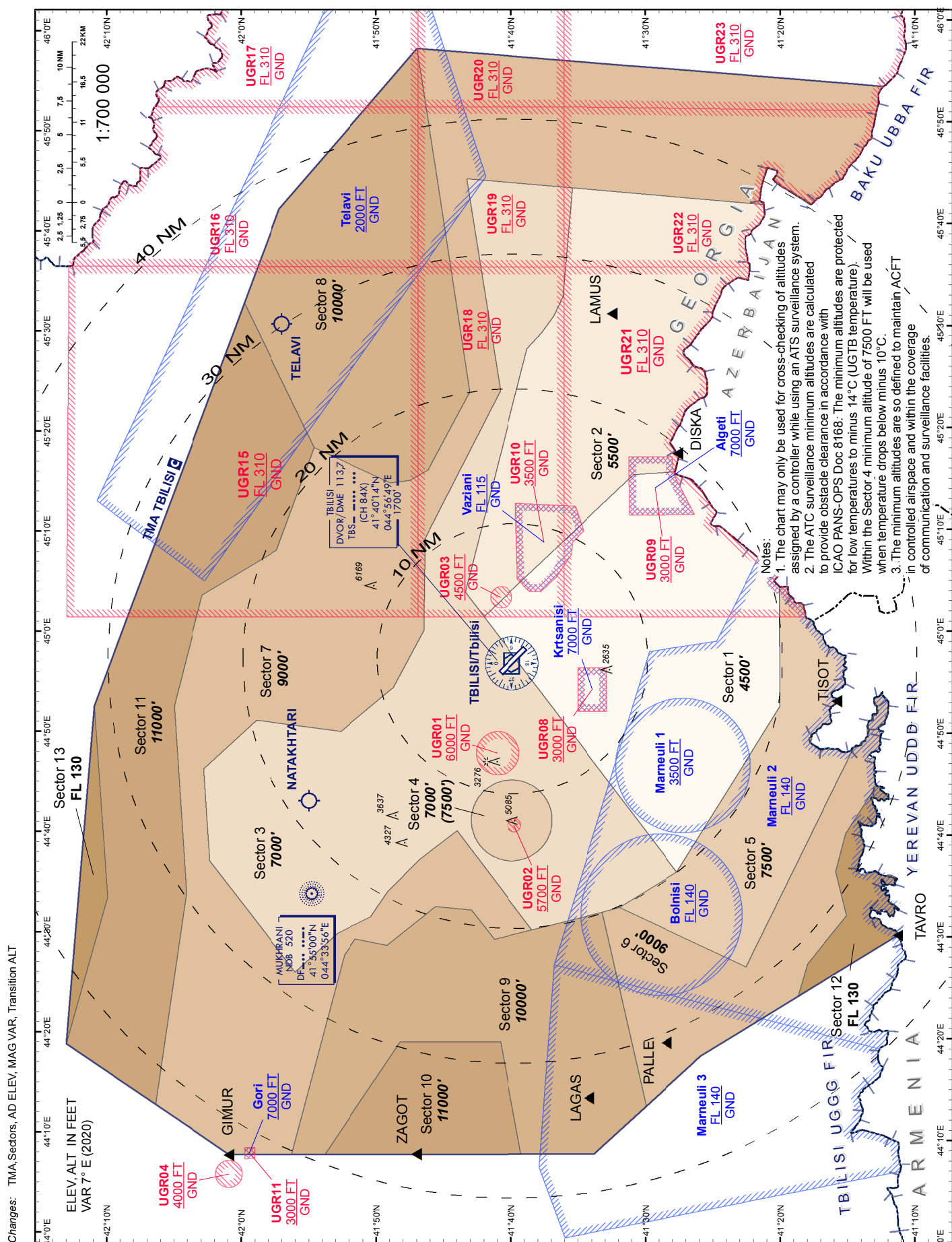


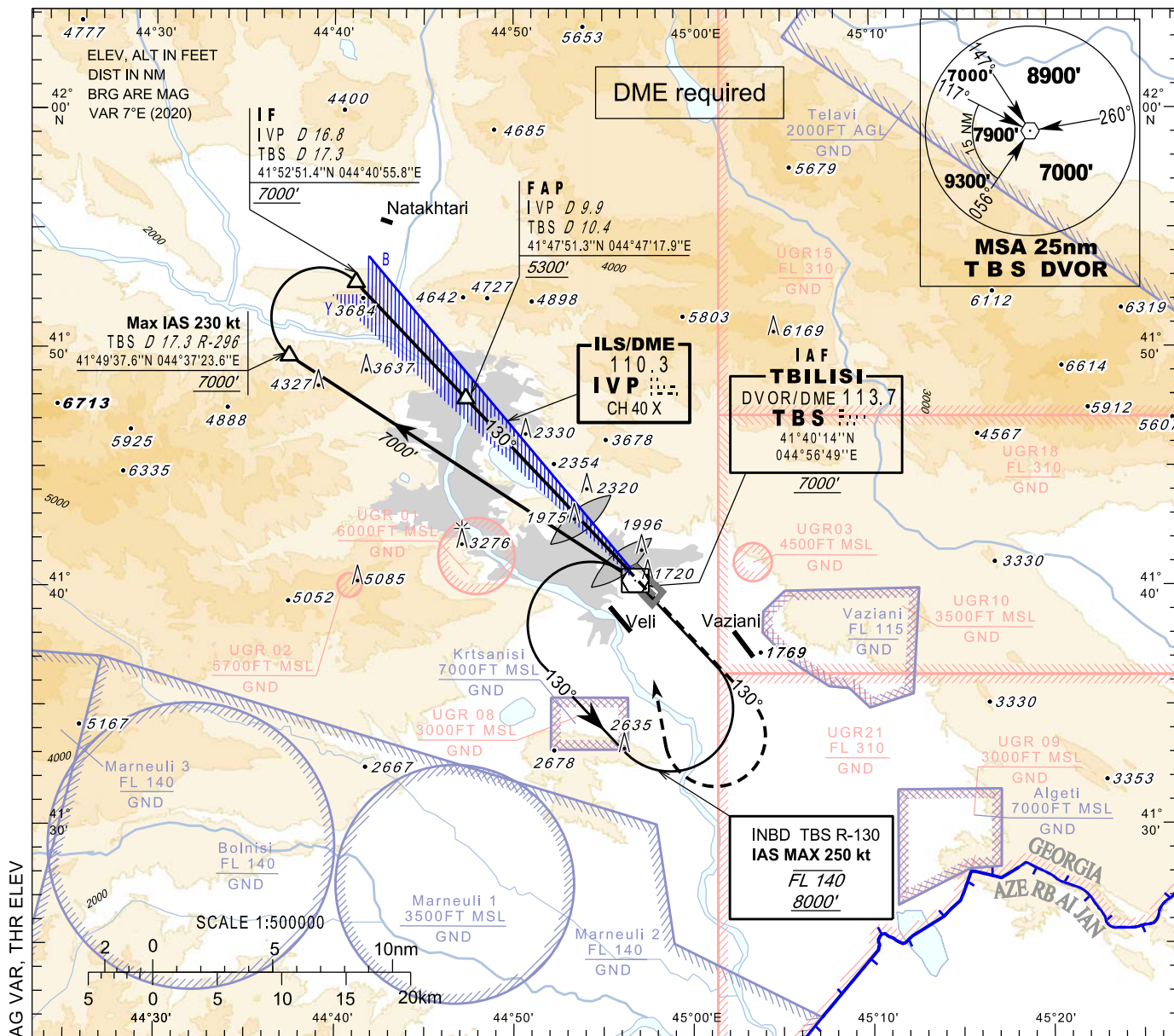
**ATC SURVEILLANCE MINIMUM
ALTITUDE CHART - ICAO**AERODROME ELEV 1578'
TRANSITION ALT 11000'APP 134.600
TWR 119.000 (Primary)
128.000 (Secondary)**TBILISI/Tbilisi (UGTB)**

