

MIAMI ARTC CENTER AND PALM BEACH TRACON
LETTER OF AGREEMENT

Effective: October 13, 2016

SUBJECT: APPROACH CONTROL SERVICE

1. **PURPOSE.** This agreement covers approach control service for airports within airspace delegated to Palm Beach TRACON as depicted in the Annexes and is supplementary to the Air Traffic Handbook.
2. **CANCELLATION:** The Miami ARTC Center and Palm Beach TRACON Letter of Agreement, Subject: Approach Control Service dated October 17, 2013 is cancelled.
3. **RESPONSIBILITIES:** Miami ARTC Center (ARTCC) delegates to Palm Beach TRACON (TRACON) authority and responsibility for control of aircraft within the Terminal Area described in the Annexes.
 - 3.1 TRACON must keep the ARTCC Traffic Management position advised of current runway configuration.
4. **DEFINITION.** Turboprops with a filed true airspeed of less than 210 knots must be considered props for the purposes of this agreement.
5. **PROCEDURES.**
 - 5.1 **ARRIVALS**
 - 5.1.1 Arrivals are released for **turns** within the confines of the Arrival Transition Areas (ATAs) as defined in the Annexes.
 - 5.1.2 ARTCC must clear arrivals to the destination airport, via appropriate ATAs, to cross Transition Fixes as follows:

ATA	ROUTE	TRANSITION FIX	JET ALTITUDES /SPEEDS	TURBO- PROPS	PROPS
ANGEE	TUXXI Direct SUA or Vector	ANGEE	60	60	N/A
FFAIR	Heading 180	FFAIR	N/A	N/A	60 SUA ONLY

ATA	ROUTE	TRANSITION FIX	JET ALTITUDES /SPEED	TURBO- PROPS	PROPS
SWOMP	FRWAY STAR	SWOMP	80/250 kts	60	N/A
	CAYSL STAR	SWOMP	80/250 kts	60	N/A
STOOP	FRWAY STAR	CHADO	100/250 kts	70	N/A
	CAYSL STAR	CHADO	100/250 kts	70	N/A
	TUXXI STAR	TUXXI	100/250 kts	70	N/A
	V492/V537	STOOP	N/A	70	60 (N/A LNDG PBI ON EAST OPS)
					LNDG BCT N/A
BOBIO	V492/Direct PHK	15 NW PHK	100 (250 kts WHEN PBI ON EAST OPS)	50/70	50/70
	WLACE STAR	BOBIO	100 (250 kts WHEN PBI ON EAST OPS)	50/70	N/A
	PRRIE STAR	TARTY	090	50/70	N/A
WALIK	BR21V, BR69V or Direct KIXAL NE of BR21V	10 E KIXAL	60 (N/A LNDG PBI ON WEST OPS)	40/60 (N/A LNDG PBI ON WEST OPS)	40/60
MRLIN	BR54V/BR55V/BR6 4V/BR68V/BR10L	30 SE PBI	50	40/50	40
DOUGZ	PBI-Direct PBI BCT- H090	30 SW PBI 30 W BCT	50	50	50
SHEDS	PHK/Vector parallel/diverging east of SHEDS Overflights	20 N PHK	60 F45 ONLY	60 F45 ONLY	60 (N/A LNDG PBI ON WEST OPS)

- 5.1.3 SWOMP and WALIK arrivals are released for descent within the confines of the ATA.
- 5.1.4 DOUGZ ATA will only be used for aircraft that originate from the **RSW Terminal Area and points south**. Aircraft that originate from points north of the RSW Terminal Area must be routed via the **BOBIO** ATA.
- 5.1.5 VRB/FPR Area Arrivals (KVRB, KFPR, and X26).
- 5.1.5.1 ARTCC must clear arrivals to the destination airport, via appropriate ATAs, to cross Transition Fixes as follows:

