

STANDARD DEPARTURE CHART-INSTRUMENT

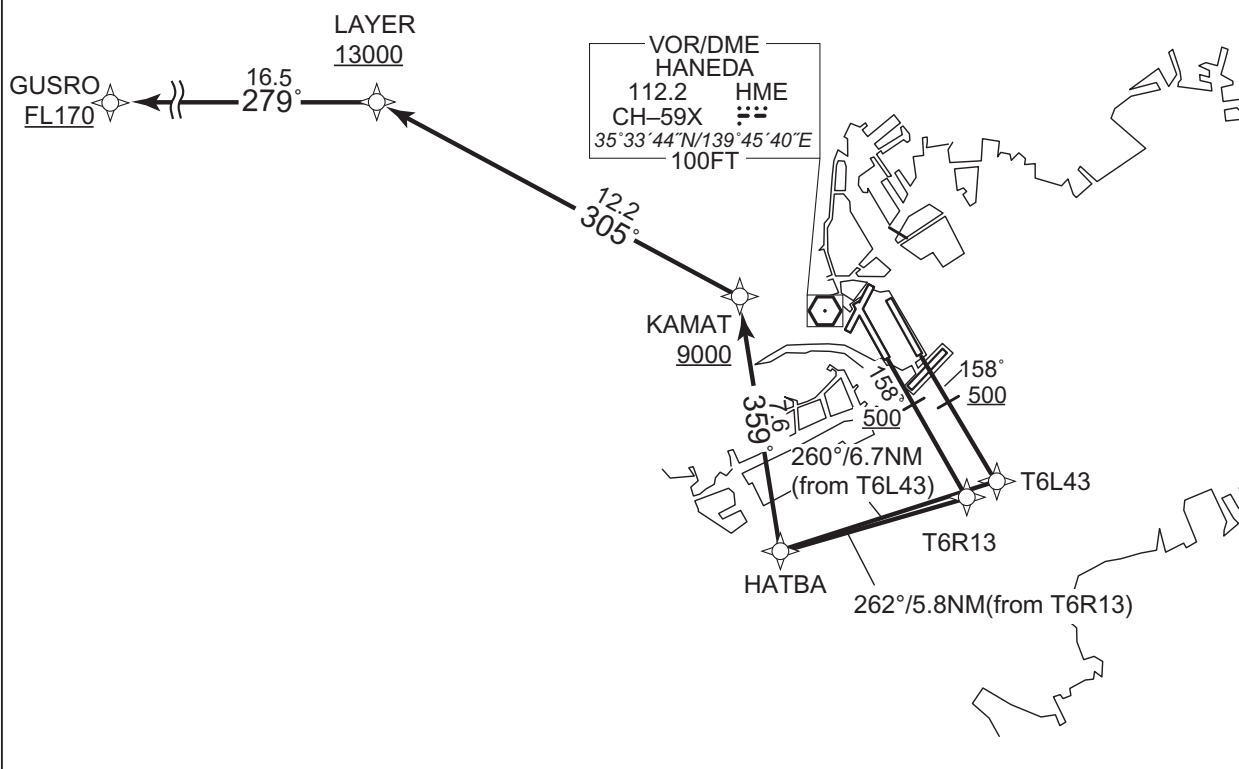
RJTT/TOKYO INTL

RNAV SID

GUSRO ONE DEPARTURE			RNAV1
Note 1) DME/DME/IRU or GNSS required. ※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling. 2) RADAR service required.		Critical DME	RWY16R : HME 1.2NM FM DER – HATBA HYD 2.8NM to HATBA - 1.6NM to HATBA PQD HATBA - 1.6NM to KAMAT RWY16L : HME 1.0NM FM DER - HATBA HYD 2.8NM to HATBA - 1.6NM to HATBA PQD HATBA - 1.6NM to KAMAT RWY34R : HME 1.0NM FM DER - 2.5NM to TT502 TT503 – 3.8NM to KAMAT 1.8NM to KAMAT - KAMAT HYD 1.2NM to TT503 – TT503 4.8NM to KAMAT – 3.8NM to KAMAT RWY34L : HME 0.5NM FM DER - 2.5NM to TT502 TT503 – 3.8NM to KAMAT 1.8NM to KAMAT - KAMAT HYD 1.2NM to TT503 – TT503 4.8NM to KAMAT – 3.8NM to KAMAT RWY04 : HME 1.7NM FM DER - 2.5NM to TT502 TT503 – 3.8NM to KAMAT 1.8NM to KAMAT – KAMAT HYD 1.2NM to TT503 – TT503 4.8NM to KAMAT – 3.8NM to KAMAT RWY05 : HME DER - 2.7NM to TT502 TT503 - 3.8NM to KAMAT 1.8NM to KAMAT - KAMAT HYD 1.2NM to TT503 - TT503 4.8NM to KAMAT - 3.8NM to KAMAT
DME GAP	RWY16R : DER - 1.2NM FM DER RWY16L : DER - 1.0NM FM DER RWY34R : DER - 1.0NM FM DER 3.8NM to KAMAT – 1.8NM to KAMAT RWY34L : DER - 0.5NM FM DER 3.8NM to KAMAT – 1.8NM to KAMAT RWY04 : DER - 1.7NM FM DER 3.8NM to KAMAT – 1.8NM to KAMAT RWY05 : 3.8NM to KAMAT - 1.8NM to KAMAT RWY22 : DER – 1.4NM FM DER		
Inappropriate Nav aids	See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1		

