

STANDARD ARRIVAL CHART  
INSTRUMENT (STAR) - ICAO

TRANSITION LEVEL: by ATC  
TRANSITION ALTITUDE: 6000

Alt set: - hPa (mm on req)  
-QNH (QFE on req)

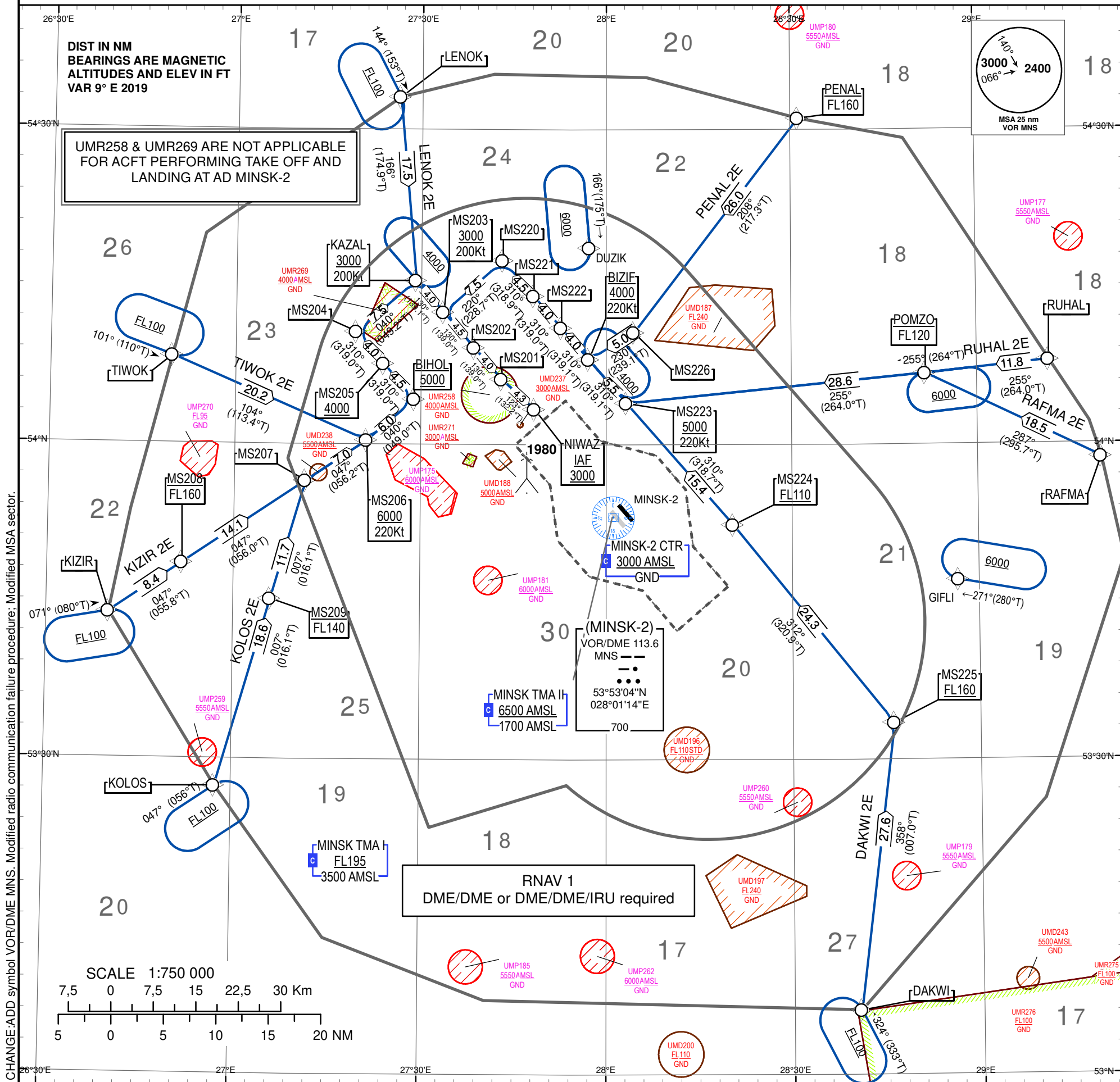
MINSK APP	125.900
MINSK RADAR	125.250
MINSK TOWER	130.400 PRI 118.300 SRY
MINSK-2 ATIS	128.850 EN 135.850 RUS