ATA	ROUTE	TRANSITION FIX	JET ALTITUDES	TURBO- PROPS	PROPS
RALPH	Vector	RALPH	N/A	N/A	50 INCLUDING SUA
	HHUGH Direct Airport	HHUGH	60	60	N/A
SURFN	BR62V	SURFN	50	50/40	40/30
ECKOS	Vector	ECKOS	60	60	60
STARK	Vector	STARK	60	60	60
	V295.SMERE	SMERE	N/A	N/A	30

- 5.1.5.2 RALPH arrivals are released for descent within the confines of the ATA.
- 5.1.5.3 ECKOS and STARK arrivals are approved descending to 60.
- 5.1.5.3 Jets and turboprop aircraft departing Miami Terminal airspace filed at or above 11,000 feet, will be cleared direct HHUGH and are approved descending to 60.
- 5.1.6 When holding becomes necessary, ARTCC must hold arrivals within ARTCC airspace.

5.2 DEPARTURES

5.2.1 Aircraft issued a heading or a direct routing must be within the confines of the DTA.

5.2.2 Departure Transition Area (DTA) name, identifiers, and routings are as follows:
In order of required DTA routing:

DTA	RNAV	AIRWAY	HEADING	ASSIGNED ALTITUDE
SMUGS AOB 100	N/A	V3 or Direct TRV west of V3	H340	70/90
TBIRD AOB 100	TBIRD RNAV SID	V531 or Direct BAIRN	H325	70/90
TBIRD AOA 110	TBIRD RNAV SID	N/A	EAST H290 WEST H320	100
BLUFI	SLIDZ RNAV SID	A699	N/A	110/120
TURPS	MIXAE RNAV SID	BR63V	H090	50 MYGF/MYGW 60 Props 60/70 Turboprops 70 Jets
LMORE	LMORE RNAV SID	N/A	Heading	100
MKYDG	LMORE RNAV SID	N/A	Heading	40/60/80 100

5.2.2.1 BLUFI, TBIRD and LMORE/MKYDG departures are released for turns within the confines of the Departure Transition Areas (DTAs) as defined in the annex.

5.2.2.2 TBIRD departures assigned 10,000 ft are released to ARTCC for climb.

- 5.2.2.3 TURPS departures are released to ARTCC for climb, east of V295, within the confines of the TURPS DTA.
- 5.2.2.4 TURPS departures with a clearance limit of MYGF or MYGW must be cleared via BR63V at 5,000 feet.
- 5.2.2.5 TRACON may transition BLUFI departures simultaneously at 11,000 and 12,000 feet, provided successive turbojet departures off the same airport are in-trail.
- 5.2.2.5.1 BLUFI traffic stopped at 11,000 is released for climb.
- 5.2.3 SUA departures must be transitioned as follows, in the order of required DTA routing:

DTA	RNAV	AIRWAY	HEADING	ASSIGNED ALTITUDES
BLUFI	BRNGR RNAV SID	N/A	H120	60
SUAW	SNDLR RNAV SID	N/A	Heading 270-300	40/50

- 5.2.3.1 SUAW departures are released for climb to filed altitude. SUAW departures are released for turns west of V3 up to a 320 heading.
- 5.2.3.2 SUA BLUFI departures are assigned heading 120 and released for turns from heading 090 to 120.
- 5.2.4 BCT departures must be transitioned as follows in the order of required DTA routing.

DTA	RNAV	AIRWAY	HEADING	ASSIGNED ALTITUDES
TURPS	N/A	BR63V	H090	50 MYGF/MYGW 60 Props 60/70 Turboprops 70 Jets
TBIRD AOB 100	N/A	V531 or Direct BAIRN	N/A	70/90
SMUGS AOB 100	N/A	V3 or Direct TRV/FPR West of V3	N/A	70/90
BLUFI	N/A	A699	N/A	110/120
LMORE	N/A	N/A	Heading	100
MKYDG	N/A	N/A	Heading	40/60/80/100

