MOA

STEREO: PAM 15
B/H MOA: 9,000'-17,999'
COMPASS LAKE ATCAA: FL 180-230



FREQUENCIES

Common (MOA Monitor)	360.825
Blue (ACMI 9)	379.55
Red (ACMI 10)	236.0
Backup	379.4/341.75

Points

W	N3038 W8535	PAM 359/34
C	N3032 W8521	PAM 022/30
E	N3026 W8505	PAM 049/34

1. Fly a River Departure (14) or a TROWT Departure (32)
2. 9,000-23,000'. Use 29.92 in the airspace. If station altimeter is below 29.92, the lowest altitude shall not be assigned.
3. SUBSONIC.
4. Chaff and flares authorized above 9,000' MSL.
5. Flights should remain East of **W8540** and North of **N3018**.

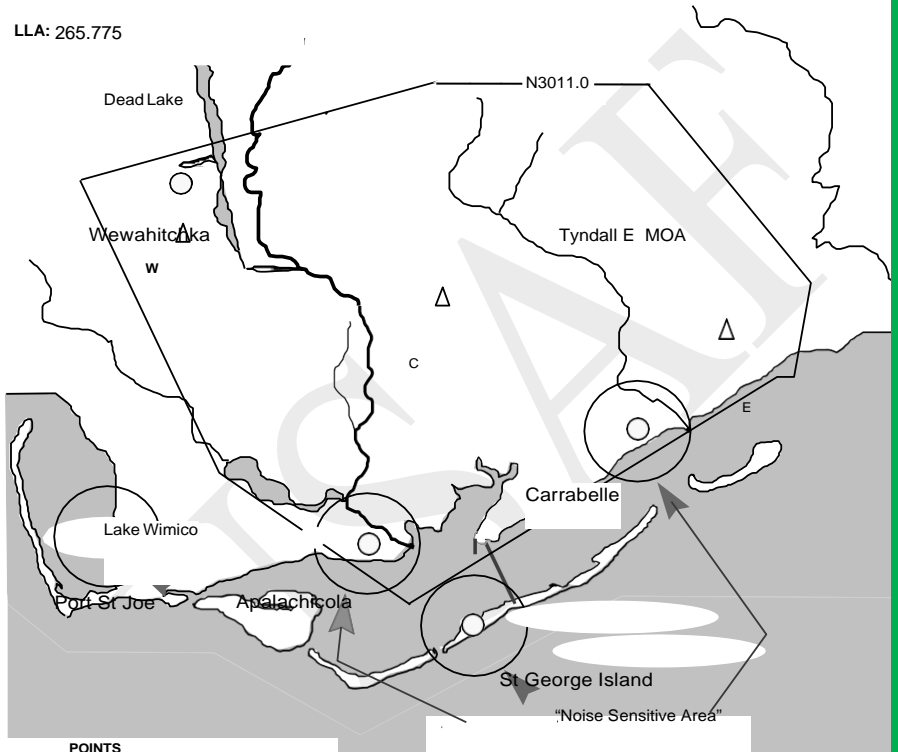
CARRABELLE MOA

STEREOS: PAM 8, 12, 13, HILO
E MOA 9,000' – FL180
CARRABELLE ATCAA FL180-370
FLA A FL240-280

CARRABELLE FREQUENCIES:
CMN: 255.9 (MOA MONITOR)

ACMI 1(B): 354.3/143.6 ACMI 2(R): 234.875

LLA: 265.775



POINTS

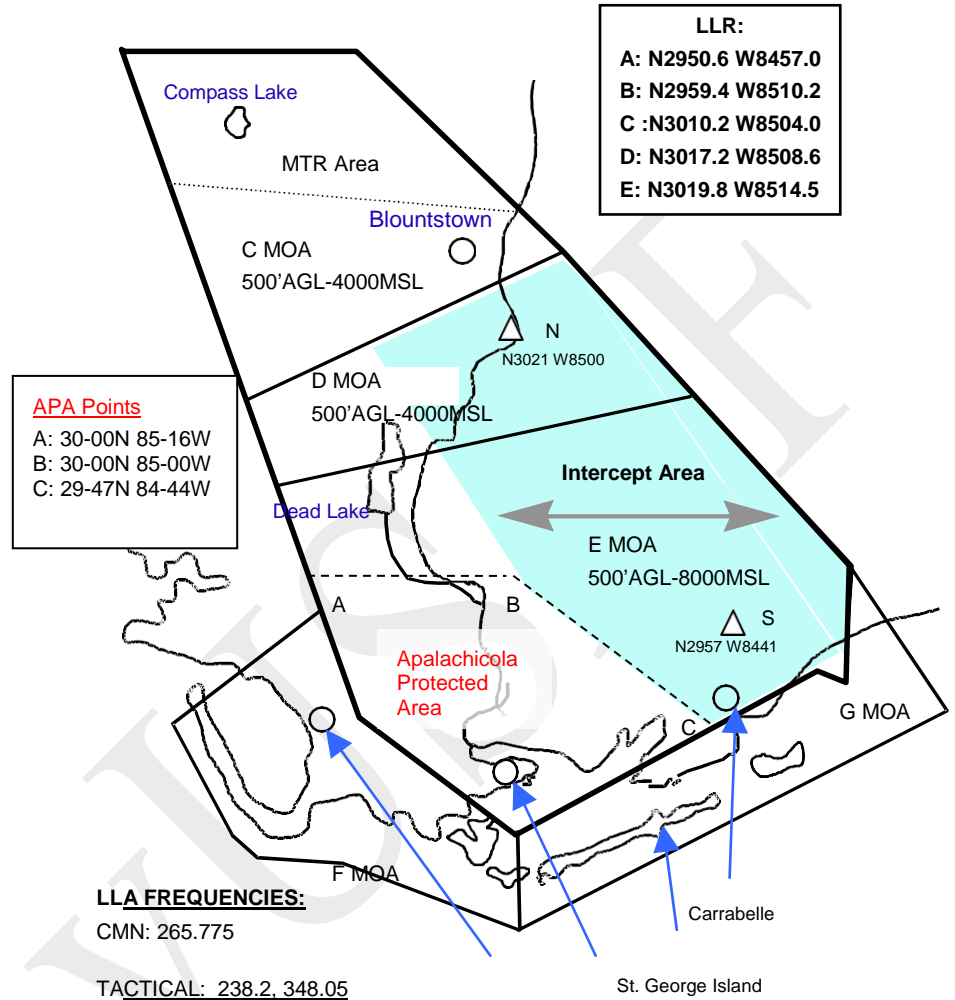
CENTER	N30°00'	W84°55'	PAM 098/34
WEST	N30°04'	W85°11'	PAM 090/20
EAST	N29°56'	W84°38'	PAM 100/49

Avoid by 3NM and 3,000' AGL

1. Fly an OYSTE Departure (RWY 14) or a TROWT Departure (RWY 32).
2. Expect 9,000-FL230 (PAM 8), 5,000-FL230 (PAM 12), 500'-FL180 (PAM HILO) or as assigned for PAM-8 or 12.
3. Use 29.92 in the airspace. If station altimeter is below 29.92, the lowest altitude shall not be assigned.
4. SUBSONIC.
5. Chaff and flares authorized above 9,000' MSL.
6. Flights should remain south of latitude N3011.0

TYNDALL LOW LEVEL AREA

PAM HI-LOW, PAM LOW, PAM 8, 13



LLR:
A: N2950.6 W8457.0
B: N2959.4 W8510.2
C: N3010.2 W8504.0
D: N3017.2 W8508.6
E: N3019.8 W8514.5

APA Points
A: 30-00N 85-16W
B: 30-00N 85-00W
C: 29-47N 84-44W

F & G MOAs: Not included in LLA unless specifically assigned. If approved, 1000' - 17999MSL

Avoid by 3NM/3,000' AGL

1. Fly an OYSTE Departure (RWY 14), or a TROWT Departure (RWY 32).
2. Controlling agency is Tyndall RAPCON.
3. Subsonic
4. Chaff and flares are prohibited at all times.
5. Check the latest information on towers and noise sensitive areas via Portable Flight Planning Software (PFPS) and FalconView.
6. Avoid populated areas to the max extent possible.
7. Avoid Compass Lake by 1500' or 3 NM. Avoid extensive maneuvering over

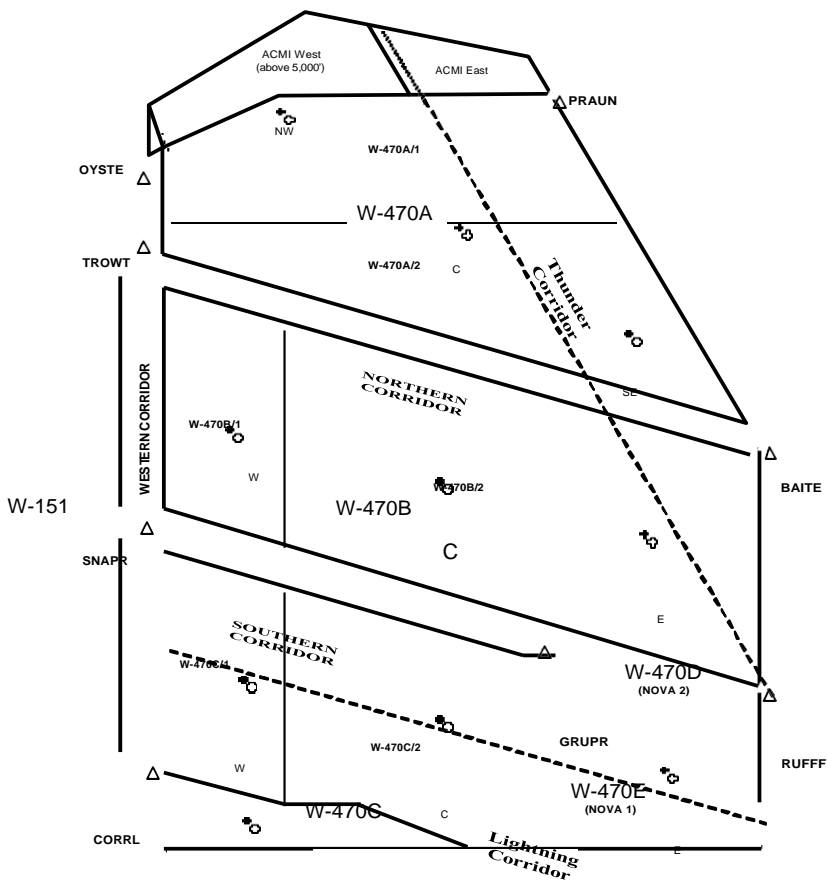
Compass Lake at all altitudes within the LLA.

