

RJTT/TOKYO INTL RNAV SID

### **ROVER THREE A DEPARTURE**

RWY16R: Climb on HDG 158° at or above 500FT, direct to T6R11, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY16L: Climb on HDG 158° at or above 500FT, turn left direct to T6L23, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY34L/34R: Climb on HDG 338° at or above 700FT, turn right direct to TORAM, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY04: Climb on HDG 043° at or above 700FT, direct to TORAM, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY05 :Climb on HDG 050° at or above 500FT, turn right direct to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

Note RWY34L/34R/04 : 5.0% climb gradient required up to 700FT. RWY05 : 5.0% climb gradient required up to 500FT.

RJTT/TOKYO INTL RNAV SID

# ROVER THREE A DEPARTURE

### RWY16R

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	158 (150.0)	-7.9	_	_	+500	_	_	RNAV1
002	DF	T6R11	_	_	-7.9	_	_	_	_	_	RNAV1
003	TF	WELDA	_	068 (060.6)	-7.9	7.8	_	+6000	_	_	RNAV1
004	TF	PLUTO	_	352 (344.5)	-7.9	7.1	_	ı	_	_	RNAV1
005	TF	KAIJI	_	011 (003.0)	-7.9	7.6	_	ı	_	_	RNAV1
006	TF	SPOON	_	347 (339.2)	-7.9	11.0	_	-FL150	_	_	RNAV1
007	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	_	_	RNAV1

### RWY16L

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	158 (150.0)	-7.9	_	_	+500	_	_	RNAV1
002	DF	T6L23	_	_	-7.9	_	L	_	_	_	RNAV1
003	TF	WELDA	_	055 (047.3)	-7.9	4.8	_	+6000	_	_	RNAV1
004	TF	PLUTO	_	352 (344.5)	-7.9	7.1	_	ı	1	_	RNAV1
005	TF	KAIJI	_	011 (003.0)	-7.9	7.6	_	-	1	_	RNAV1
006	TF	SPOON	_	347 (339.2)	-7.9	11.0	_	-FL150	_	_	RNAV1
007	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	1	_	RNAV1

# RWY34L/RWY34R

Seria	al Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Numb	er Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	338 (330.0)	-7.9	_	_	+700	_	_	RNAV1
002	d DF	TORAM	_	_	-7.9	_	R	_	_	_	RNAV1
003	TF	PLUTO	_	099 (090.7)	-7.9	6.0	_	_	_	_	RNAV1
004	TF	KAIJI	_	011 (003.0)	-7.9	7.6	_	_	_	_	RNAV1
005	TF	SPOON	_	347 (339.2)	-7.9	11.0	_	-FL150	_	_	RNAV1
006	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	_	_	RNAV1

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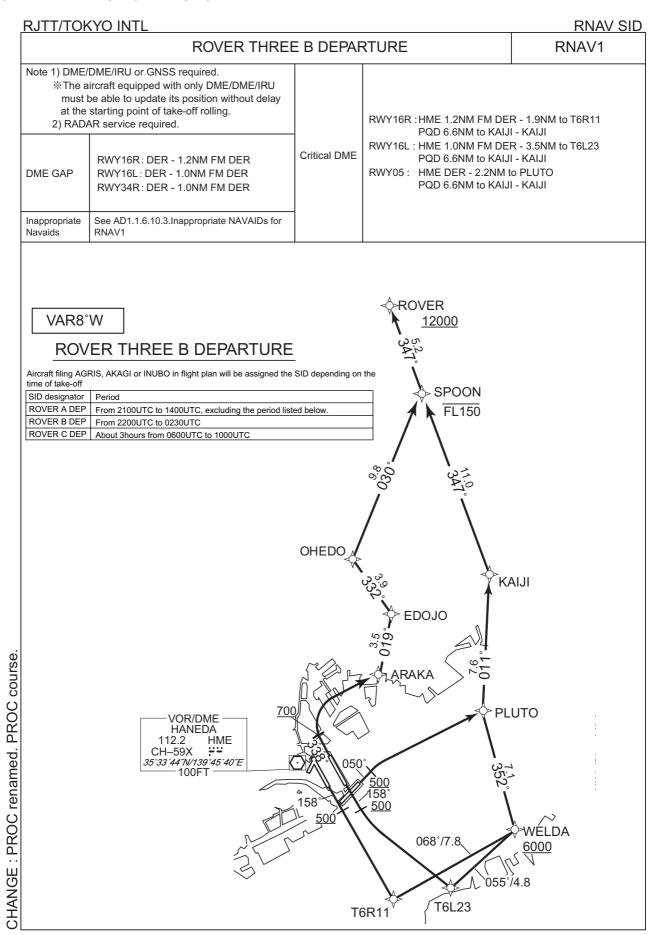
### RWY04