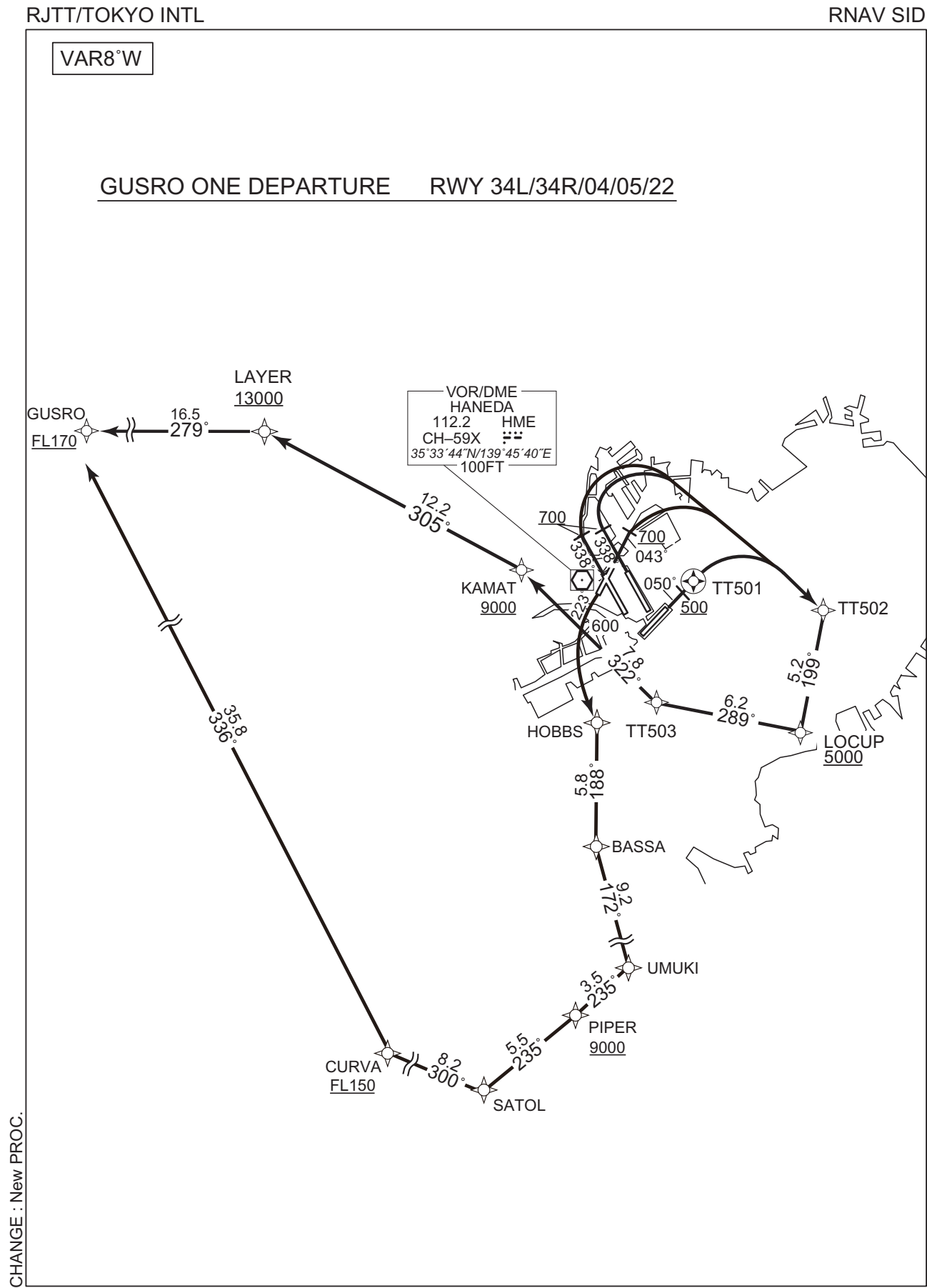
VAR8°W

GUSRO ONE DEPARTURE RWY16R/16L



CHANGE : New PROC.

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RWY16R : Climb on HDG 158° at or above 500FT, direct to T6R13, to HATBA, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to GUSRO at or above FL170.

RWY16L : Climb on HDG 158° at or above 500FT, direct to T6L43, to HATBA, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to GUSRO at or above FL170.

RWY34L/34R : Climb on HDG 338° at or above 700FT, turn right direct to TT502, to LOCUP at or above 5000FT, to TT503, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to GUSRO at or above FL170.

RWY04 : Climb on HDG 043° at or above 700FT, turn right direct to TT502, to LOCUP at or above 5000FT, to TT503, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to GUSRO at or above FL170.

RWY05 : Climb on HDG 050° at or above 500FT, direct to TT501, turn right direct to TT502, to LOCUP at or above 5000FT, to TT503, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to GUSRO at or above FL170.