8. Remain above 1000' within 5 NM of Apalachicola.

9. Remain clear of Apalachicola Protected Area SFC - 4000'MSL when active.

VUSAFE

W-470 / NOVA
STEREOS: PA M 470, 19, 22



W-470F

- OYSTE** 2932N8500W (137/44)
- TROWT** 2922N8458W (143/52)
- SNAPR** 2846N8458W (158/84)
- CORRL** 2815N8458W (164/114)
- PRAUN** 2942N8400W (105/85)
- BAITE** 2856N8331W (122/127)
- GRUPR** 2831N8403W (139/123)
- RUFFF** 2824N8331W (132/147)

- W-470A POINTS**
- C** 2925N8414W (119/80)
- NW** 2940N8438W (116/55)
- SE** 2911N8350W (120/105)
- W-470B/D POINTS**
- C** 2852N8417W (137/97) **W**
- 2859N8445W (146/78) **E**
- 2845N8348W (130/122)
- W-470C/E/F POINTS**
- C** 2821N8417W (146/123) **W**
- 2827N8445W (156/106) **E**
- 2814N8348W (139/144) **F**
- 2806N8440W (160/127)

- W-470 FREQUENCIES**
- W-470A**
- CMN: 227.075
- ACMI 7(B): 361.4/139.0
- ACMI 8(R): 314.05/149.750
- W-470B/D**
- CMN: 376.45
- ACMI 5(B): 257.5/140.325
- ACMI 6(R): 358.85/141.95
- W-470C/E/F**
- CMN: 291.15
- ACMI 3(B): 234.925/142.875
- ACMI 4(R): 360.55/141.175

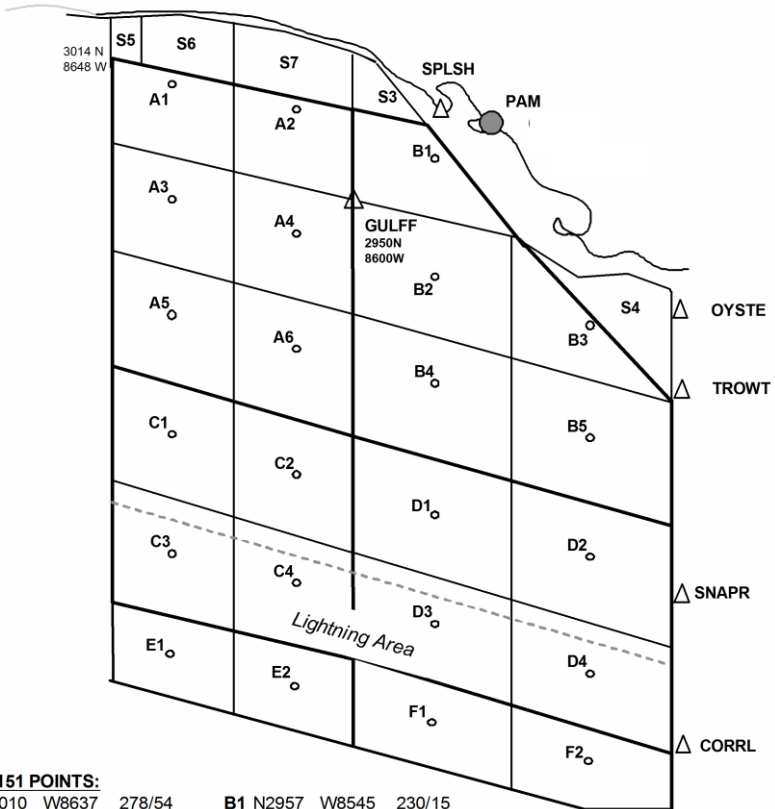
W470 SFC – UNLIMITED, ACMI EAST & WEST 5,000'-FL600
 Use local altimeter in the airspace.
 Chaff/Flare authorized >1,000' AGL, Supersonic authorized >10,000 feet MSL and >15nm from the closest shoreline.

Normal RTB should be from Oyste or Trowt, at or below FL230. Higher recoveries require prior coordination with Jacksonville Center.

VUSAFE

W-151

STEREO: PAM 151, 2, 86



W-151 POINTS:

A1 N3010 W8637 278/54
A2 N3005 W8612 273/31
A3 N2949 W8637 254/58
A4 N2943 W8612 237/38
A5 N2930 W8637 237/65
A6 N2924 W8612 218/53

C1 N2910 W8637 224/75
C2 N2903 W8612 208/70
C3 N2850 W8637 216/93
C4 N2845 W8612 202/85
E1 N2831 W8636 212/107
E2 N2825 W8612 200/104

B1 N2957 W8545 230/15
B2 N2937 W8545 197/30
B3 N2928 W8515 155/38
B4 N2918 W8545 190/48
B5 N2909 W8515 163/58

D1 N2857 W8545 188/70
D2 N2849 W8515 168/75
D3 N2838 W8545 185/88
D4 N2830 W8515 169/93
F1 N2818 W8545 187/106
F2 N2811 W8515 173/114

W-151A

CMN: 309.2
 ACMI 22(B): 323.8
 ACMI 23(R): 245.45

W-151B

CMN: 253.6
 ACMI 11(B): 326.625/138.250
 ACMI 12(R): 339.675/140.375

W-151 C/E

CMN: 239.8
 ACMI 24(B): 229.05
 ACMI 25(R): 259.75

W-151 D/F

CMN: 338.175
 ACMI 19(B): 235.2/141.15
 ACMI 20(R): 289.175/150.575

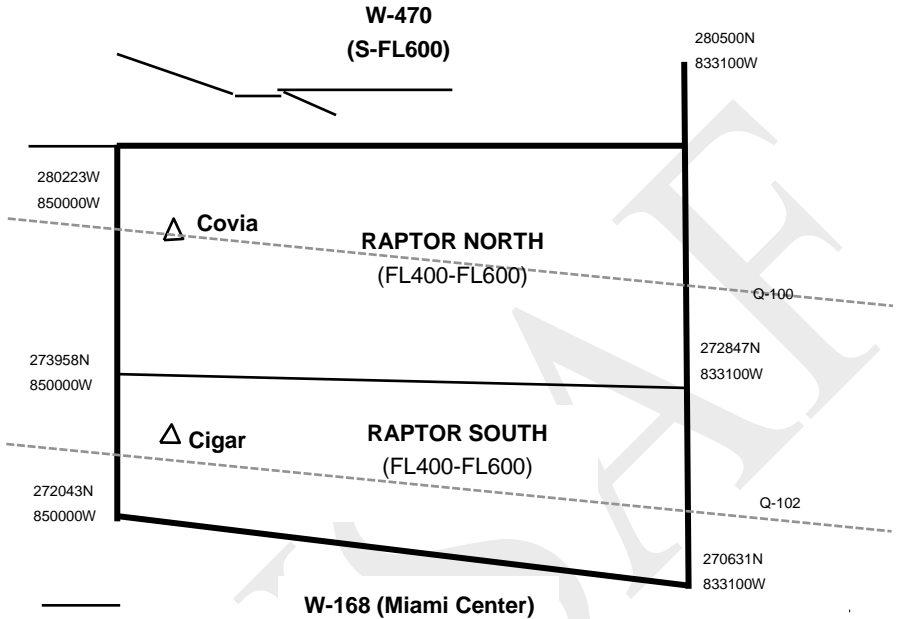
W151 SFC – UNLIMITED

Use local altimeter in the airspace

Chaff/Flare authorized >1,000' AGL, Supersonic authorized >10,000 feet MSL and >15nm from the closest shoreline

RAPTOR ATCAA

STEREO: PAM 22
FL400 - FL600



Common Reference
Points:

COVIA: 2756N08444W

CIGAR: 2730N08447W

1. Procedures: Raptor ATCAA will always be used in conjunction with, at a minimum, the southern portion of the W470 complex. Release will include Raptor ATCAA and any restrictions.
2. Stereo: PAM22 with OYSTE/TROWT departure (runway dependant). Clearance will be OYSTE and/or TROWT then into W470 and include release of Raptor ATCAA.
3. Supersonic approved. Chaff and flares are not authorized.

MOODY 3 MOA



STEREO: PAM 10

EUFALA
EUF CH 29



EUF 155/20
N3139/W8458



PZD CH 108

C

ENTRY  EXIT

N3124/W8448
PAM 027/90
PZD 240/30
(CH 108)

EUF 155/59
N3104/W8437



JAX CTR FREQ: 134.850

TAC FREQ: 359.0

ENTRY/EXIT: N3124 W8448

1. Fly a RIVER-FOUR Departure.
2. Altitude 8,000'-FL230 or as assigned. If block encompasses airspace above and below FL180, set 29.92 altimeter setting.
3. When the station altimeter is below 29.92, the lowest published altitude shall not be assigned to mission aircraft.
4. Chaff (with the exception of R-196 chaff) and flares authorized.
5. SUBSONIC.
6. Radio failure - while in the area, proceed from the filed exit point with appropriate squawk at EAC time at highest altitude in last assigned block to

the designated IAF.

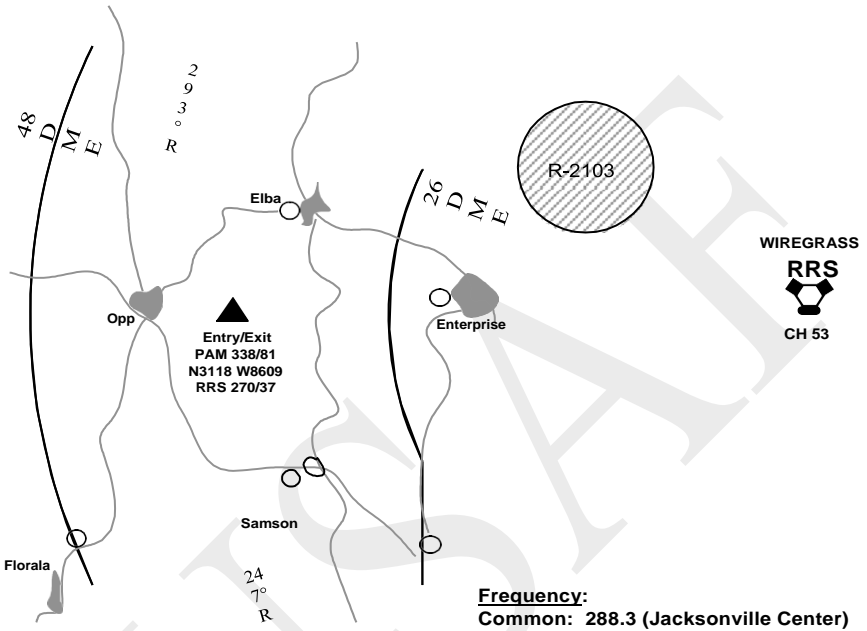
VUSAFF

5. Chaff (with the exception of R-196 chaff) and Flares authorized.

VUSAFE

ROSE HILL MOA

8,000' - FL230
STEREO: PAM 16



<u>PT</u>	<u>LAT</u>	<u>LONG</u>	<u>RRS(CH 53)</u>
E/E	N3117	W8609	270/37
S	N3103	W8609	250/39
N	N3131	W8609	290/39

TAC FREQ: 288.3

ENTRY/EXIT: N3118 W8609

1. Fly a DEFUN Departure.
2. Altitude 8,000'-FL230. Set 29.92 altimeter setting if the block is above FL180.
3. When the station altimeter is below 29.92, the lowest published altitude shall not be assigned.
4. JAX radar must be operational and aircraft must have operational transponder.
5. SUBSONIC.
6. Chaff and flares prohibited.
7. Request clearance at least 5 minutes prior to departure from area.
8. Radio failure – Depart at specified time, VFR- maintain VFR and land as

soon as practical. IFR- via assigned route at highest altitude or flight level assigned in last ATC clearance.