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	043 (034.9)	-7.9	_	_	+700	_	_	RNAV1
002	DF	TORAM	_	_	-7.9	_	_	_	_	_	RNAV1
003	TF	PLUTO	_	099 (090.7)	-7.9	6.0	_	_	_	_	RNAV1
004	TF	KAIJI	_	011 (003.0)	-7.9	7.6	_	1	1	_	RNAV1
005	TF	SPOON	_	347 (339.2)	-7.9	11.0	_	-FL150	_	_	RNAV1
006	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	_	_	RNAV1

# RWY05

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	050 (042.4)	-7.9	_	_	+500	_	_	RNAV1
002	DF	PLUTO	_	_	-7.9	_	R	_	_	_	RNAV1
003	TF	KAIJI	_	011 (003.0)	-7.9	7.6	_	_	1	_	RNAV1
004	TF	SPOON	_	347 (339.2)	-7.9	11.0	-	-FL150	_	_	RNAV1
005	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	_	_	RNAV1

Waypoint Identifier	Coordinates	Waypoint Identifier	Coordinates
KAIJI	354409.6N / 1395806.6E	T6L23	352627.6N / 1395539.1E
PLUTO	353632.1N / 1395736.8E	T6R11	352552.5N / 1395137.2E
ROVER	355918.3N / 1395059.3E	TORAM	353636.8N / 1395011.0E
SPOON	355428.3N / 1395316.0E	WELDA	352941.4N / 1395956.7E
SPOON	300426.3N / 1390316.0E	WELDA	352941.4N / 1395956.7E



RJTT/TOKYO INTL RNAV SID

# **ROVER THREE B DEPARTURE**

RWY16R: Climb on HDG 158° at or above 500FT, direct to T6R11, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY16L: Climb on HDG 158° at or above 500FT, turn left direct to T6L23, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY34R: Climb on HDG 338° at or above 700FT, turn right direct to ARAKA, to EDOJO, to OHEDO, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY05 :Climb on HDG 050° at or above 500FT, turn right direct to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

Note RWY34R: 5.0% climb gradient required up to 700FT. RWY05: 5.0% climb gradient required up to 500FT.

RJTT/TOKYO INTL RNAV SID

# ROVER THREE B DEPARTURE

# RWY16R

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	158 (150.0)	-7.9	_	_	+500	_	_	RNAV1
002	DF	T6R11	_	_	-7.9	_	_	_	_	_	RNAV1
003	TF	WELDA	_	068 (060.6)	-7.9	7.8	_	+6000	_	_	RNAV1
004	TF	PLUTO	_	352 (344.5)	-7.9	7.1	_	-	-	_	RNAV1
005	TF	KAIJI	_	011 (003.0)	-7.9	7.6	_	-	-	_	RNAV1
006	TF	SPOON	_	347 (339.2)	-7.9	11.0	_	-FL150	_	_	RNAV1
007	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	_	_	RNAV1

# RWY16L

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	158 (150.0)	-7.9	_	_	+500	_	_	RNAV1
002	DF	T6L23	_	_	-7.9	_	L	_	_	_	RNAV1
003	TF	WELDA	_	055 (047.3)	-7.9	4.8	_	+6000	_	_	RNAV1
004	TF	PLUTO	_	352 (344.5)	-7.9	7.1	1	_	-	_	RNAV1
005	TF	KAIJI	_	011 (003.0)	-7.9	7.6	1	_	-	_	RNAV1
006	TF	SPOON	_	347 (339.2)	-7.9	11.0	_	-FL150	_	_	RNAV1
007	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	_	_	RNAV1