**MINSK-2  
RNAV RWY 13L**

DAKWIE, KIZIR2E,  
KOLOS2E, LENOK2E,  
PENAL2E, RAFMA2E,  
RUHAL2E, TIWOK2E

DIST IN NM  
BEARINGS ARE MAGNETIC  
ALTITUDES AND ELEV IN FT  
VAR 9° E 2019

UMR258 & UMR269 ARE NOT APPLICABLE  
FOR ACFT PERFORMING TAKE OFF AND  
LANDING AT AD MINSK-2



RNAV 1 approval required. Otherwise advise ATC.
ALT / FL / SPEED restrictions must always be followed as published unless explicitly cancelled by ATC. If unable to comply restrictions report at first contact with MINSK APP.
Descent planning: expect base turn normally abeam 10-15 NM final. Actual descent clearance will be as directed by ATC.
Expect direct routing/shortcuts by ATC whenever possible (especially during off-peak hours).
Holdings at GIFLI, DUZIK used for RWY configuration change and during unexpected events.
<b>RADIO COMMUNICATION FAILURE PROCEDURE</b> If available call +375172157600
<b>RNAV 1 approved aircraft:</b>
<b>If STAR was assigned and acknowledged by flight crew:</b> continue with assigned STAR; set transponder to 7600 and in 2 minutes start descending in accordance with vertical restrictions specified on chart; execute approach and land.
<b>If STAR was assigned, acknowledged by flight crew and vectoring was initiated:</b> continue on assigned heading, adhering to last assigned and acknowledged altitude; set transponder to 7600, in 2 minutes start descending and proceed to initial approach fix (IAF) in accordance with vertical restrictions; execute approach and land.
<b>If STAR was not assigned:</b> continue according to FPL; set transponder to 7600 and in 2 minutes start descending in accordance with vertical restrictions specified on chart; execute approach and land.
<b>RNAV 1 not approved aircraft:</b> maintain last assigned and acknowledged altitude/flight level; set transponder to 7600; proceed to MNS VOR/DME; hold over MNS VOR/DME descending to altitude 4000 (all turns RIGHT, 1 min, inbound course 310°); then proceed to TP (R 332.7° D12.2 MNS VOR/DME) descending to 3000; execute turn final intercept IMDL LOC, approach and land. If landing is not possible, climb on track 130° to 3000, turn LEFT to MNS VOR/DME and follow crew decision.
IAS 200 KT on base leg/closing heading to final approach up to 12 NM to touchdown. IAS 180 KT on final approach course within 12 NM to 6 NM to touchdown. IAS 160 KT on final approach course within 6NM to 4NM to touchdown. These speeds are applied for ATC separation purposes and are mandatory. All speed restrictions are to be flown as accurately as possible. Aircraft unable to confirm to these speeds should inform ATC and state what speeds to be used.

CHANGE:ADD symbol VOR/DME MNS. Modified radio communication failure procedure. Modified MSA sector.