VUSAFE

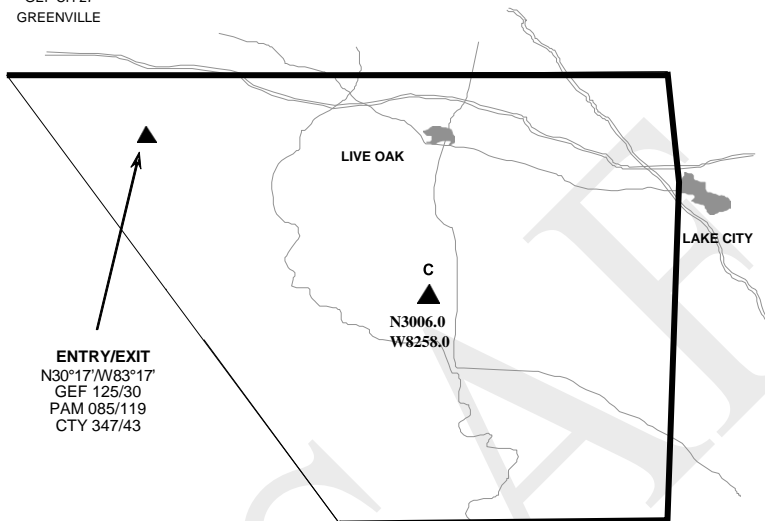
LIVE OAK MOA

STEREO: PAM 11

8000'MSL-FL230



GEF CH 27
GREENVILLE



Frequencies:

JAX CTR: 134.850

TAC: 348.3



CTY CH 57
CROSS CITY

JAX CTR FREQ: 134.850

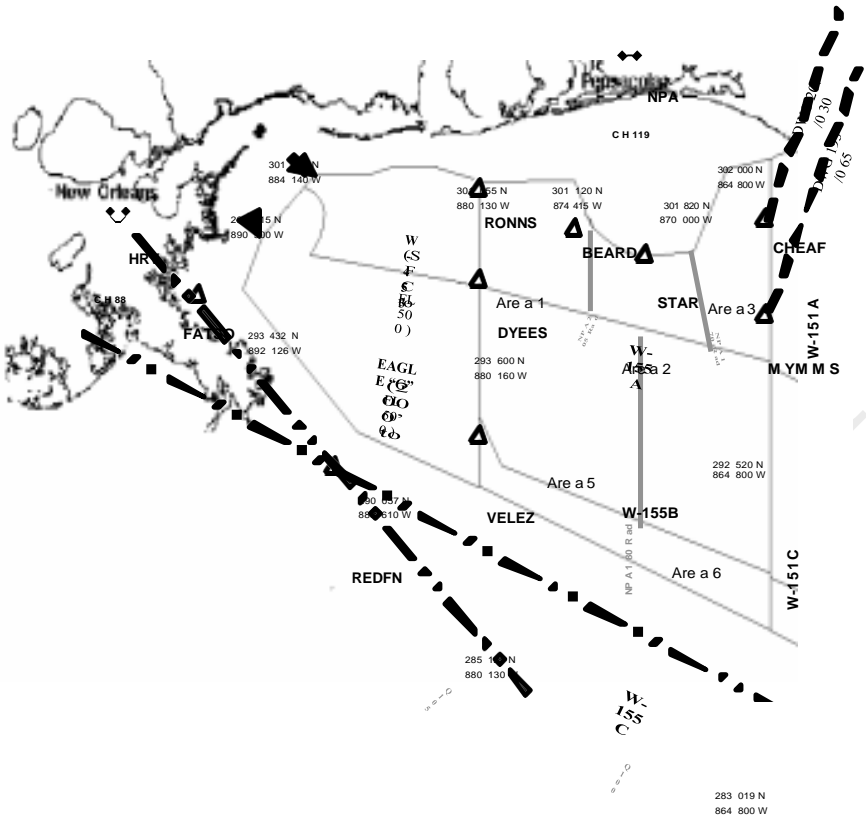
TAC FREQ: 348.3

ENTRY/EXIT: N3017 W8317

1. Fly a RIVER Departure.
2. Altitude 8,000'-FL230.
3. Controlling agency is Jacksonville ARTCC.
4. SUBSONIC.
5. Radio failure – Proceed from the filed exit point with the appropriate squawk at EFC at highest altitude in last assigned block to the designated IAF.
6. When the station altimeter is below 29.92, the lowest published altitude shall not be assigned to mission aircraft.
7. Chaff and flares prohibited.

W155 AND GULF

STEREO: PAM 155G



W-155 (S-FL500)

Stereos/Departure: PAM155 using PHIPS or DEFUN Departure

Frequencies:

353.775 Seabreeze Primary 127.45 Seabreeze VHF

Reference Points:

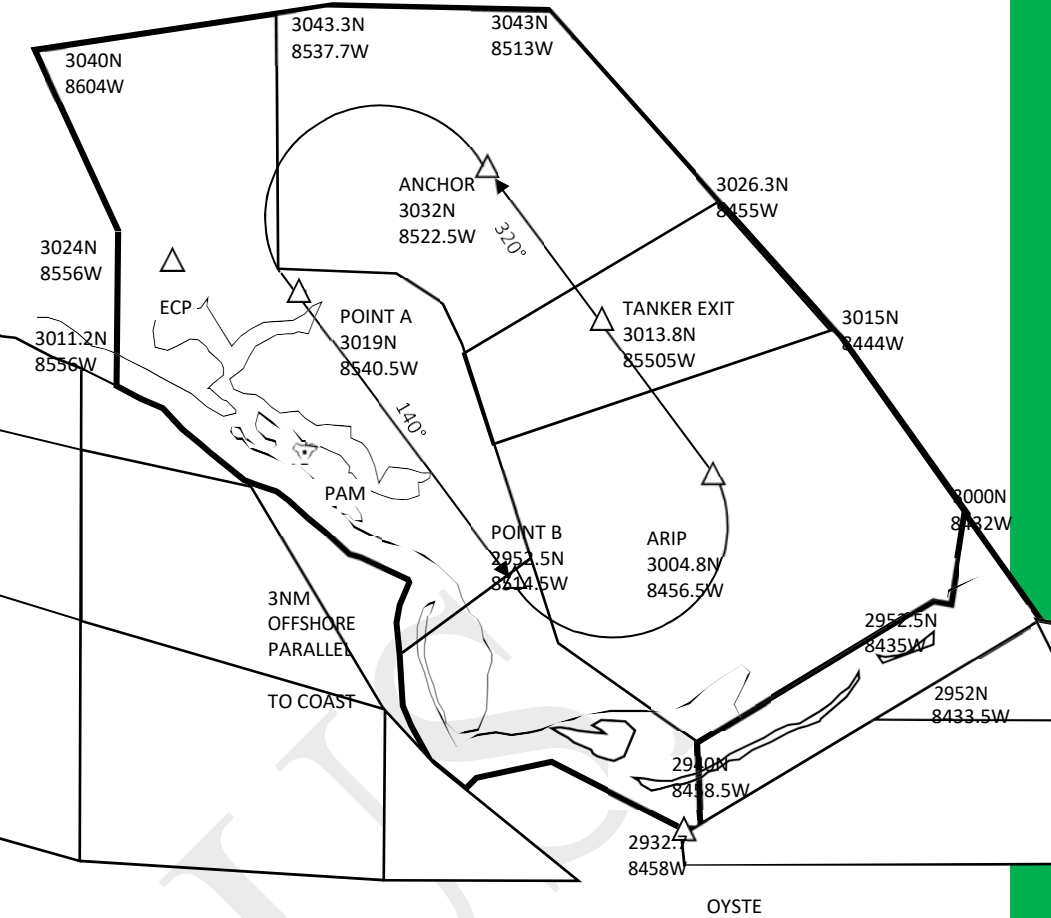
Beard: NPA 210/028	Mymms: NPA 153/063 or DWG 193/065
Staar: NPA 180/030	Cheaf: NPA 124/034 or DWG 207/030
Rozie: NPA 160/28	Warrington (DWG): 302869N 0863125W

Eagle Gulf (2000' to FL500, and includes W-453)