- 5.2.4.1 LMORE departures filed 11,000 ft or above, are released to TRACON for climb to 10,000 ft, after acceptance of radar handoff by ALUTO Sector. A point out will not be necessary if the aircraft re-enters TRACON airspace.
- 5.2.4.2 TRACON may transition BLUFI departures simultaneously at 11,000 and 12,000 feet, provided successive turbojet departures off the same airport are in-trail.
- 5.2.4.2.1 BLUFI traffic stopped at 11,000 is released for climb.
- 5.2.5 VRB/FPR Area Departures (KVRB, KFPR, and X26) must be transitioned as follows in the order of required DTA routing:

DTA	RNAV	AIRWAY	HEADING	ASSIGNED ALTITUDES
BULDG AOB 40	N/A	N/A	Heading	40
BULDG AOA 50	N/A	N/A	Heading	50
LEBUR	N/A	N/A	H090 Clockwise to H110	50
SOPHA	N/A	Direct SOPHA	Heading	50
VALKA	N/A	N/A	H290	50

- 5.2.5.1 SOPHA, LEBUR, VALKA and BULDG departures are released for turns within the confines of the DTA's as defined in the annex **or** above 4,000 feet. PBI is responsible for all internal coordination.
- 5.2.6 **ALTITUDE ASSIGNMENTS**
- 5.2.6.1 Aircraft filing above the altitude assigned must be advised to expect clearance to filed altitude ten (10) minutes after departure.

5.3 **OVERFLIGHTS**

- 5.3.1 ARTCC must route overflights via ATAs/DTA and routings as follows:

ATA	ROUTING	ALTITUDE		
		JETS	TURBO-PROPS	PROPS
SHEDS	PHK.V437/V267.BRIKL	N/A	N/A	60/80
DOUGZ	H090	N/A	N/A	50
BOBIO	PBI.BR63V.HALBI	N/A	N/A	90
TOPPR	BLUFI STAR	N/A	120	N/A
MRLIN (FLL/NORTH SATELLITE)	BR68V or Heading to join north of TRITN	N/A	60	60
MRLIN (MIA/SOUTH SATELLITE)	BR68V..V295.VKZ	N/A	N/A	60
RALPH	Over TRV - Direct TRV	N/A	N/A	50
	Island Traffic - Heading 090			

5.3.1.1 TRACON must deliver overflights via DTAs depicted in the Annex, at altitude consistent with the DEPARTURES section of this Letter.

Note: BOBIO and RALPH overflights are excluded from this requirement

5.3.1.2 ARTCC must reroute overflights filed through Miami Approach Control's delegated airspace, clear of Palm Beach Approach delegated airspace.

5.3.1.3 The forwarding of flight plan information via automation procedures must be considered as coordination for aircraft established on IR034, IR046Z, IR051, and IR056 routes. ARTCC must advise TRACON when these aircraft are clear of terminal airspace.

5.3.1.4 Aircraft utilizing IR020 must be at 7,000 feet.

5.3.1.5 During a NAVAID outage that renders V267/437/51 unusable, ZMA must deliver aircraft incapable of advanced navigation via heading 170-190 in the SHEDS ATA.

5.3.1.6 The BOBIO overflight procedure may be terminated by either facility at any time.

5.3.1.7 Aircraft Landing MLB Complex (Including KMLB, KCOI, KCOF, KTIX, KXMR & X59)

5.3.1.7.1 Aircraft will be issued routing TRV direct MLB to cross TRV at 6,000 feet.

5.3.1.7.2 Props may be transitioned through the RALPH or SURFN ATA's with routing direct TRV direct MLB at prop ATA altitudes as depicted in the LOA.

5.4 **APPROACHES INTO OKEECHOBEE COUNTY AIRPORT (KOB)**

5.4.1 Due to the proximity of KOB to Palm Beach TRACON airspace, ZMA will coordinate arrivals and departures at KOB including any required restrictions.

5.4.2 PBI Approach will ascertain the requested approach.

5.4.2.1 If approach to RWY 23 or RWY 32 is requested, PBI will clear the aircraft direct to the IF with ZMA control beginning 5 NM from the IF. No procedure turns are authorized without coordination.