# RWY34R

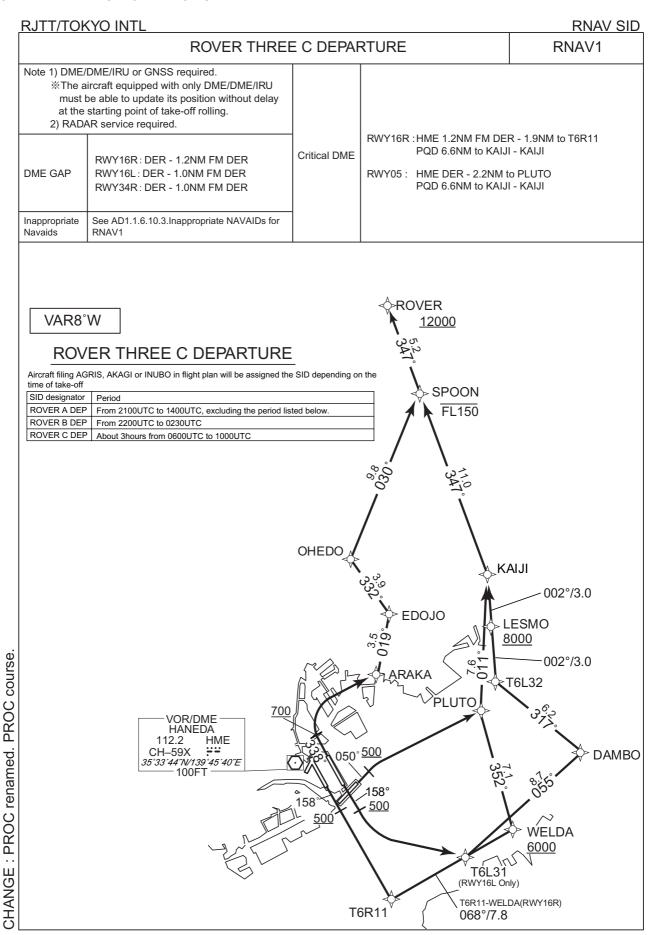
5	Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
3	Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
	001	VA	_	_	338 (330.0)	-7.9	_	_	+700	_	_	RNAV1
	002	DF	ARAKA	_	_	-7.9	_	R	_	_	_	RNAV1
	003	TF	EDOJO	_	019 (010.8)	-7.9	3.5	_	_	_	_	RNAV1
5	004	TF	OHEDO	_	332 (323.7)	-7.9	3.9	_	-	-	_	RNAV1
	005	TF	SPOON	-	030 (022.4)	-7.9	9.8	_	-FL150	-	_	RNAV1
:	006	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	-	_	RNAV1
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### RWY05

Serial	Path	Waypoint	Fly	Course	Magnetic	1		Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	050 (042.4)	-7.9	_	_	+500	_	_	RNAV1
002	DF	PLUTO	_	_	-7.9	_	R	-	1	_	RNAV1
003	TF	KAIJI	_	011 (003.0)	-7.9	7.6	ı	ı	ı	_	RNAV1
004	TF	SPOON	_	347 (339.2)	-7.9	11.0	1	-FL150	ı	_	RNAV1
005	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	-	_	RNAV1

Waypoint Identifier	Coordinates	Waypoint Identifier	Coordinates
ARAKA	353848.8N / 1395041.9E	ROVER	355918.3N / 1395059.3E
EDOJO	354214.0N / 1395129.9E	SPOON	355428.3N / 1395316.0E
KAIJI	354409.6N / 1395806.6E	T6L23	352627.6N / 1395539.1E
OHEDO	354523.4N / 1394838.6E	T6R11	352552.5N / 1395137.2E
PLUTO	353632.1N / 1395736.8E	WELDA	352941.4N / 1395956.7E



RJTT/TOKYO INTL RNAV SID

# ROVER THREE C DEPARTURE

RWY16R: Climb on HDG 158° at or above 500FT, direct to T6R11, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY16L: Climb on HDG 158° at or above 500FT, turn left direct to T6L31, to DAMBO, to T6L32, to LESMO at or above 8000FT, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY34R: Climb on HDG 338° at or above 700FT, turn right direct to ARAKA, to EDOJO, to OHEDO, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY05 :Climb on HDG 050° at or above 500FT, turn right direct to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

Note RWY34R: 5.0% climb gradient required up to 700FT. RWY05: 5.0% climb gradient required up to 500FT.