Stereos/Departure: None for Eagle G use only, file DD 175

VUSAFF

FLA "A" (AR660) AIR REFUELING TRACK



STEREO: PAM 5
FL 240-FL280 OR AS ASSIGNED BY ATC

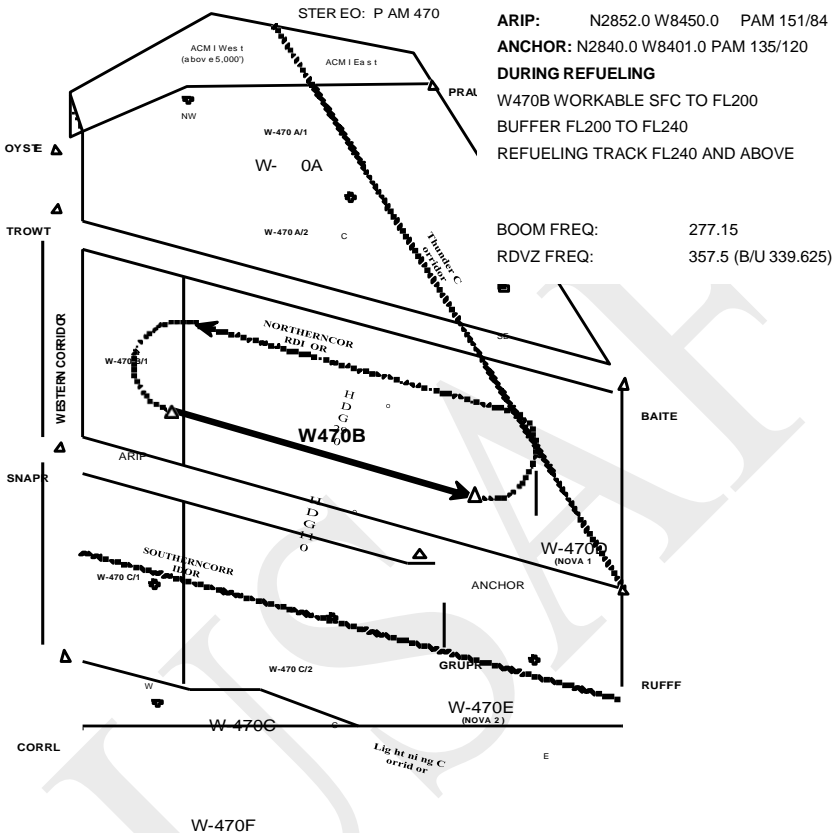
ARIP:	3004.8N	8456.5W	(PAM 089/33)
ANCHOR:	3032.0N	8522.5W	(PAM 020/30)
POINT A:	3019.0N	8540.5W	(PAM 342/16)
POINT B:	2952.5N	8514.5W	(PAM 124/21)
TANKER EXIT:	3013.8N	8550.0W	(PAM 070/27)

BOOM FREQ: 277.15
RDVZ FREQ: 357.5 (B/U 339.625)

RAMP 2 AIR REFUELING TRACK

FL240 - FL350

W-470 WARNING AREA (SFC - FL600)



REFUELING PROCEDURES

ENTRY: OYSTE/TROWT - Departure to TROWT, climb and maintain FL210B230 (or as assigned). At TROWT, proceed direct ARIP, climb and maintain FL240 (or as assigned).

EXIT: Climb and maintain FL280 (or assigned) direct Northern Corridor, direct TROWT.

W470A/C, W151B/D: Proceed direct airspace, remain in W470B until handoff.

W470B: Proceed direct Northern Corridor, direct TROWT. In the Northern Corridor, descend to FL240 by TROWT. Remain in the Northern Corridor until cleared into W470B.

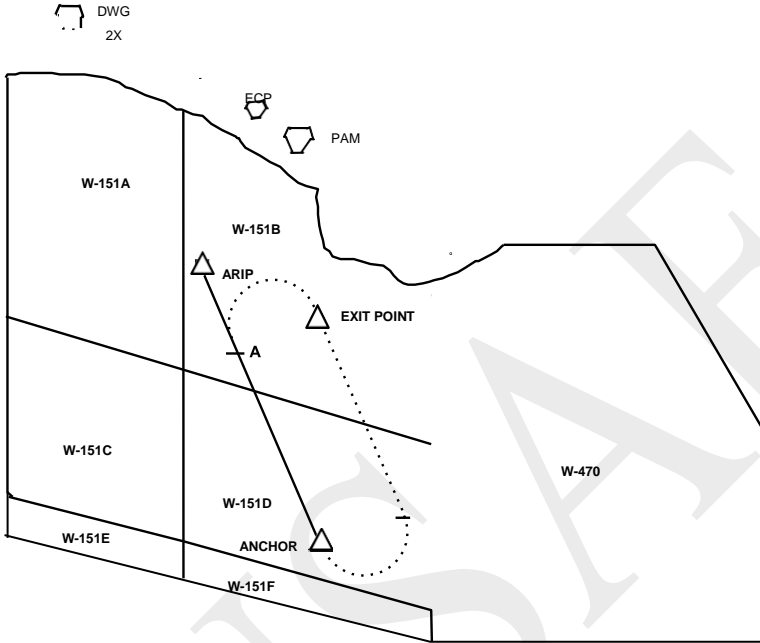
CARRABELLE, COMPASS LAKE, LLA, RTB, OTHER: Proceed direct TROWT. At TROWT descend to cross OYSTE at FL230. Expect vectors passing TROWT.

LOST COMM: Descend to 8000' prior to TROWT then proceed IAW In Flight Guide.

VUSAFE

DESTIN "B" AIR REFUELING TRACK

STEREO: PAM 151



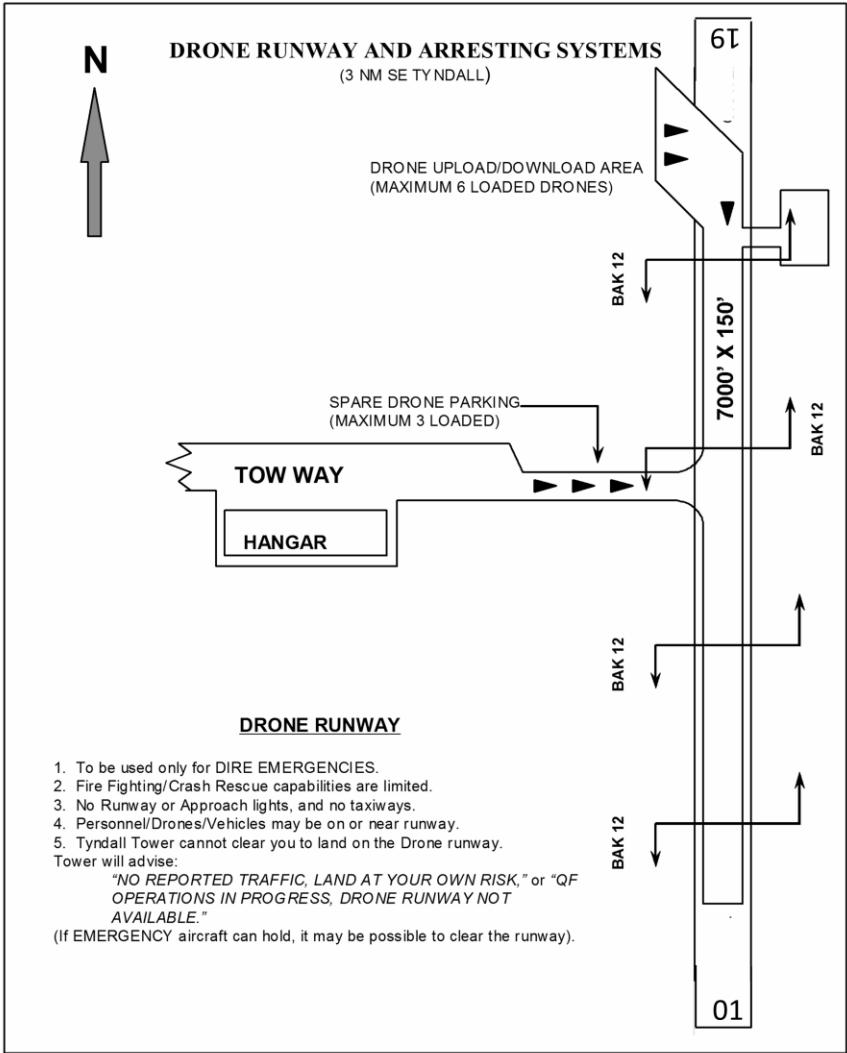
ENTRY: OYSTE/TROWT departure. At COTBI (RWY 14) / ZATVI (RWY 32), turn right direct ARIP. Upon entering W-151B airspace, climb and maintain FL230 (or as assigned).

EXIT: FL280 or as assigned, direct airspace. Remain in W151B/D/F until transferred to MRU/Eglin Mission Control

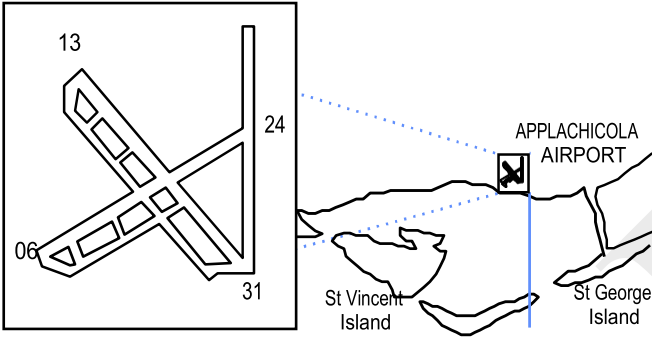
ARIP	2937N 8559W	(DWG 151/059)
ANCHOR	2832N 8528W	(DWG 154/129)
POINT A	2917N 8549W	(DWG 152/080)
POINT B	2839N 8506W	(DWG 146/133)
EXIT POINT	2926N 8527W	(DWG 138/084)

BOOM FREQ: 277.15

DRONE RUNWAY – EMERGENCY (NOT TO SCALE)



APALACHICOLA AIRPORT - EMERGENCY



NOTES:

1. Location: N2943.5 W8501.5 (PAM 126/35) ELEV 20'
2. RWY 31/13 5,350' x 150', displaced threshold RWY 31
RWY 24/06 5,070' x 150'
3. Primary landing runway is 31/13.
4. Practice approaches require 325 OG/CC approval.
5. RWY 31/13 is NOT normally lighted at night unless they are being used by light aircraft.

HAZARDS:

1. All runways have 4-6 inch concrete lip on their ends.
2. Trees are present on the approach ends of all runways.
3. A 300' radio tower is located ½ NM south of the field.
4. Expect vehicular traffic on the field.
5. Grass growth on taxiways and runways.
6. VFR only, uncontrolled field.