ATC Surveillance Minimum Altitude Sectors' Coordinates

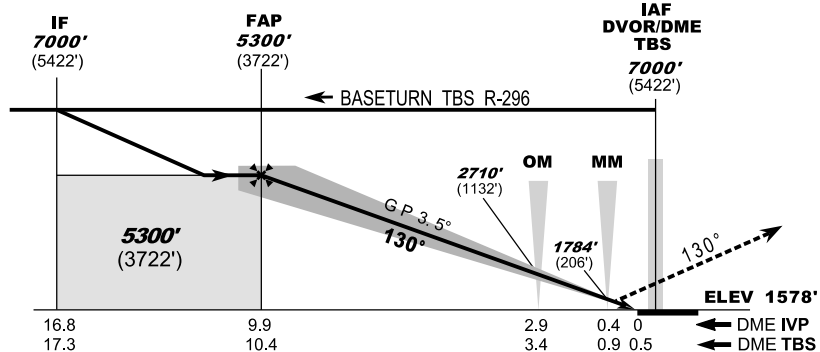
Sector	Lateral Limits
Sector 1	412755N 0443615E - 414217N 0450126E - 413110N 0451526E - 412804N 0451543E - then along the state border - 412022N 0450423E - 412018N 0445238E - 412755N 0443615E
Sector 2	414217N 0450126E - 414340N 0450353E - 413901N 0452757E - 413756N 0452930E - 413701N 0453109E - 413622N 0453301E - 413535N 0454349E - 412122N 0454200E - then along the state border - 412804N 0451543E - 413110N 0451526E - 414217N 0450126E
Sector 3	415611N 0442606E - 420234N 0443708E - 420303N 0444617E - 415909N 0445109E - 415253N 0445003E - 414900N 0445425E - 414643N 0450005E - 414638N 0450910E - 414102N 0452348E - 414325N 0454449E - 413535N 0454349E - 413622N 0453301E - 413701N 0453109E - 413756N 0452930E - 413901N 0452757E - 414340N 0450353E - 414217N 0450126E - 412755N 0443615E - 413210N 0443242E - 413327N 0443213E - 413840N 0443026E - 414414N 0444014E - 414700N 0443723E - 414921N 0443411E - 415037N 0443138E - 415302N 0443003E - 415611N 0442606E
Sector 4	Circle with radius 3 NM, centered at 414012N 0444117E
Sector 5	413210N 0443242E - 412755N 0443615E - 412018N 0445238E - 412022N 0450423E - then along the state border - 411450N 0444830E - 412244N 0442654E - 413210N 0443242E
Sector 6	413004N 0441306E - 413327N 0443213E - 413210N 0443242E - 412244N 0442654E - 411450N 0444830E - then along the state border - 411308N 0444451E - 411525N 0444005E - 411608N 0443620E - 411518N 0443201E - 411810N 0442714E - 411852N 0442404E - 412602N 0441808E - 413004N 0441306E
Sector 7	420100N 0440756E - 420630N 0441251E - 420420N 0443356E - 420517N 0445232E - 420312N 0450336E - 415739N 0450804E - 415450N 0451815E - 414912N 0451442E - 414745N 0451457E - 414625N 0451558E - 414317N 0452342E - 414700N 0455746E - 411225N 0455332E - then along the state border - 412122N 0454200E - 413535N 0454349E - 414325N 0454449E - 414102N 0452348E - 414638N 0450910E - 414643N 0450005E - 414900N 0445425E - 415253N 0445003E - 415909N 0445109E - 420303N 0444617E - 420234N 0443708E - 415611N 0442606E - 415302N 0443003E - 415037N 0443138E - 414921N 0443411E - 414700N 0443723E - 414414N 0444014E - 413840N 0443026E - 414127N 0442929E - 414310N 0443222E - 414550N 0443242E - 414924N 0442849E - 415144N 0442927E - 415233N 0442752E - 415620N 0440800E - 420100N 0440756E
Sector 8	415959N 0453237E - 415720N 0454158E - 414700N 0455746E - 414317N 0452342E - 414625N 0451558E - 414745N 0451457E - 414912N 0451442E - 415450N 0451815E - 415959N 0453237E
Sector 9	415620N 0440800E - 415233N 0442752E - 415144N 0442927E - 414924N 0442849E - 414550N 0443242E - 414310N 0443222E - 414127N 0442929E - 413840N 0443026E - 413327N 0443213E - 413004N 0441306E - 413353N 0440821E - 413920N 0440816E - 414056N 0441922E - 414820N 0441917E - 415352N 0440803E - 415620N 0440800E
Sector 10	415352N 0440803E - 414820N 0441917E - 414056N 0441922E - 413920N 0440816E - 415352N 0440803E
Sector 11	421309N 0441850E - 421008N 0443329E - 421111N 0445232E - 415959N 0453237E - 415450N 0451815E - 415739N 0450804E - 420312N 0450336E - 420517N 0445232E - 420420N 0443356E - 420630N 0441251E - 421309N 0441850E
Sector 12	411852N 0442404E - 411810N 0442714E - 411518N 0443201E - 411608N 0443620E - 411525N 0444005E - 411308N 0444451E - then along the state border - 411130N 0443008E - 411852N 0442404E
Sector 13	421309N 0441850E - 421111N 0445232E - 421008N 0443329E - 421309N 0441850E

**INSTRUMENT
APPROACH
CHART - ICAO**HEIGHTS RELATED TO
THR RWY 13R - ELEV 1578'

TRANSITION ALTITUDE 11000'

APP 134.600
TWR 119.000 (Primary)
128.000 (Secondary)
ATIS 132.800**TBILISI/Tbilisi (UGTB)****ILS y
RWY 13R****MISSED APPROACH****Normal:**
Climb straight ahead to 7000', when passing 4500' turn right to TBS, then as directed by ATC.**TBS DVOR Unserviceable:**
Climb straight ahead to 7000', after passing 4500' expect vectoring.**Radio Communication Failure:**
Climb straight ahead to 8000', when passing 4500' turn right to TBS, hold as published, when ready make new approach.

ILS RDH 50'