RWY22 : Climb on HDG 223° at or above 600FT, turn left direct to HOBBS, to BASSA, to UMUKI, to PIPER at or above 9000FT, to SATOL, to CURVA at or above FL150, to GUSRO at or above FL170.

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

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

RWY22 : 5.0% climb gradient required up to 600FT.

CHANGE : New PROC.

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GUSRO ONE DEPARTURE

RWY16R

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	—	—	158 (150.0)	-7.9	—	—	+500	—	—	RNAV1
002	DF	T6R13	—	—	-7.9	—	—	—	—	—	RNAV1
003	TF	HATBA	—	262 (253.8)	-7.9	5.8	—	—	—	—	RNAV1
004	TF	KAMAT	—	359 (351.1)	-7.9	7.6	—	+9000	—	—	RNAV1
005	TF	LAYER	—	305 (297.1)	-7.9	12.2	—	+13000	—	—	RNAV1
006	TF	GUSRO	—	279 (271.2)	-7.9	16.5	—	+FL170	—	—	RNAV1

RWY16L

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	—	—	158 (150.0)	-7.9	—	—	+500	—	—	RNAV1
002	DF	T6L43	—	—	-7.9	—	—	—	—	—	RNAV1
003	TF	HATBA	—	260 (251.9)	-7.9	6.7	—	—	—	—	RNAV1
004	TF	KAMAT	—	359 (351.1)	-7.9	7.6	—	+9000	—	—	RNAV1
005	TF	LAYER	—	305 (297.1)	-7.9	12.2	—	+13000	—	—	RNAV1
006	TF	GUSRO	—	279 (271.2)	-7.9	16.5	—	+FL170	—	—	RNAV1