REMARKS:

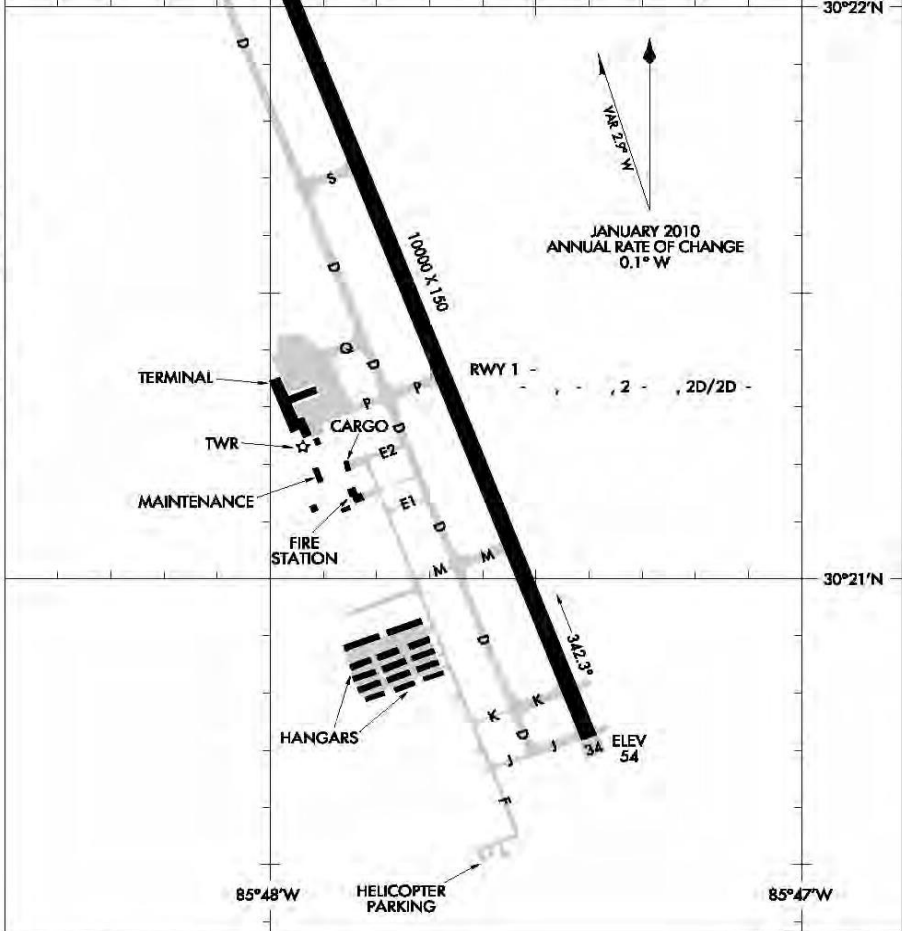
Airport is manned during daylight hours (850) 653-2222.
Weather Service -24 hours (850) 653-8318/8271.

(KECP) PANAMA CITY/NORTHWEST FLORIDA BEACHES INTL

ATIS
119.975
PANAMA CITY TOWER *
118.95
GND CON
121.65
D

COORD: N3021.49 W8547.74 (NO TACAN)
RWY 16/34: 10K x 150', ELEV 69'
TYN APPR: 317.45 (CH 6) / 124.15
ECP TWR: 269.0 / 118.95
ILS or LOC DME RWY 16: LOC 111.15/CH 48 (Y)

**CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
REARBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.**



AIRPORT DIAGRAM
10210

PANAMA CITY/NORTHWEST FLORIDA

PANAMA CITY, FLORIDA
ITY INTL (ECP)

LOST COMMUNICATION – SINGLE SHIP

IFF Procedures

Squawk Mode 3/7600. Strangle mode 2.

If able to recover in VMC, follow VFR procedures below.

If unable to recover in VMC, follow IFR procedures below.

VFR Procedures

- Return to the traffic pattern avoiding departure corridors, training areas and drone launch/recovery areas.

- Enter the normal traffic pattern, fly alongside the outside RWY at 1000', rocking wings and clearing. At departure end, turn and climb to 1600'.

- For cable engagement, have hook down during fly past or flash landing light on final.

IFR Procedures

Departure - If outside 35 DME or above FL230, follow lost comm. procedures in the FIH. If within 35 DME of PAM TACAN and below FL230:

- Continue on the published departure and squawk 7600.

- One minute after squawking 7600, climb/descend and maintain 8000' direct the appropriate holding fix for the active runway.

- Commence approach 30 minutes after departure time.

Working Area - Proceed to the appropriate holding fix for the active runway at one of the following altitudes and hold until the ETA, then descend in the holding pattern to the IAF altitude and penetrate. If already below the IAF altitude, penetrate from your present altitude:

- PCA: Last assigned or lowest in the block.

- LLA: 4000'.

- COMPASS LAKE/ CARRABELLE / W470 / W151: IFR - FL180.

NOTE: W470/151D - Recover via Splsh-Three / Felex-One arrival procedures and proceed direct IAF at TROWT or OYSTE.

NOTE: W151B – Recover direct IAF.

Recovery – Follow the lost communications instructions received from approach. If instructions have not been given:

- Enroute Descent – Proceed to the IAF at the last assigned altitude or EMERGENCY safe (3300'), whichever is higher, and execute the published approach.

- Established in the Radar Pattern – Climb to 3000 and approximate a normal radar pattern. Intercept the 14 DME arc, arc left/right to intercept published IAP for RWY 14L/32R and execute the published approach.

Ground-

Turn on Taxi light and taxi to park.

If you need to cross a runway:

- Get the attention of tower by raising and lowering the canopy. At night, point at the tower and flash the landing light.

- Look for a flashing green light from tower. Then, proceed onto the runway and taxi off at the nearest taxiway.

FIGHTER INDEX OF THERMAL STRESS

FITS Caution:

- Be alert for symptoms of heat stress.
- Drink plenty of liquids (non-caffeinated).
- Limit ground operations time to 90 minutes (time outside an air-conditioned environment). If exceeded, MIN recovery time is 30 min.
- Minimum of 30 consecutive minutes of inactivity in AC environment between flights.

FITS Danger (in addition to Caution procedures):

- Avoid exercise 4 hours prior to takeoff on any low-level sorties.
- Minimum recovery time between flights is 2 hours (landing time to next T/O). Does not apply to hot pit refueling.
- Limit ground operations to 45 minutes (time outside air-conditioned environment). If exceeded, the minimum recovery time is 30 min.
- Complete a maximum of two aircraft inspections (initial sortie of the day)
- Complete a maximum of one aircraft inspection (subsequent sorties during the day).
- Canopy down and a properly functioning ECS constitutes an air-conditioned environment for FITS compliance.

INFLIGHT EMERGENCIES - GENERAL

- Notify the **SOF on 373.65 (CH 11)**, time permitting with:
 - Type of aircraft and call-sign
 - Nature of emergency
 - ETA in minutes or miles
 - Landing runway
 - Souls on board
 - Fuel remaining (in minutes)
 - Armament status or hazardous cargo, if applicable
 - Corrective actions taken
 - Intentions
- When possible, use single frequency approach (**SFA on 317.8 (CH 12)**).
- Recovery to the outside runway is preferred.
- Pilots may request CHASE response if the situation warrants.
 - Under CHASE response, the fire and rescue vehicles will follow the aircraft down the runway.

SECURING AIRCRAFT AFTER EMERGENCIES

- The preferred runway for emergency landings is RWY 14L/32R.
- The number one priority is to safely recover aircraft and terminate the EP.
- The default course of action is to shut down on the runway and egress.

The following options should be considered if ground egress is not required:

- Shut down on the runway and stay in the cockpit until the aircraft is towed clear,
- Taxi clear, shut down, and have the aircraft towed to park,
- Land and taxi back.

SECURING AIRCRAFT WITH UNSAFE GEAR

Aircraft that land with an unsafe gear indication will stop straight ahead on the runway (or in the cable, if applicable) and have the landing gear pinned prior to taxiing clear. This applies any time a landing is accomplished with in-cockpit gear indications other than three down and locked.

IMPOUNDED AIRCRAFT

Pilots will advise maintenance to impound the aircraft if one of the following malfunctions occurs:

- Loss of thrust
- Engine case penetration, rupture, or burnthrough
- Engine bay fire, massive fuel leak
- Uncommanded flight control inputs
- FOD
- Physiological incident
- Loss of pitot static system
- Loss of all attitude or directional gyros
- Damage to aircraft
- Inadvertent release of munitions
- Landing gear does not extend normally

FUEL DUMPING

The fuel dump area is a minimum of **5 NM off shore, at or above 10,000' MSL** unless an emergency dictates otherwise. Notify controlling agency prior to commencing fuel dumping and when fuel dumping is complete.

ON-SCENE COMMANDER PROCEDURES (OSC) / RESCAP

1. Fly the aircraft first: Clear flight path / 300KCAS min, 1000'AGLmin
 - a. Establish safe separation between aircraft.
 - b. Don't fly below the last known altitude of chute (1 min per 1000')
2. Establish OSC ASAP.
3. Pass location to SOF / ATC to alert SAR force response
4. Inventory status: fuel / wingman / assets available
 - a. Revise RTB location (if required / able)
 - b. Update Bingo fuel (if able)
 - c. Stack aircraft to optimize on station time
 - d. Don't overfly Bingo Fuel
 - e. Send excess assets home to ease deconfliction.
 - f. Consider keeping HF capable aircraft on station if required.
5. Confirm if chute(s) or survivor(s) have been seen.
6. Contact downed aircrew:
 - a. Initial contact: 243.0 then switch to 282.8
 - b. Determine condition: injuries / ability to move.
 - c. Remind them to turn locator beacon off as required.
 - d. Have them inventory signaling devices.
 - e. Verify survivor's position: location / GPS / overflight / what can survivor see?
 - f. Relay required information to SAR forces (through ATC / SOF)

HOT BRAKES PROCEDURES

Notify Ground. If in chocks remain in place, else:

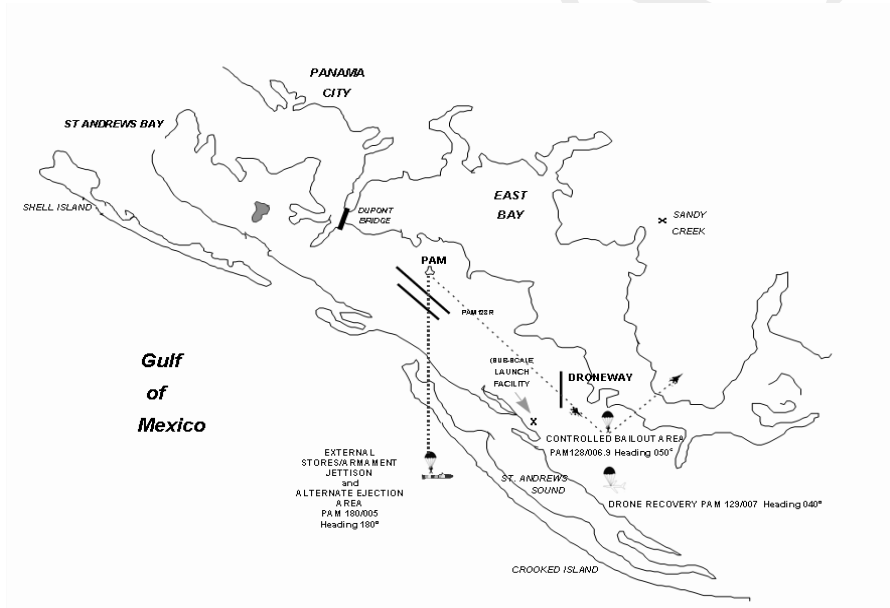
- Intersection of Bravo and Delta Taxiways (primary)
- Alpha just short of 14L, and Juliet short of 32R (secondary)
- SOF may direct EOR based on the situation.