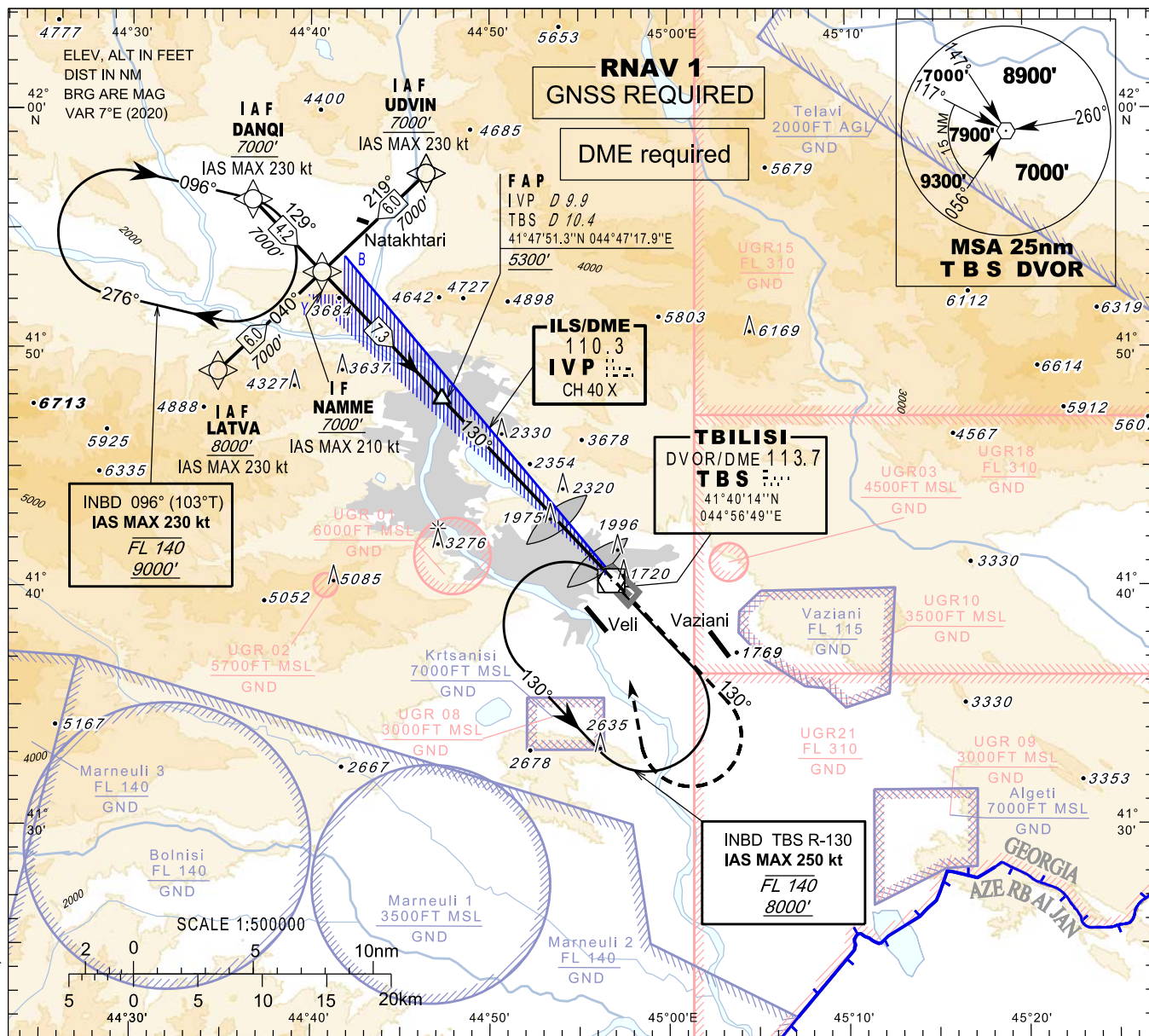


Straight in Approach	A B	C	D
OCA(H)	1768 (190)	1778 (200)	1788 (210)

DME IVP NM	9	8	7	6	5	4	3	2	1
DME TBS NM	9.5	8.5	7.5	6.5	5.5	4.5	3.5	2.5	1.5
ALT (HGT) ft	4973 (3395)	4601 (3023)	4230 (2652)	3858 (2280)	3486 (1908)	3115 (1537)	2743 (1165)	2371 (793)	2000 (422)

**INSTRUMENT
APPROACH
CHART - ICAO**HEIGHTS RELATED TO
THR RWY 13R - ELEV 1578'

TRANSITION ALTITUDE 11000'

APP 134.600
TWR 119.000 (Primary)
128.000 (Secondary)
ATIS 132.800**TBILISI/Tbilisi (UGTB)****ILS z
RWY 13R****MISSED APPROACH****Normal:**

Climb straight ahead to 7000', when passing 4500' turn right to TBS, then as directed by ATC.

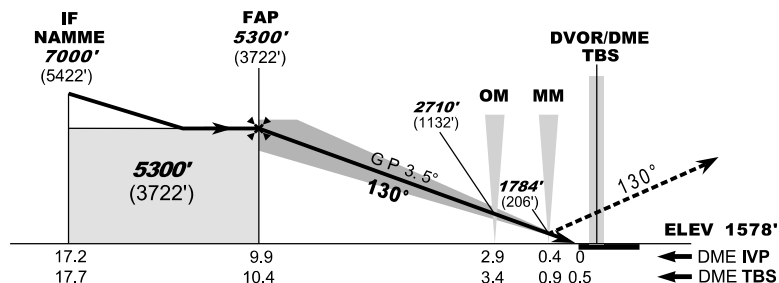
TBS DVOR Unserviceable:

Climb straight ahead to 7000', after passing 4500' expect vectoring.

Radio Communication Failure:

Climb straight ahead to 8000', when passing 4500' turn right to TBS, hold as published, when ready make new approach (ILS y or LOC y or VOR).