5.4.2.2 Aircraft requesting any other approach will be cleared direct to the airport at 2,000 feet

5.5 **SEBASTIAN (X26) JUMP PROCEDURES:** The following procedures must be used when jump activities are conducted above 5,000 feet:

5.5.1 The Melbourne Low Sector (R04) must advise Palm Beach Approach Control of the following items:

- 5.5.1.1 a. Jumping in progress at X26.
- b. Beacon Code issued to jump aircraft or lead aircraft if more than one exists.
- b. Requested jump altitude.
- c. Two (2) minute notice prior to jump.

5.5.3 The Melbourne Low Sector team will be responsible for coordination with all applicable Center Sectors.

5.5.4 Palm Beach Approach will handle these sky diving activities in accordance with JO 7110.65, paragraph 9-7-4 b-d.

5.5.5 Palm Beach Approach will consider communications with the aircraft to be terminated when the jump/lead aircraft descends below 5,000 feet or squawks 1200.

5.6 **CLEARANCE DELIVERY**

5.6.1 Palm Beach ATC Tower (ATCT) must issue departure clearances:

5.6.1.1 Via "As Filed" when no pluses appear.

- 5.6.1.2 When a Preferential Departure Route (PDR) appears on the first line of the terminal departure flight progress strip between pluses; Via the PDR to the fix that matches the filed route of flight, then “as filed.”
- Note: Palm Beach ATCT must not issue DTA identifiers and or coordination fixes, as part of a route of flight.
- 5.6.1.3 Via amended routes displayed on the proposal strip beginning with the first plus in the route of flight and ending with the second plus in the route of flight.
- 5.6.1.3.1 When a FR strip is required to display the second plus in the route of flight, the amended route must continue from the last element on the proposal strip to the next plus on the FR strip.
- 5.6.1.4 Via full route clearances when **FRC** appears in the remarks section.
- 5.6.1.5 ATCT must ensure the amended altitude is issued when **FRA** (Full Route Altitude) appears in the remark section.
- 5.6.2 ARTCC must issue, via interphone, all full route clearances, amendments and requested altitude changes made by ARTCC less than thirty (30) minutes prior to proposed departure time.

6 **SEPARATION.**

- 6.1 Radar separation must not be less than **five (5)** nautical miles constant or increasing.
- 6.1.1 In accordance with FAA Order 7110.65, when transitioning from terminal to enroute control via the DTAs listed in 5.2.4, separation of three (3) increasing to five (5) nautical miles may be used.
- 6.1.2 Aircraft assigned the same altitude, transitioning to PBI Approach from the LBV (R47) and Melbourne Low (R04) sectors, must be a minimum of three (3) nautical miles intrail. ARTCC must ensure this separation is maintained or increasing.

7 **AUTOMATION OUTAGES.**

- 7.1 Tower FDIO/Central Computer Complex/Interface
- 7.1.1 ARTCC must advise TRACON of automation outages as soon as possible after occurrence and pass proposed flight plan, overflight and arrival information via interphone.

7.1.1.1 Upon notification of ARTCC computer outage, ATCT must stop all departures until such time as ARTCC coordinates otherwise.

7.1.2 ATCT must notify ARTCC of any malfunctions of the FDIO and pass departure times via interphone.

8 **SPECIAL USE AIRSPACE.**

8.1 ZMA must advise PBI TRACON of the current status of all Special Use Airspace adjacent to PBI that is within ZMA boundaries.