CONTROLLED BAILOUT - PAM 128/6.9

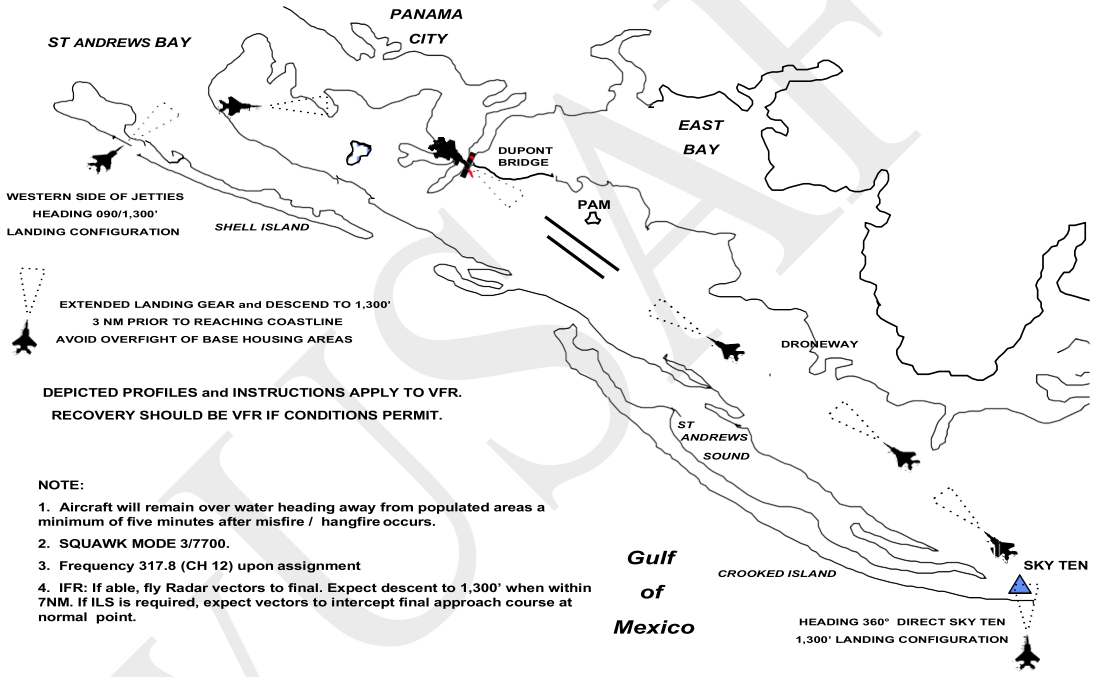
- Notify SOF and Tyndall RAPCON of intentions .
- VMC: Proceed to PAM 128/6.9 (2 NM north of SKY TEN) heading 050°.
- IMC: Request RAPCON vectors to bailout point.
- **IMC/Radar Out:** Arc north on 7 DME arc to bailout area.
- Overhead bailout area, eject, following appropriate flight manual procedures:
 - 150-250 KIAS and 2,000-5,000' MSL, throttles idle.

CONTROLLED JETTISON - PAM 180/5

- Contact SOF and RAPCON
- Fly recommended flight manual A/S at 3,500' MSL. (F-22A <260KIAS)
- Clear area visually for boats or other aircraft. At Night or IMC, request traffic advisories from RAPCON.
- Jettison stores heading 180 at the PAM 180/05.
- After drop, enter the hung ordnance pattern if required.



ARMAMENT HANGFIRE/MISFIRE
RECOVERY PATTERN



DEPICTED PROFILES and INSTRUCTIONS APPLY TO VFR.
RECOVERY SHOULD BE VFR IF CONDITIONS PERMIT.

NOTE:

1. Aircraft will remain over water heading away from populated areas a minimum of five minutes after misfire / hangfire occurs.
2. SQUAWK MODE 3/7700.
3. Frequency 317.8 (CH 12) upon assignment
4. IFR: If able, fly Radar vectors to final. Expect descent to 1,300' when within 7NM. If ILS is required, expect vectors to intercept final approach course at normal point.

CABLE ENGAGEMENT

- If an approach end arrestment is required, land on the inside runway or coordinate with the SOF for the outside runway approach end cable to be raised (approx. 15 minutes required).
- Normally, the approach end cable on the outside runway will be down for T-38 ops. This cable will be raised when the weather drops below 1000' ceilings and/or 2 SM visibility, and for all night flying. The SOF may also direct this cable to be raised as required.

In order to minimize runway closure time for a cable engagement:

- Pilots will plan to shut down in the cable and stay in the aircraft until towed clear of the runway, unless the emergency requires ground egress.
- Pilots will ride the brakes back to parking while being towed. The tow chief will have a checklist and is responsible for the tow operation. Ensure a chock walker is in place if the brakes are inoperative

ARRESTING GEAR CAPABILITIES

Maximum engagement speeds for varying types of Air Force arresting gear are located in the -1 CL. If forced to take a cable at an out-base, use the following barrier equivalents to determine max engagement speeds. Refer to the IFR Supplement for arresting gear availability at a particular airfield.

TYPE	EQUIV.	DESCRIPTION
BAK-9	E-27	Rotary Friction Brake
BAK-12/14	No Equivalent	Rotary Friction Brake
BAK-13	E-28	Rotary Hydraulic (Water Brake)
MA-1A	E-5	Chain Type

NOTE: Tyndall AFB MA-1A (mod) barriers and the E-5 barrier located at the departure end of 13R during normal configurations are essentially the same.

For tail-hook equipped aircraft, the MA-1A and E-5 should be used as a last-ditch method to help slow the aircraft before departing the hard surface.

Navy bases have removed the E-5 barrier at most of their fields. Conditions permitting, pilots should make every effort to use a BAK-12/14 or E-28 at Navy or Marine airfields for emergencies or if stopping distance is critical.

If an MA-1A / E-5 arrestment is unavoidable, make every effort to engage it as slow as possible. **Continue to attempt all means of normal, backup, or emergency braking before & during E-5 / MA-1A cable engagement.**

At 40,000lbs GW, engagements of an E-5 or MA-1A above 82 knots may not stop your aircraft prior to departing a hard surface.

TYNDALL LIGHTNING CONDITIONS

Lightning Watch: Issued when lightning is forecast to be within 5 NM of Base Housing, Flightline, or Silver Flag Area in the next 30 minutes.

Lightning Warning: Issued when lightning is observed within a 5 NM radius of the Golf Course, Flightline Area, or Silver Flag Area.

When a Lightning Warning is issued within 5 NM of the Flightline Area, the following will be accomplished:

- **Cease refueling and all flightline activity.**
- **Evacuate personnel from the flightline to indoor cover or in a flightline vehicle.**
- **Aircraft will not be armed during lightning within 5 NM of the flightline area.**
 - Aircraft in chocks and not ready to taxi: clear the crew chief off and remain running or shutdown and clear the flightline. The intent is to expeditiously get the crew chief off the flightline and to safety.
 - If ready to taxi, clear off the crew chief and taxi to EOR. Contact SOF and expect guidance to continue taxiing and hold in EOR.
 - After landing, taxi to park and hold until lightning warning is rescinded. If parking under sunshades with no marshalers available, expect to hold in EOR until lightning warning is removed. Coordinate with the SOF to be chocked as soon as practical. Contact SOF for guidance prior to reaching: 1200# of fuel remaining or 150° F1B fuel temp for F-22; emergency fuel for T-38.
 - Chocking aircraft with low fuel after landing is a priority (to allow shutdown if required by fuel temperatures). The SOF and Ops Sups will work with Maintenance to chock aircraft holding with low fuel as soon as practical.
 - F-22s may shutdown one engine if required. T-38s will not shut down an engine.
- **Aircraft will not takeoff, land, or fly approaches at Tyndall AFB during periods of lightning within 5 NM of the flightline area without OG/CC approval.**
 - Airborne aircraft will terminate mission, hold, and contact SOF. If lightning still within 5 at divert fuel, divert, or follow SOF instructions. The SOF will obtain OG/CC (or WEG/CC if only WEG aircraft are airborne) approval for aircraft to land with lightning within 5.
 - This guidance does not preclude the SOF from making time-sensitive safety-of-flight decisions based on WX, fuel state, and ORM assessment. When time allows, the SOF will contact the respective group CC.

BIRD WATCH CONDITIONS

When it becomes known that a bird strike occurred, notify the wing flight safety and preserve available non-fleshy (feathers, beak, or feet) bird remains. AHAS and BAM will be utilized to determine mission suitability.

SEVERE:

Traffic Pattern: Only full-stop landings are permitted. Formation approaches are prohibited. The SOF will consider changing runways, delaying takeoffs and landings, diverting aircraft, changing pattern altitude, etc.

Low-Level Areas: Consideration should be given to avoid flying in Low-Level areas. Restrict all missions to those essential for training. When flying within Low-Level areas limit all flying to above 1,000ft AGL and less than 450 knots when below 3,000ft AGL. Limit formation flying to a minimum when below 3,000ft AGL. Specific routes or segments will be specified and avoided.

MODERATE:

Traffic Pattern: Touch-and-goes and low approaches only as reqd for training. **Low-Level Areas:** Low-Level area use only for syllabus or recurrency training.

WIND AND SEA STATE CONDITIONS

Tyndall assigned aircraft will adhere to Wind and Sea State restrictions. Sea state notification will come from the duty forecaster through the Command Post to the 325 OG/CC, SOF, and 53 WEG/CC when the following conditions exist:

SEA TEMPERATURES: Aircrew must wear anti-exposure suits on any overwater flight if the temperature is 60°F or less. If the water temperature is between 60°F and 51°F and the airspace surface air temperature is 70°F or greater, the OG/CC may waive the anti-exposure suit requirement (IAW AFI 11-301V2)

SEA STATES:

SEACON YELLOW: (advisory condition only): Actual wave heights are greater than or equal to 8 feet or sustained surface winds are greater than or equal to 20 knots. No restrictions on flying.

SEACON RED: Seas greater than 10 feet and/or sustained surface winds are greater than or equal to 25 knots. OG/CC waiver is required to conduct overwater training flights (IAW AFI 11-202V3_ACCSUP_I).

WIND OVER LAND: 325 FW flying operations will be suspended if observed winds are sustained in excess of 35 knots over land between departure and intended route of flight.