**TABULAR DESCRIPTION**

DAKWI2E										
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation	Distance NM	Turn Direction	Altitude FT	Speed KT	Navigation Specification
001	IF	DAKWI	-	-	9	-	-	-	-	RNAV1
002	TF	MS225	-	358(007.0)	9	27.6	-	+FL160	-	RNAV1
003	TF	MS224	-	312(320.9)	9	24.3	-	+FL110	-	RNAV1
004	TF	MS223	-	310(318.7)	9	15.4	-	+5000	-220	RNAV1
005	TF	BIZIF	-	310(319.1)	9	5.5	-	@4000	-	RNAV1
006	TF	MS222	-	310(319.1)	9	4.0	-	-	-	RNAV1
007	TF	MS221	-	310(319.0)	9	4.0	-	-	-	RNAV1
008	TF	MS220	-	310(318.9)	9	4.5	-	-	-	RNAV1
009	TF	MS203	-	220(228.7)	9	7.5	-	+3000	-200	RNAV1
010	TF	MS202	-	130(139.0)	9	4.5	-	-	-	RNAV1
011	TF	MS201	-	130(139.0)	9	4.0	-	-	-	RNAV1
012	TF	NIWAZ	-	123(132.2)	9	4.3	-	@3000	-	RNAV1
KIZIR2E										
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation	Distance NM	Turn Direction	Altitude FT	Speed KT	Navigation Specification
001	IF	KIZIR	-	-	9	-	-	-	-	RNAV1
002	TF	MS208	-	047(055.8)	9	8.4	-	-FL160	-	RNAV1
003	TF	MS207	-	047(056.0)	9	14.1	-	-	-	RNAV1
004	TF	MS206	-	047(056.2)	9	7.0	-	+6000	-220	RNAV1
005	TF	BIHOL	-	040(049.0)	9	6.0	-	@5000	-	RNAV1
006	TF	MS205	-	310(319.0)	9	4.5	-	+4000	-	RNAV1
007	TF	MS204	-	310(319.0)	9	4	-	-	-	RNAV1
008	TF	KAZAL	-	040(049.2)	9	7.5	-	+3000	-200	RNAV1
009	TF	MS203	-	130(139.1)	9	4.0	-	-	-	RNAV1
010	TF	MS202	-	130(139.0)	9	4.5	-	-	-	RNAV1
011	TF	MS201	-	130(139.0)	9	4.0	-	-	-	RNAV1
012	TF	NIWAZ	-	123(132.2)	9	4.3	-	@3000	-	RNAV1
KOLOS2E										
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation	Distance NM	Turn Direction	Altitude FT	Speed KT	Navigation Specification
001	IF	KOLOS	-	-	9	-	-	-	-	RNAV1
002	TF	MS209	-	007(016.1)	9	18.6	-	-FL140	-	RNAV1
003	TF	MS207	-	007(016.1)	9	11.7	-	-	-	RNAV1
004	TF	MS206	-	047(056.2)	9	7.0	-	+6000	-220	RNAV1
005	TF	BIHOL	-	040(049.0)	9	6.0	-	@5000	-	RNAV1
006	TF	MS205	-	310(319.0)	9	4.5	-	+4000	-	RNAV1
007	TF	MS204	-	310(319.0)	9	4.0	-	-	-	RNAV1
008	TF	KAZAL	-	040(049.2)	9	7.5	-	+3000	-200	RNAV1
009	TF	MS203	-	130(139.1)	9	4.0	-	-	-	RNAV1
010	TF	MS202	-	130(139.0)	9	4.5	-	-	-	RNAV1
011	TF	MS201	-	130(139.0)	9	4.0	-	-	-	RNAV1
012	TF	NIWAZ	-	123(132.2)	9	4.3	-	@3000	-	RNAV1
LENOK2E										
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation	Distance NM	Turn Direction	Altitude FT	Speed KT	Navigation Specification
001	IF	LENOK	-	-	9	-	-	-	-	RNAV1
002	TF	KAZAL	-	166(174.9)	9	17.5	-	+3000	-200	RNAV1
003	TF	MS203	-	130(139.1)	9	4	-	-	-	RNAV1
004	TF	MS202	-	130(139.0)	9	4.5	-	-	-	RNAV1
005	TF	MS201	-	130(139.0)	9	4	-	-	-	RNAV1
006	TF	NIWAZ	-	123(132.2)	9	4.3	-	@3000	-	RNAV1