ILS RDH 50'



Straight in Approach	A B	C	D
OCA(H)	1768 (190)	1778 (200)	1788 (210)

DME IVP NM	9	8	7	6	5	4	3	2	1
DME TBS NM	9.5	8.5	7.5	6.5	5.5	4.5	3.5	2.5	1.5
ALT (HGT) ft	4973 (3395)	4601 (3023)	4230 (2652)	3858 (2280)	3486 (1908)	3115 (1537)	2743 (1165)	2371 (793)	2000 (422)

RNAV Transition Coding Tables - RWY 13R (ILS)

LATVA transition										
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification	
	Identifier	Flyover	Coordinates				Level	Speed kt		
IF	LATVA	-	41°49'00.0"N 044°34'45.0"E	-	-	-	+A8000	-230	RNAV1	
TF	NAMME	-	41°53'08.8"N 044°40'33.6"E	40° (46.6°)	6	-	+A7000	-210	RNAV1	

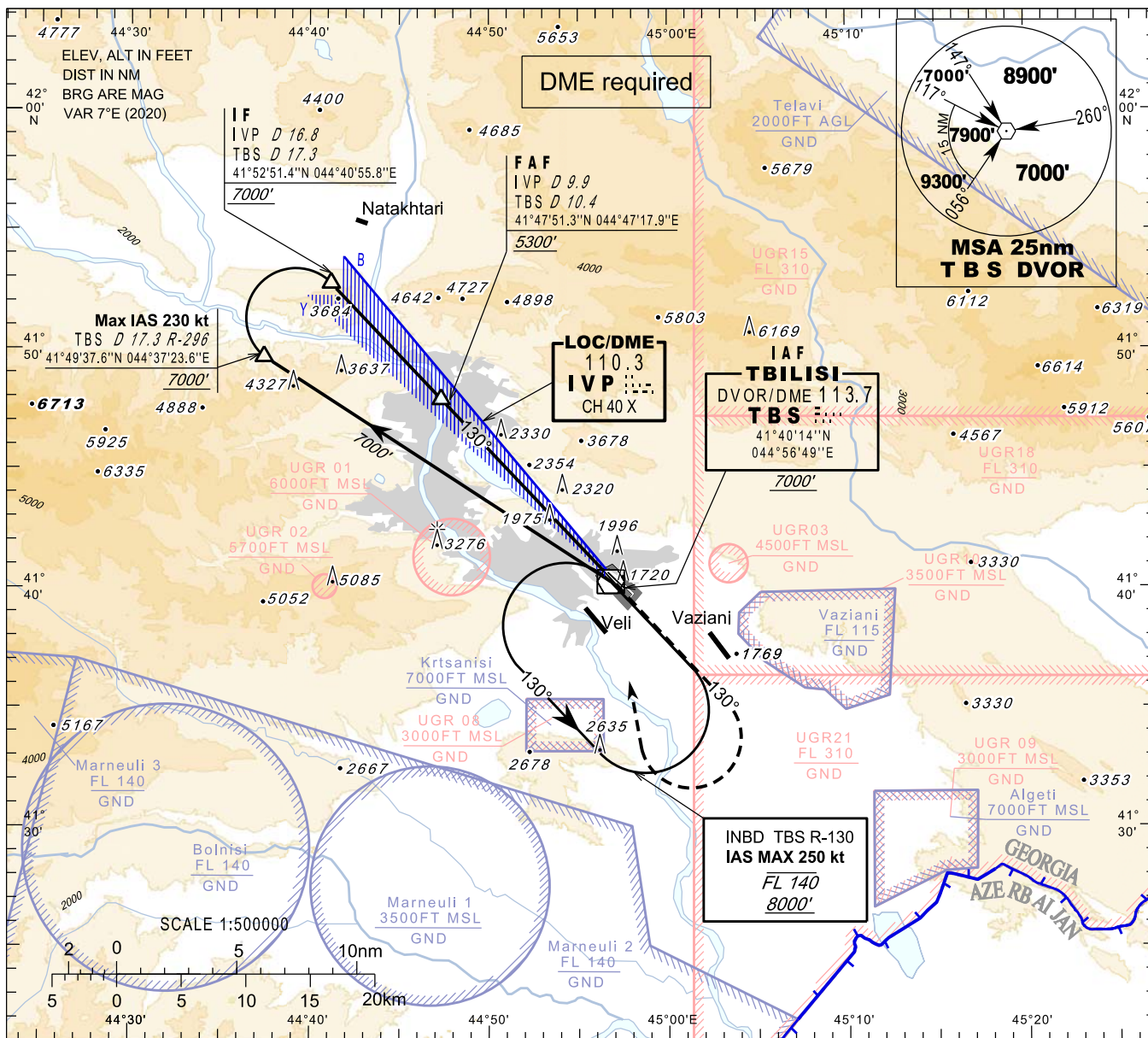
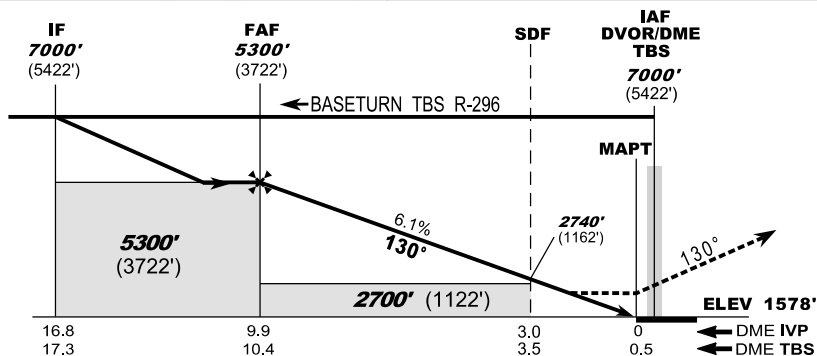
DANQI transition										
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification	
	Identifier	Flyover	Coordinates				Level	Speed kt		
IF	DANQI	-	41°56'11.3"N 044°36'40.5"E	-	-	-	+A7000	-230	RNAV1	
TF	NAMME	-	41°53'08.8"N 044°40'33.6"E	129° (135.8°)	4.2	-	+A7000	-210	RNAV1	