RJTT/TOKYO INTL RNAV SID

# ROVER THREE C DEPARTURE

# RWY16R

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	158 (150.0)	-7.9	_	_	+500	-	_	RNAV1
002	DF	T6R11	_	_	-7.9	_	_	_	_	_	RNAV1
003	TF	WELDA	_	068 (060.6)	-7.9	7.8	_	+6000	-	_	RNAV1
004	TF	PLUTO	_	352 (344.5)	-7.9	7.1	_	_	-	_	RNAV1
005	TF	KAIJI	_	011 (003.0)	-7.9	7.6	_	_	_	_	RNAV1
006	TF	SPOON	_	347 (339.2)	-7.9	11.0	_	-FL150	1	_	RNAV1
007	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	_	_	RNAV1

### RWY16L

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	-	_	158 (150.0)	-7.9	_	_	+500	_	_	RNAV1
002	DF	T6L31	_	_	-7.9	_	L	_	_	_	RNAV1
003	TF	DAMBO	_	055 (047.5)	-7.9	8.7	_	_	_	_	RNAV1
004	TF	T6L32	_	317 (309.4)	-7.9	6.2	_	_	_	_	RNAV1
005	TF	LESMO	_	002 (354.1)	-7.9	3.0	_	+8000	_	_	RNAV1
006	TF	KAIJI	_	002 (354.1)	-7.9	3.0	_	_	_	_	RNAV1
007	TF	SPOON	_	347 (339.2)	-7.9	11.0	_	-FL150	_	_	RNAV1
800	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	_	_	RNAV1

# RWY34R

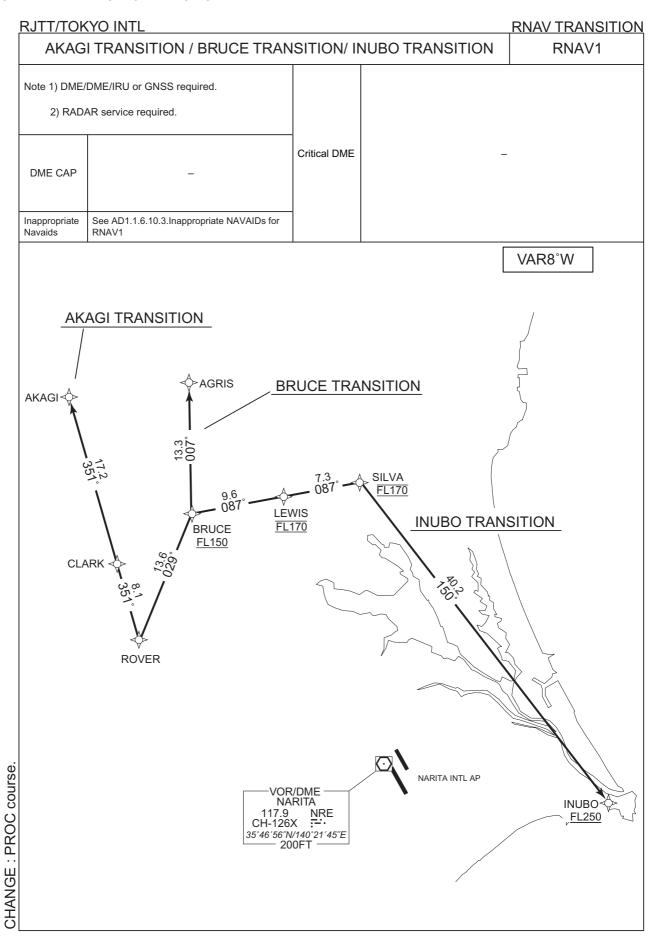
Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	-	_	338 (330.0)	-7.9	_	_	+700	_	_	RNAV1
002	DF	ARAKA	_	_	-7.9	_	R	_	_	_	RNAV1
003	TF	EDOJO	_	019 (010.8)	-7.9	3.5	_	_	_	_	RNAV1
004	TF	OHEDO	_	332 (323.7)	-7.9	3.9	_	ı	_	_	RNAV1
005	TF	SPOON	_	030 (022.4)	-7.9	9.8	_	-FL150	_	_	RNAV1
006	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	_	_	RNAV1