RWY34L/RWY34R

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	—	—	338 (330.0)	-7.9	—	—	+700	—	—	RNAV1
002	DF	TT502	—	—	-7.9	—	R	—	—	—	RNAV1
003	TF	LOCUP	—	199 (190.9)	-7.9	5.2	—	+5000	—	—	RNAV1
004	TF	TT503	—	289 (280.8)	-7.9	6.2	—	—	—	—	RNAV1
005	TF	KAMAT	—	322 (314.2)	-7.9	7.8	—	+9000	—	—	RNAV1
006	TF	LAYER	—	305 (297.1)	-7.9	12.2	—	+13000	—	—	RNAV1
007	TF	GUSRO	—	279 (271.2)	-7.9	16.5	—	+FL170	—	—	RNAV1

CHANGE : VAR.

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RWY04

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	—	—	043 (034.9)	-7.9	—	—	+700	—	—	RNAV1
002	DF	TT502	—	—	-7.9	—	R	—	—	—	RNAV1
003	TF	LOCUP	—	199 (190.9)	-7.9	5.2	—	+5000	—	—	RNAV1
004	TF	TT503	—	289 (280.8)	-7.9	6.2	—	—	—	—	RNAV1
005	TF	KAMAT	—	322 (314.2)	-7.9	7.8	—	+9000	—	—	RNAV1
006	TF	LAYER	—	305 (297.1)	-7.9	12.2	—	+13000	—	—	RNAV1
007	TF	GUSRO	—	279 (271.2)	-7.9	16.5	—	+FL170	—	—	RNAV1

RWY05

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	—	—	050 (042.4)	-7.9	—	—	+500	—	—	RNAV1
002	DF	TT501	Y	—	-7.9	—	—	—	—	—	RNAV1
003	DF	TT502	—	—	-7.9	—	R	—	—	—	RNAV1
004	TF	LOCUP	—	199 (190.9)	-7.9	5.2	—	+5000	—	—	RNAV1
005	TF	TT503	—	289 (280.8)	-7.9	6.2	—	—	—	—	RNAV1
006	TF	KAMAT	—	322 (314.2)	-7.9	7.8	—	+9000	—	—	RNAV1
007	TF	LAYER	—	305 (297.1)	-7.9	12.2	—	+13000	—	—	RNAV1
008	TF	GUSRO	—	279 (271.2)	-7.9	16.5	—	+FL170	—	—	RNAV1

RWY22

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	—	—	223 (214.9)	-7.9	—	—	+600	—	—	RNAV1
002	DF	HOBBS	—	—	-7.9	—	L	—	—	—	RNAV1
003	TF	BASSA	—	188 (179.9)	-7.9	5.8	—	—	—	—	RNAV1
004	TF	UMUKI	—	172 (163.9)	-7.9	9.2	—	—	—	—	RNAV1
005	TF	PIPER	—	235 (227.4)	-7.9	3.5	—	+9000	—	—	RNAV1
006	TF	SATOL	—	235 (227.4)	-7.9	5.5	—	—	—	—	RNAV1
007	TF	CURVA	—	300 (292.2)	-7.9	8.2	—	+FL150	—	—	RNAV1
008	TF	GUSRO	—	336 (328.3)	-7.9	35.8	—	+FL170	—	—	RNAV1

CHANGE : VAR.

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Waypoint Coordinates			
Waypoint Identifier	Coordinates	Waypoint Identifier	Coordinates
BASSA	352108.8N / 1394542.2E	PIPER	350958.3N / 1394542.0E
CURVA	350919.0N / 1393124.4E	SATOL	350613.3N / 1394043.4E
GUSRO	353944.8N / 1390813.1E	T6L43	352828.4N / 1395104.6E
HATBA	352623.4N / 1394315.9E	T6R13	352800.8N / 1395006.4E
HOBBS	352653.9N / 1394541.3E	TT501	353328.7N / 1395029.9E
KAMAT	353353.6N / 1394148.9E	TT502	353224.4N / 1395720.7E
LAYER	353925.4N / 1392829.5E	TT503	352828.0N / 1394840.4E
LOCUP	352718.8N / 1395608.5E	UMUKI	351219.1N / 1394849.2E

CHANGE : New PROC.