UDVIN transition										
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification	
	Identifier	Flyover	Coordinates				Level	Speed kt		
IF	UDVIN	-	41°57'17.3"N 044°46'22.9"E	-	-	-	+A7000	-230	RNAV1	
TF	NAMME	-	41°53'08.8"N 044°40'33.6"E	219° (226.2°)	6	-	+A7000	-210	RNAV1	

RNAV Holding Coding Table								
Fix Identifier	Inbound course °MAG(°True)	Time (min)	Turn Direction	Min alt.	Max alt.	Speed limit (kt)	Mag. VAR	Navigation Specification
DANQI	96° (103.0°)	1.0	R	A9000	FL140	230	-7°	RNAV1

**INSTRUMENT
APPROACH
CHART - ICAO**HEIGHTS RELATED TO
THR RWY 13R - ELEV 1578'

TRANSITION ALTITUDE 11000'

APP 134.600
TWR 119.000 (Primary)
128.000 (Secondary)
ATIS 132.800**TBILISI/Tbilisi (UGTB)****LOC y
RWY 13R****MISSED APPROACH****Normal:**Climb straight ahead to **7000'**, when passing **4500'** turn right to **TBS**, then as directed by **ATC**.**TBS DVOR Unserviceable:**Climb straight ahead to **7000'**, after passing **4500'** expect vectoring.**Radio Communication Failure:**Climb straight ahead to **8000'**, when passing **4500'** turn right to **TBS**, hold as published, when ready make new approach.

Straight in Approach	A B C D
OCA(H)	2280 (700)

Timing is not authorised for defining the MAPT

DME IVP NM	9	8	7	6	5	4	3	2	1
DME TBS NM	9.5	8.5	7.5	6.5	5.5	4.5	3.5	2.5	1.5
ALT (HGT) ft	4966 (3388)	4595 (3017)	4224 (2646)	3853 (2275)	3482 (1904)	3111 (1533)	2740 (1162)	2369 (791)	1998 (420)

RNAV Transition Coding Tables - RWY 13R (LOCz)

LATVA transition									
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
IF	LATVA	-	41°49'00.0"N 044°34'45.0"E	-	-	-	+A8000	-230	RNAV1
TF	NAMME	-	41°53'08.8"N 044°40'33.6"E	40° (46.6°)	6	-	+A7000	-210	RNAV1