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### RWY05

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	050 (042.4)	-7.9	_	_	+500	_	_	RNAV1
002	DF	PLUTO	_	_	-7.9	_	R	_	_	_	RNAV1
003	TF	KAIJI	_	011 (003.0)	-7.9	7.6	_	_	_	_	RNAV1
004	TF	SPOON	_	347 (339.2)	-7.9	11.0	_	-FL150	_	_	RNAV1
005	TF	ROVER	_	347 (339.1)	-7.9	5.2	_	+12000	_	_	RNAV1

	Waypoint Identifier	Coordinates	Waypoint Identifier	Coordinates		
	ARAKA	353848.8N / 1395041.9E	ROVER	355918.3N / 1395059.3E		
	DAMBO	353416.5N / 1400443.4E	SPOON	355428.3N / 1395316.0E		
	EDOJO	354214.0N / 1395129.9E	T6L31	352822.8N / 1395648.0E		
	KAIJI	354409.6N / 1395806.6E	T6L32	353810.9N / 1395852.2E		
	LESMO	354110.3N / 1395829.4E	T6R11	352552.5N / 1395137.2E		
	OHEDO	354523.4N / 1394838.6E	WELDA	352941.4N / 1395956.7E		
	PLUTO	353632.1N / 1395736.8E				
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### **RJTT/TOKYO INTL**

### **RNAV TRANSITION**

# **AKAGI TRANSITION**

From ROVER, to CLARK, to AKAGI.

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	ROVER	_	_	-7.9	_	_	_	_	_	RNAV1
002	TF	CLARK	_	351 (342.7)	-7.9	8.1	_	_	_	_	RNAV1
003	TF	AKAGI	_	351 (343.4)	-7.9	17.2	_	_	_	_	RNAV1

# BRUCE TRANSITION

From ROVER, to BRUCE at or above FL150, to AGRIS.

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	ROVER	_	_	-7.9	_	_	_	_	_	RNAV1
002	TF	BRUCE	_	029 (020.7)	-7.9	13.6	_	+FL150	_	_	RNAV1
003	TF	AGRIS	_	007 (358.7)	-7.9	13.3	_	_	_	_	RNAV1

### **INUBO TRANSITION**

From ROVER, to BRUCE at or above FL150, to LEWIS at FL170, to SILVA at FL170, to INUBO at or above FL250.

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	ROVER	_	_	-7.9	_	_	_	_	_	RNAV1
002	TF	BRUCE	_	029 (020.7)	-7.9	13.6	_	+FL150	_	_	RNAV1
003	TF	LEWIS	_	087 (078.6)	-7.9	9.6	_	FL170	_	_	RNAV1
004	TF	SILVA	_	087 (078.8)	-7.9	7.3	_	FL170	_	_	RNAV1
005	TF	INUBO	_	150 (141.9)	-7.9	40.2	_	+FL250	_	_	RNAV1

	Waypoint Identifier	Coordinates	Waypoint Identifier	Coordinates			
	AGRIS	362514.7N / 1395633.1E	INUBO	354335.3N / 1404757.9E			
	AKAGI	362328.3N / 1394156.3E	LEWIS	361353.2N / 1400834.7E			
	BRUCE	361200.4N / 1395655.9E	ROVER	355918.3N / 1395059.3E			
	CLARK	360702.0N / 1394800.5E	SILVA	361518.0N / 1401726.0E			
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