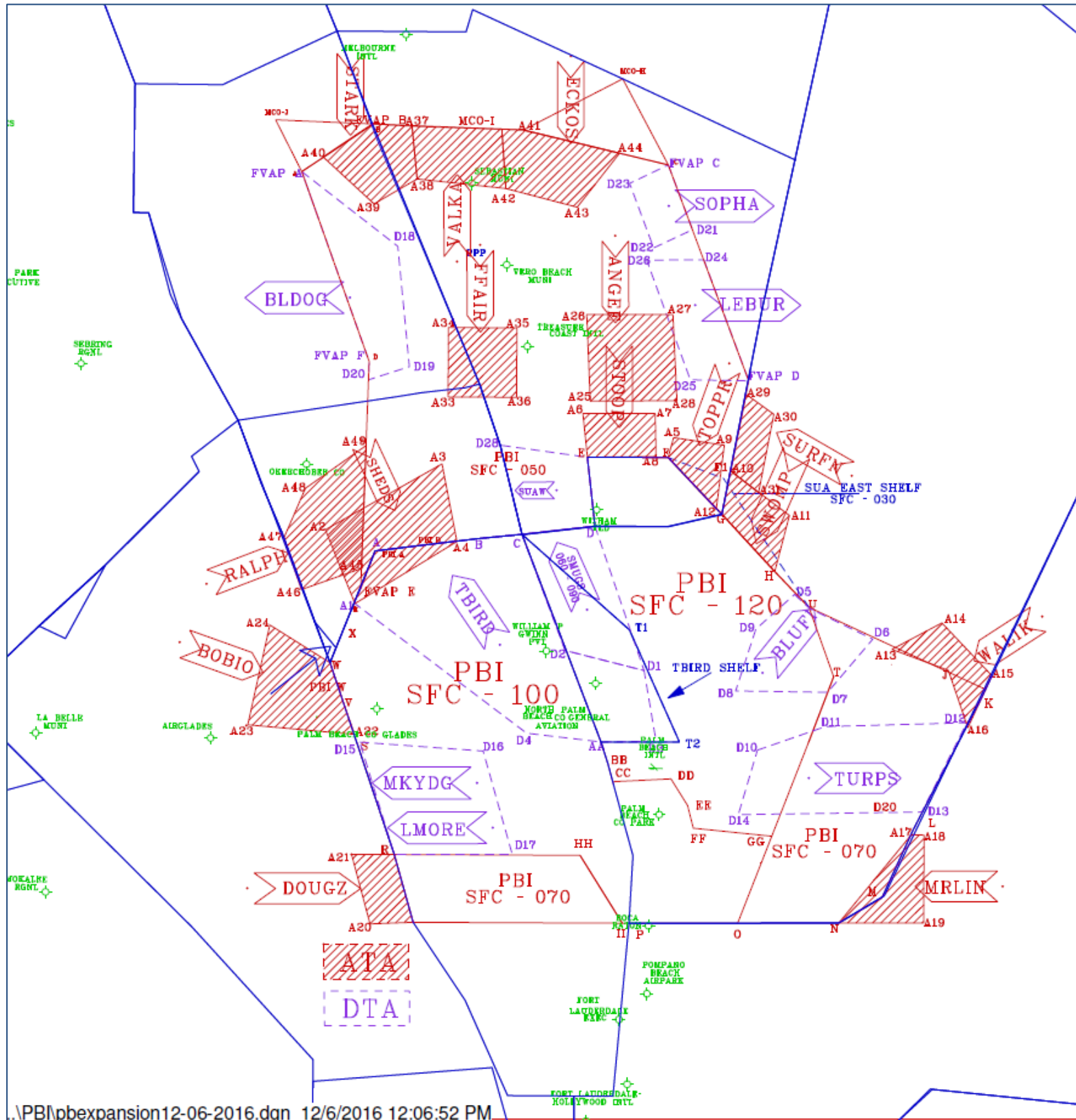
9 **MISCELLANEOUS.**

9.1 Deviations from procedures established in this Agreement must be effected only after prior coordination is accomplished which completely defines responsibility in each case.