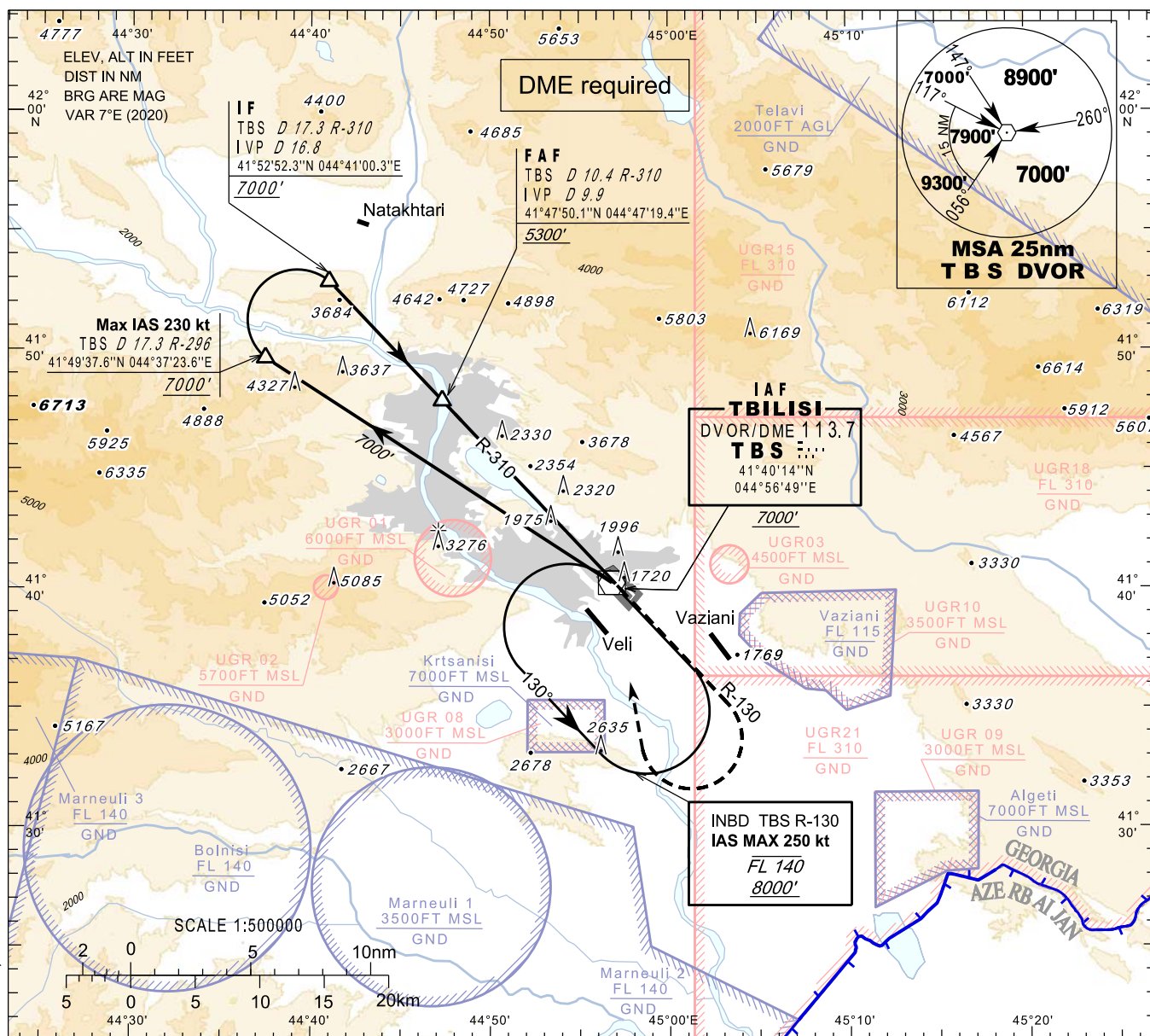
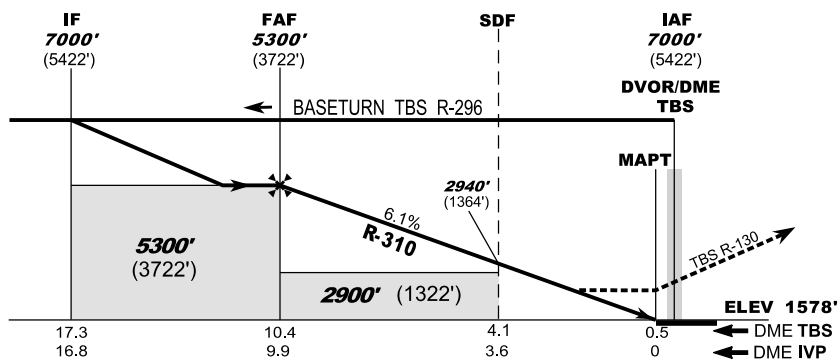
DANQI transition									
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
IF	DANQI	-	41°56'11.3"N 044°36'40.5"E	-	-	-	+A7000	-230	RNAV1
TF	NAMME	-	41°53'08.8"N 044°40'33.6"E	129° (135.8°)	4.2	-	+A7000	-210	RNAV1

UDVIN transition									
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
IF	UDVIN	-	41°57'17.3"N 044°46'22.9"E	-	-	-	+A7000	-230	RNAV1
TF	NAMME	-	41°53'08.8"N 044°40'33.6"E	219° (226.2°)	6	-	+A7000	-210	RNAV1

RNAV Holding Coding Table								
Fix Identifier	Inbound course °MAG(°True)	Time (min)	Turn Direction	Min alt.	Max alt.	Speed limit (kt)	Mag. VAR	Navigation Specification
DANQI	96° (103.0°)	1.0	R	A9000	FL140	230	-7°	RNAV1

**INSTRUMENT
APPROACH
CHART - ICAO**HEIGHTS RELATED TO
THR RWY 13R - ELEV 1578'

TRANSITION ALTITUDE 11000'