HYDRAZINE PROCEDURES

1. Notify tower/SOF.
2. F-16's will be parked in the hydrazine/hazardous cargo area.
 - a. Primary parking area - BRAVO/Golf Taxiway intersection.
 - b. Secondary parking area - alternate misfire dearm area for runway in use.
 - c. Armed - normal dearm heading.
 - d. Not armed - left wing into the wind.
1. The fire chief will establish 100 ft cordon.
2. Essential ground personnel will approach from upwind.

If bioenvironmental engineering personnel are available and declare the area safe:

- a. Transient alert will pin the EPU and pin and chock the main gear prior to shutdown unless emergency conditions require immediate shutdown. The nose gear will be pinned after shutdown.
- b. The pilot will shut down and egress the aircraft.
- c. EOD will secure/pin the aircraft armament, if armed.
- d. The fire chief will release the aircraft to transient alert.

If bioenvironmental engineering personnel are not available or the area is declared unsafe:

- a. The fire department will pin the EPU and pin and chock the landing gear.
 - e. The pilot will shut down and egress the aircraft. The fire chief will determine if self contained breathing apparatus for the pilot and assistance from the fire department are necessary.
 - f. The aircraft will not be moved or released to transient alert until the aircraft is declared safe by bioenvironmental engineering personnel and the armament is safed, if applicable.
3. F-16 units deployed to TAFB will normally bring a hydrazine response team. In such a case, the Tyndall fire department responsibilities revert to the immediate protection of life and property. Other actions described above belong to the

deployed hydrazine response team.

VUSAFF

INFLIGHT DISTRESS SIGNALS – DAY

DESCEND TO A LOWER ALTITUDE – Hold hand at top of canopy, palm down, fingers extended and joined, move hand forward and down.

FUEL CHECK – Close fist with the thumb extended and perform drinking motion with thumb touching the oxygen mask.

FUEL REMAINING – Extend one finger for each 1,000# of fuel on board. Extend finger(s) vertically for 1-5,000#, horizontally for 6-9,000#. After signaling 1,000# increments, pull hand down out of sight, then signal 100# increments in the same manner. Signal 0 with a closed fist.

HEFOE SYSTEM – Clench fist and hold it at the top of canopy, then hold up the required number of fingers to denote which system is involved. If the clenched fist is seen but no finger signal is received or the intercepting pilot is unable to understand the signal given, the pilot will assume the aircraft in distress has one or more systems inoperable and should then proceed with caution. The receiving pilot acknowledges the signal by repeating it.

1. HYDRAULIC 2. ELECTRICAL 3. FUEL 4. OXYGEN 5. ENGINE

I MUST LAND ON YOUR WING – Pat shoulder, palm down. To acknowledge, other pilot gives an OK signal; the signal indicates a jet approach speed of 130kts. Raise one finger for each 10kt increase desired. The distressed aircraft lands and the escort executes a go around.

RADIO INOP LANDING (NO ESCORT) – Squawk IAW FLIP. Fly along side of runway, 1000' AGL, rocking wings until reaching end of runway. Turn downwind and check RSU or tower for green light on base turn or final for landing clearance.

RECEIVER FAILURE – Palm of hand over ear, move hand fore & aft.

TRANSMITTER FAILURE – With palm of hand toward and in front of face, move hand up and down.

LAND IMMEDIATELY – Close fist and hold it to top of canopy with thumb extended downward, then move arm up and down rapidly. (Do not confuse signal with “gear down” signal).

BAILING OUT OR EJECTION – One or both clenched fist pulled downward across the face to simulate pulling the ejection face curtain.

DESIRE TO LAND – Movement of the hand, flat, with palm down, forward and downward, finishing the movement in a simulated roundout. As an alternate signal, lower the landing gear.

COMPLETE ELECTRICAL FAILURE – Fly 500' over tower, then to the far end of the runway and pull up into a wide downward leg. Proceed with a pattern and landing and watch the tower for signals.

APPROACH-END BARRIER ENGAGEMENT- Escorted – Extend tail hook.
Unescorted – Fly parallel to active runway at 1,000' AGL with hook extended. Rock wings until reaching departure end of runway, turn to downwind and check RSU or Tower for light signal. If a straight-in barrier engagement must be flown, flash landing light on final.

WSEP DRONE CHASE PROCEDURES

1. Remain on 308.9 and get vectors to the drone from X-Ray (unless Tally Ho)
2. Confirm with X-Ray that the "Failsafe is off" or else self-destruct timer is set for 15 seconds from LOC
3. Tell X-Ray when you are Tally Ho and call "closing for BDA" when inside 2000'
4. Perform BDA and use plain English to describe damage, if any
5. Form up on drone's left side, **maintaining ample nose/tail clearance**
6. Turn off your landing/ taxi light
7. Tell X-Ray when drone has gear down, flaps down, slats out, and hook down
8. Chase drone down to a min of 100', do not overfly the GMCS van and call out final approach speed if different than what X-Ray is calling
9. After touchdown, go hot mike and give X-Ray descriptive comm. on drone displacement from centerline and drift. For example: - "20 right, drifting right", "30 left, converging", "centerline parallel"
10. Let X-Ray know if the drag chute is good and if cable engaged OK

Contingencies

1. **If you hear a steady UHF tone on 308.9 – CLEAR THE DRONE IMMEDIATELY** (> 2000'), chattermark to UHF 349.7 and contact X-Ray.
2. If this steady tone happens on short final and drone goes around and begins a LEFT turn, immediately clear the drone and tell X-Ray (drone should turn right to avoid Tyndall AFB)
3. Be prepared to shoot down drone with live ordnance (only if directed by the Mike).

BARRIER CERTIFICATION PROCEDURES

1. Obtain brief from airfield ops prior to step. Verify barrier to be engaged and where you will start the engagement from.
2. Land, taxi clear, and de-arm (if required) and proceed to runway threshold.
3. Ensure all aircraft on the ground prior to cert. if single runway ops.
4. Verify correct barrier. If engaging approach end BAK-12 on 32L, taxi on at J and taxi past MB-60 before lowering hook.
5. Communicate gameplan to SOF.
6. Obtain tower clearance onto rwy for barrier cert.
7. Hold in position on centerline, lower hook and verify hook down.
8. For bi-directional barriers (e.g., BAK-12) engage barrier in the direction that allows the most runway remaining beyond the barrier.
9. Engage barrier on centerline at 75-100 kts. ground speed at idle power. 75 minimum for certification, 100 max for controllability, stopping distance.
10. After engagement control roll back with throttles, **DO NOT BRAKES.**
11. Shut down or retract hook as directed by ground crew. If shut down, expect tow to park, if hook is retracted safely, taxi to park.
12. Note ground speed and gross weight.
13. If barrier missed, continue down rwy, raise hook and stop normally. **DO NOT ATTEMPT A SECOND ENGAGEMENT.**

GENERAL BRIEFING GUIDE

MISSION DATA

- Time Hack
- EP / Threat of the Day
- Mission Objective(s)
- Mission Overview
- Mission Data Card
- Mission Commander / Deputy Lead
- Joker / Bingo Fuel
- Takeoff and Landing Data
- Working Area
- Weather/Sunrise / Sunset
- NOTAMs/ Bird Strike Potential
- Personal Equipment
- FCIF / Pubs / Maps

GROUND PROCEDURES

- Pre-Flight: Aircraft / Armament
- Check-In
- Taxi / Marshaling / Arming
- Spare Procedures

TAKEOFF

- Runway Lineup
- Takeoff Interval
- Abort
- Jettison Procedures
- Low Altitude Ejection
- Landing Immediately After Takeoff

DEPARTURE / ENROUTE

- Routing
- Trail Departure

- Join-Up / Formation
- Systems / Ops Checks

RECOVERY

- Rejoin
- Battle Damage Check
- Type Recovery
- Flight Break-Up
- Pattern and Landing
- After Landing
- Emergency / Alternate Airfields

SPECIAL SUBJECTS

- Instructor Responsibilities
- Chase Procedures
- IFF Procedures
- Sensor / Visual Search Responsibilities
- Midair Collision Avoidance
- Dissimilar Formations
- Carriage / Jettison Limitations
- Terrain Avoidance
- Bird Strike Procedures
- Human Factors (Channelized Attn / Task Saturation/Prioritization / Complacency)
- G-Awareness
- Spatial Disorientation / Unusual Attitudes
- Lost Wingman
- Radio Inoperative
- RESCAP
- SIIIs

SPECIAL SUBJECTS

- Instructor Responsibilities
- Chase Procedures
- IFF Procedures
- Radar / Visual Search Responsibilities / Midair Collision Avoidance
- Dissimilar Formations
- Carriage / Jettison Limitations
 - External Stores Limitations
 - Bay 5 Stowage Requirements / Limitations (F-15 Only)
- Terrain Avoidance
 - Departure / Enroute / Recovery
 - Use of Radar Altimeters / MSL Floor Settings
- Bird Strike Procedures / Use of Visor(s)
- Human Factors (Channelized Attn / Task Saturation/Prioritization / Complacency)
- G-Awareness
 - G-Suit connection / G-tolerance / G-Awareness Turn
 - Use of L-1 Anti-G Straining Maneuver (AGSM)
- Visual Illusions / Perceptions
- Spatial Disorientation / Unusual Attitudes
- Lost Wingman
- Radio Inoperative
- SARCAP
- Recall Procedures
- SIIs