Original Signed by
Janice Deak
Air Traffic Manager
Miami ARTC Center

Original Signed by
Robert Berlucchi
Air Traffic Manager
Palm Beach ATC Tower

ANNEX 1



ANNEX 2

PALM BEACH TRACON MAIN BOUNDARY POINTS

A	27-06-00N/80-42-00W
B	27-06-53N/80-33-39W
C	27-08-01N/80-22-57W
D	27-09-00N/80-13-30W
E	27-17-00N/80-14-30W
F	27-17-00N/80-04-00W
G	27-10-25N/79-57-00W
H	27-03-45N/79-50-10W
K	26-49-59N/79-22-54W
L	26-33-43N/79-32-23W
M	26-26-00N/79-36-23W
N	26-23-00N/79-42-00W
O	26-23-00N/79-55-00W
P	26-23-00N/80-09-00W
Q	26-23-00N/80-36-45W
R	26-30-50N/80-39-15W
S	26-43-45N/80-44-10W
T	26-51-32N/79-42-33W
U	26-59-36N/79-45-43W
V	26-48-30N/80-46-00W
W	26-53-00N/80-47-45W
X	26-57-00N/80-46-00W
AA	26-44-00N/80-12-39W
BB	26-41-30N/80-11-45W
CC	26-39-24N/80-11-07W
DD	26-39-43N/80-03-36W
EE	26-36-39N/80-01-27W
FF	26-34-00N/80-00-40W
GG	26-33-05N/79-50-36W
HH	26-30-50N/80-15-18W
II	26-23-00N/80-09-50W

VRB/FPR AIRSPACE 5,000ft and Below

FVAP A	27-50-00N/80-52-00W
FVAP B	27-55-38N/80-42-48W
MCO I	27-55-00N/80-23-00W
FVAP C	27-51-00N/80-04-00W

FVAP D	27-25-54N/79-53-30W
G	27-10-25N/79-57-00W
F	27-17-00N/80-04-00W
E	27-17-00N/80-14-30W
Z	27-09-00N/80-13-30W
B	27-06-53N/80-33-39W
A	27-06-00N/80-42-00W
FVAP E	27-01-35N/80-43-51W
FVAP F	27-28-00N/80-43-00W

VRB/FPR AIRSPACE 4,000ft and Below

Area B (NW Corner)	
FVAP A	27-50-00N/80-52-00W
FVAP B	27-55-38N/80-42-48W
MCO J	27-56-00N/80-55-30W
Area C (NE Corner)	
MCO I	27-55-00N/80-23-00W
MCO H	28-01-00N/80-10-00W
FVAP C	27-51-00N/80-04-00W

ATA/DTA

STOOP ATA	
E	27-17-00N/80-14-30W
A6	27-22-04N/80-15-05W
A7	27-22-05N/80-05-41W
A8	27-17-06N/80-05-34W
SHEDS ATA	
A1	26-59-52N/80-44-35W
A2	27-08-25N/80-48-30W
A3	27-16-10N/80-33-24W
A4	27-07-09N/80-31-25W
SWOMP ATA	
G	27-10-25N/79-57-00W
A10	27-15-25N/79-55-52W
A11	27-10-06N/79-48-15W
H	27-03-45N/79-50-10W
WALIK ATA	

ANNEX 2

A13	26-54-41N/79-35-01W
A14	26-57-43N/79-28-30W
A15	26-51-34N/79-22-05W
A16	26-45-34N/79-25-14W
J	26-52-13N/79-27-42W
MRLIN ATA	
A17	26-33-11N/79-32-38W
A18	26-33-08N/79-30-58W
A19	26-22-58N/79-31-01W
N	26-23-00N/79-42-00W
DOUGZ ATA	
Q	26-23-00N/80-36-45W
A20	26-22-47N/80-42-18W
A21	26-30-48N/80-44-45W
R	26-30-50N/80-39-15W
BOBIO ATA	
A22	26-44-43N/80-44-29W
A23	26-45-42N/80-58-17W
A24	26-57-18N/80-55-35W
W	26-53-00N/80-47-45W
V	26-48-30N/80-46-00W
RALPH ATA	
A45	27-03-57N/80-43-47W
A46	27-01-26N/80-51-33W
A47	27-07-23N/80-53-52W
A48	27-13-12N/80-51-09W
A49	27-18-14N/80-43-16W
SURFN ATA	
A29	27-24-21N/79-53-51W
A30	27-22-00N/79-50-15W
A31	27-12-53N/79-52-14W
A10	27-15-25N/79-55-52W
ANGEER ATA	
A25	27-23-31N/80-14-08W
A26	27-33-36N/80-14-38W
A27	27-33-36N/80-03-23W
A28	27-23-36N/80-02-52W
ECKOS ATA	