STANDARD ARRIVAL CHART  
INSTRUMENT (STAR) – ICAOMINSK-2  
RNAV RWY 13L

PPENAL2E										
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation	Distance NM	Turn Direction	Altitude FT	Speed KT	Navigation Specification
001	IF	PENAL	-	-	9	-	-	-FL160	-	RNAV1
002	TF	MS226	-	208(217.3)	9	26.0	-	-	-	RNAV1
003	TF	BIZIF	-	230(239.1)	9	5.0	-	@4000	-220	RNAV1
004	TF	MS222	-	310(319.1)	9	4.0	-	-	-	RNAV1
005	TF	MS221	-	310(319.0)	9	4.0	-	-	-	RNAV1
006	TF	MS220	-	310(318.9)	9	4.5	-	-	-	RNAV1
007	TF	MS203	-	220(228.7)	9	7.5	-	+3000	-200	RNAV1
008	TF	MS202	-	130(139.0)	9	4.5	-	-	-	RNAV1
009	TF	MS201	-	130(139.0)	9	4.0	-	-	-	RNAV1
010	TF	NIWAZ	-	123(132.2)	9	4.3	-	@3000	-	RNAV1
RAFMA2E										
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation	Distance NM	Turn Direction	Altitude FT	Speed KT	Navigation Specification
001	IF	RAFMA	-	-	9	-	-	-	-	RNAV1
002	TF	POMZO	-	287(295.7)	9	18.5	-	-FL120	-	RNAV1
003	TF	MS223	-	255(264.0)	9	28.6	-	+5000	-220	RNAV1
004	TF	BIZIF	-	310(319.1)	9	5.5	-	@4000	-	RNAV1
005	TF	MS222	-	310(319.1)	9	4.0	-	-	-	RNAV1
006	TF	MS221	-	310(319.0)	9	4.0	-	-	-	RNAV1
007	TF	MS220	-	310(318.9)	9	4.5	-	-	-	RNAV1
008	TF	MS203	-	220(228.7)	9	7.5	-	+3000	-200	RNAV1
009	TF	MS202	-	130(139.0)	9	4.5	-	-	-	RNAV1
010	TF	MS201	-	130(139.0)	9	4.0	-	-	-	RNAV1
011	TF	NIWAZ	-	123(132.2)	9	4.3	-	@3000	-	RNAV1
RUHAL2E										
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation	Distance NM	Turn Direction	Altitude FT	Speed KT	Navigation Specification
001	IF	RUHAL	-	-	9	-	-	-	-	RNAV1
002	TF	POMZO	-	255(264.0)	9	11.8	-	-FL120	-	RNAV1
003	TF	MS223	-	255(264.0)	9	28.6	-	+5000	-220	RNAV1
004	TF	BIZIF	-	310(319.1)	9	5.5	-	@4000	-	RNAV1
005	TF	MS222	-	310(319.1)	9	4.0	-	-	-	RNAV1
006	TF	MS221	-	310(319.0)	9	4.0	-	-	-	RNAV1
007	TF	MS220	-	310(318.9)	9	4.5	-	-	-	RNAV1
008	TF	MS203	-	220(228.7)	9	7.5	-	+3000	-200	RNAV1
009	TF	MS202	-	130(139.0)	9	4.5	-	-	-	RNAV1
010	TF	MS201	-	130(139.0)	9	4.0	-	-	-	RNAV1
011	TF	NIWAZ	-	123(132.2)	9	4.3	-	@3000	-	RNAV1
TIWOK2E										
Serial Number	Path Descriptor	Waypoint Identifier	Fly - over	Course °M(°T)	Magnetic Variation	Distance NM	Turn Direction	Altitude FT	Speed KT	Navigation Specification
001	IF	TIWOK	-	-	9	-	-	-	-	RNAV1
002	TF	MS206	-	104(113.4)	9	20.2	-	+6000	-220	RNAV1
003	TF	BIHOL	-	040(049.0)	9	6	-	@5000	-	RNAV1
004	TF	MS205	-	310(319.0)	9	4.5	-	+4000	-	RNAV1
005	TF	MS204	-	310(319.0)	9	4	-	-	-	RNAV1
006	TF	KAZAL	-	040(049.2)	9	7.5	-	+3000	-200	RNAV1
007	TF	MS203	-	130(139.1)	9	4	-	-	-	RNAV1
008	TF	MS202	-	130(139.0)	9	4.5	-	-	-	RNAV1
009	TF	MS201	-	130(139.0)	9	4	-	-	-	RNAV1
010	TF	NIWAZ	-	123(132.2)	9	4.3	-	@3000	-	RNAV1

**RNAV HOLDING INDIFICATION**

Path Descriptor	Holding Fix	Inbound MAG Track° (True Track°)	Altitude (ft) / Flight Level	Time / Distance outbound	Turn Direction
HM	BIZIF	310(319.1)	+4000	1MIN	R
HM	DAKWI	324(333.0)	+FL100	1MIN	L
HM	DUZIK	166(175.0)	+6000	1.5 MIN	R
HM	GIFLI	271(280.0)	+6000	1.5 MIN	R
HM	KAZAL	130(139.1)	+4000	1MIN	L
HM	KIZIR	071(080.0)	+FL100	1MIN	R
HM	KOLOS	047(056.0)	+FL100	1MIN	R
HM	LENOK	144(153.0)	+FL100	1MIN	R
HM	POMZO	255(264.0)	+6000	1MIN	L
HM	TIWOK	101(110.0)	+FL100	1MIN	L

**WAYPOINT LIST**

Waypoint Identifier	Coordinates	
BIHOL	540419.1N	0272858.2E
BIZIF	540807.2N	0275712.1E
DAKWI	530607.0N	0284037.0E
DUZIK	541844.3N	0275718.9E
GIFLI	534705.9N	0285644.0E
KAZAL	541537.7N	0272910.4E
KIZIR	534352.4N	0264004.0E
KOLOS	532723.0N	0265723.0E
LENOK	543305.0N	0272629.0E
MS201	540614.0N	0274305.5E
MS202	540914.8N	0273837.7E
MS203	541236.9N	0273338.8E
MS204	541043.7N	0271930.0E
MS205	540742.7N	0272357.6E
MS206	540023.3N	0272118.5E
MS207	535629.8N	0271129.3E
MS208	534836.2N	0265145.9E
MS209	534513.8N	0270559.4E
MS220	541732.7N	0274314.4E
MS221	541409.3N	0274816.7E
MS222	541108.3N	0275244.7E
MS223	540357.8N	0280318.7E
MS224	535222.7N	0282030.3E
MS225	533329.5N	0284612.0E
MS226	541041.5N	0280431.5E
MS710	535757.7N	0281207.8E
NIWAZ	540322.9N	0274826.5E
PENAL	543105.0N	0283117.0E
POMZO	540646.0N	0285142.0E
RAFMA	535841.0N	0291959.0E
RUHAL	540758.0N	0291142.0E
TIWOK	540820.0N	0264945.0E