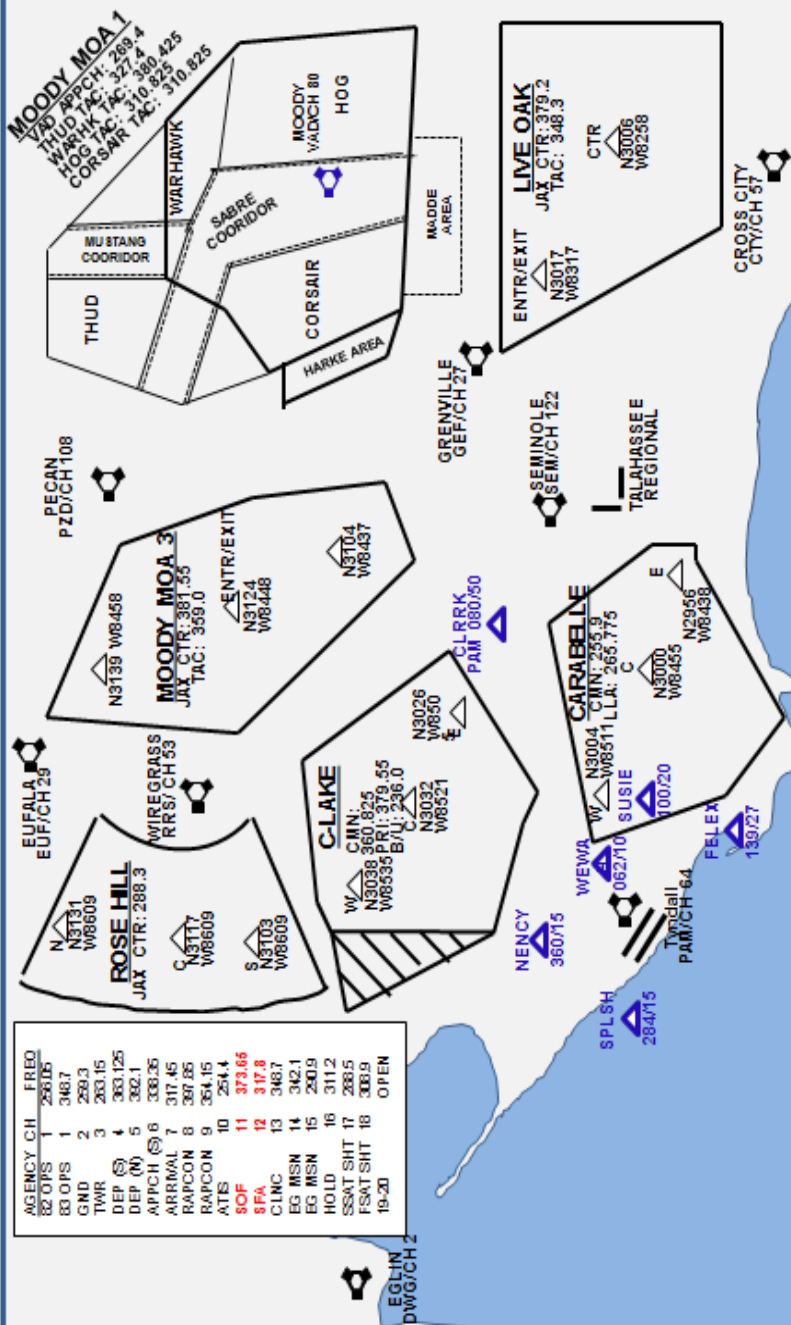
CREW COORDINATION / PASSENGER BRIEFING GUIDE

1. Pre-Flight
2. Prohibited Items
3. Cockpit Layout
4. Flight Maneuvering Parameters
5. Mission Duties
6. Change of Aircraft Control
7. Passenger Flying Parameters
8. Rear Seat Landing Procedures
9. Emergencies
 - a. Runway Departure
 - b. Canopy Loss
 - c. Ejection/Egress (With and Without Intercom)/Command Selector Valve Position
 - d. Loss of Intercom
 - e. Bird Strike Procedures/Use of Visor(s)
10. Flight Control Interference
 - a. Rudder Interference
 - b. Rudder Pedal Adjustment
 - c. Stick Interference

GROUND CREW

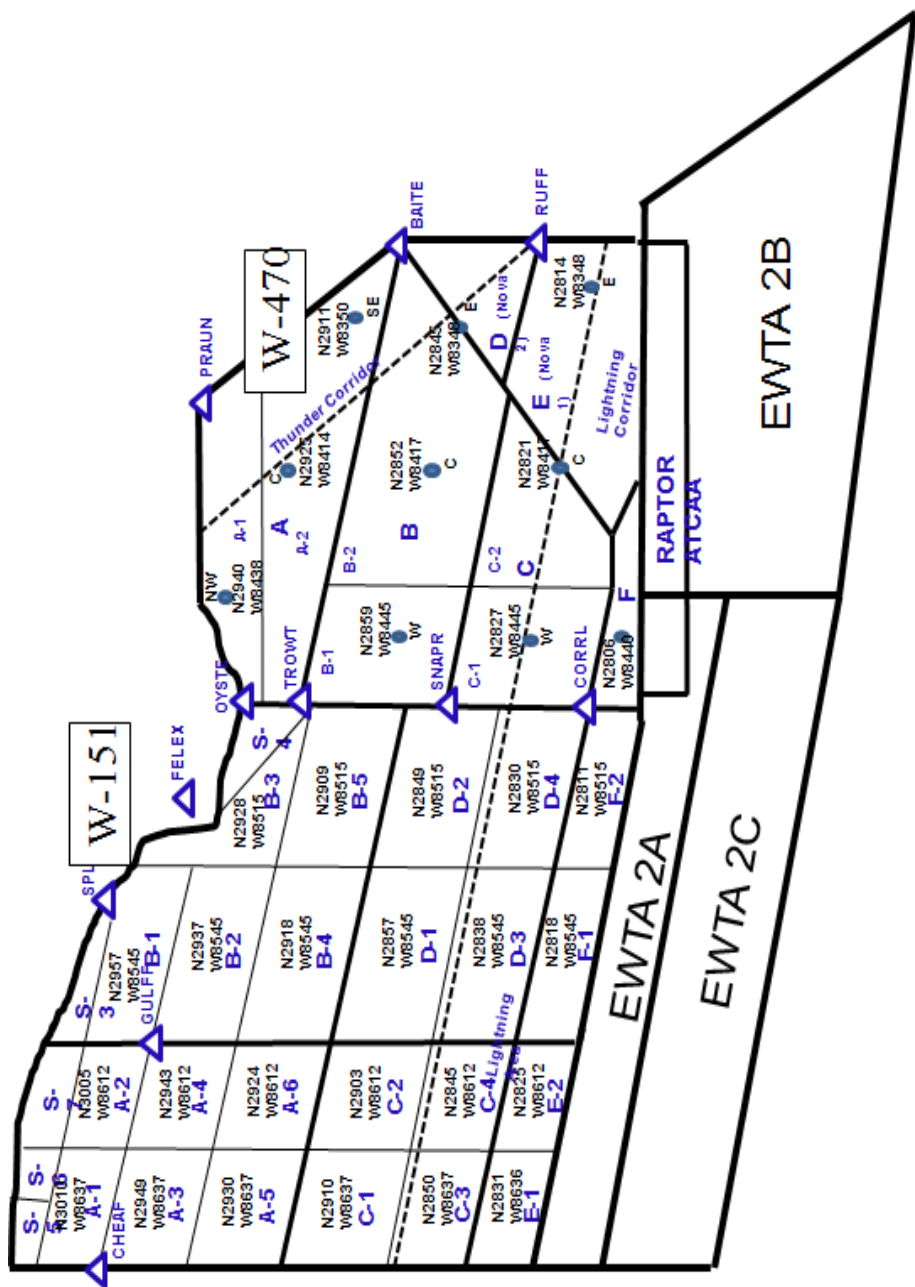
1. Act only on pilot's instructions
2. Ground emergency procedures
3. Hand signals
4. Aircraft danger areas

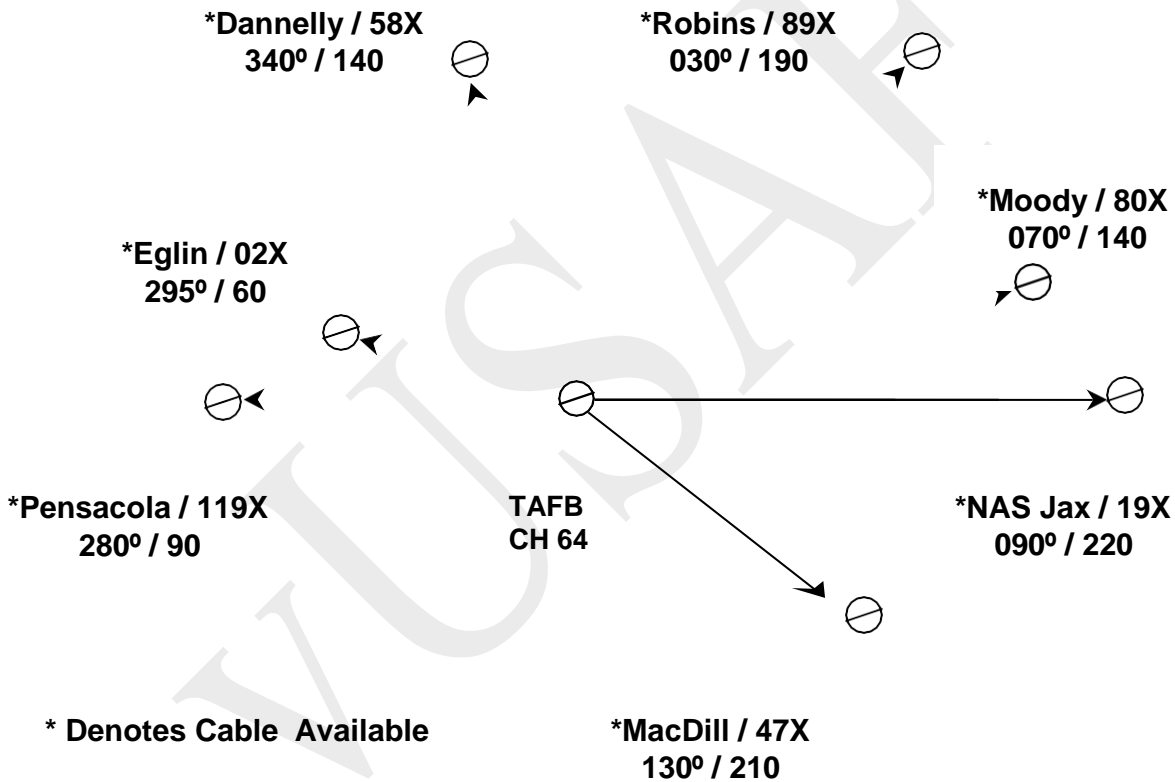
AGENCY	CH	FREQ
82 OWS	1	260.05
83 OPS	1	348.7
GND	2	260.3
TWR	3	263.15
DEP (S)	4	363.125
DEP (N)	5	362.1
APPRCH (S)	6	300.35
ARRIVAL	7	317.45
RAPCON	8	367.85
RAPCON	9	354.15
ATES	10	254.4
SOF	11	373.65
SFA	12	317.8
SFA	13	348.7
EG MSN	14	342.1
EG MSN	15	200.9
HOLD	16	311.2
SSAT SHT	17	288.5
FSAT SHT	18	308.9
19-20		OPEN



OVERLAND CHEAT SHEET (Not to Scale)

OVERWATER CHEAT SHEET





DIVERT DATA - QUICK GLANCE

* Denotes Cable Available

*MacDill / 47X
130° / 210