A41	27-55-06N/80-25-50W
A42	27-48-12N/80-25-17W
A43	27-46-03N/80-15-56W
A44	27-52-21N/80-10-23W
MCO-I	27-55-00N/80-23-00W
STARK ATA	
A37	27-55-23N/80-37-36W
A38	27-49-15N/80-36-53W
A39	27-46-19N/80-42-31W
A40	27-51-43N/80-49-14W
FVAP-B	27-55-38N/80-42-48W
VALKA ATA	
A37	27-55-23N/80-37-36W
A38	27-49-15N/80-36-53W
A42	27-48-12N/80-25-17W
A41	27-55-06N/80-25-50W
FFAIR ATA	
A33	27-23-56N/80-32-41W
A34	27-32-00N/80-32-41W
A35	27-32-00N/80-23-45W
A36	27-23-56N/80-23-45W
TOPPR ATA	
F	27-17-00N/80-04-00W
A5	27-19-18N/80-03-17W
A9	27-18-26N/79-56-41W
A12	27-11-00N/79-57-45W

SUAW DTA	
E	27-17-00N/80-14-30W
D	27-09-00N/80-13-30W
C	27-08-01N/80-22-57W
D28	27-18-22N/80-25-50W
SMUGS DTA 060 - 090	
C	27-08-01N/80-22-57W
D	27-09-00N/80-13-30W
D1	26-52-16N/80-07-06W
D2	26-54-35N/80-17-18W
TBIRD DTA	

ANNEX 2

A	27-06-00N/80-42-00W
B	27-07-30N/80-28-40W
Y	27-08-01N/80-22-57W
D2	26-54-35N/80-17-18W
D1	26-52-16N/80-07-06W
D3	26-44-05N/80-05-32W
AA	26-44-00N/80-12-39W
D4	26-44-58N/80-22-15W
A1	26-59-52N/80-44-35W
BLUFI DTA	
D5	27-01-05N/79-47-35W
U	26-55-00N/79-40-55W
D6	26-55-52N/79-37-28W
D7	26-49-44N/79-43-20W
D8	26-49-55N/79-55-15W
D9	26-57-05N/79-52-37W
TURPS DTA	
D10	26-43-03N/79-52-26W
D11	26-45-46N/79-43-38W
D12	26-46-07N/79-25-22W
D13	26-35-50N/79-31-14W
D14	26-35-34N/79-54-54W
LMORE/MKYDG DTA	
D15	26-42-44N/80-43-48W
D16	26-42-52N/80-27-51W
D17	26-30-54N/80-24-02W
R	26-30-50N/80-39-15W
BLDOG DTA	
FVAP-A	27-50-00N/80-52-00W
D19	27-41-24N/80-39-22W
D20	27-27-26N/80-37-44W
D21	27-25-52N/80-43-04W
FVAP-F	27-28-00N/80-43-00W
LEBUR DTA	
D25	27-39-58N/79-59-21W
FVAP-D	27-25-54N/79-53-30W
D26	27-26-02N/80-01-08W
D27	27-39-55N/80-06-50W
SOPHA DTA	
FVAP-C	27-51-00N/80-04-00W

D22	27-43-28N/80-00-51W
D23	27-41-20N/80-05-55W
D24	27-48-51N/80-09-05W
TBIRD Shelf 130-140	
Y	27-08-01N/80-22-57W
T1	26-57-00N/80-09-00W
T2	26-44-00N/80-02-30W
AA	26-44-00N/80-12-39W
Back to point of beginning (Y)	