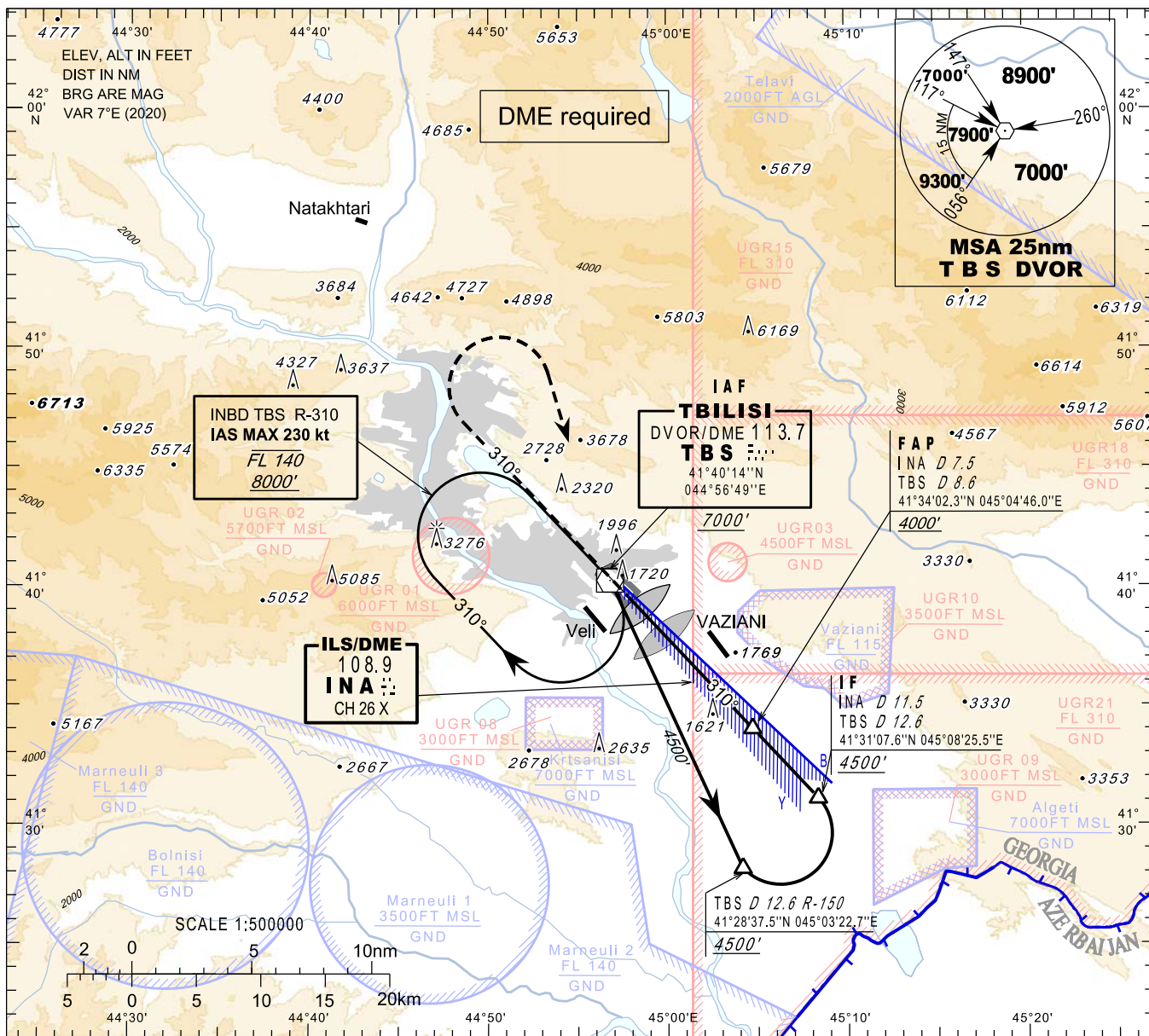
APP 134.600
TWR 119.000 (Primary)
128.000 (Secondary)
ATIS 132.800**TBILISI/Tbilisi (UGTB)****VOR
RWY 13R****MISSED APPROACH****Normal:**Climb on **R-130 TBS** to 7000', when passing 4500' turn right to **TBS**. Then as directed by **ATC**.**Radio Communication Failure:**Climb on **R-130 TBS** to 8000', when passing 4500' turn right to **TBS** and hold as published, when ready make new approach.

Timing is not authorised for defining the MAPT

Straight-in Approach	A	B	C	D
OCA(H)	2580 (1000)			
DME TBS NM	10	9	8	7
DME IVP NM	9.5	8.5	7.5	6.5
ALT (HGT) ft	5142 (3564)	4771 (3193)	4400 (2822)	4029 (2451)

**INSTRUMENT
APPROACH
CHART - ICAO**HEIGHTS RELATED TO
THR RWY 31L - ELEV 1513'

TRANSITION ALTITUDE 11000'

APP 134.600
TWR 119.000 (Primary)
128.000 (Secondary)
ATIS 132.800**TBILISI/Tbilisi (UGTB)****ILS y
RWY 31L****MISSED APPROACH****Normal:**Climb straight ahead to **7000'**, when passing **6000'** turn right to **TBS**, then as directed by **ATC**.**TBS DVOR Unserviceable:**Climb straight ahead to **7000'**, when passing **6000'** turn right heading **170°**, expect vectoring.**Radio Communication Failure:**Climb straight ahead to **8000'**, when passing **6000'** turn right to **TBS**, hold as published, when ready make new approach.

ILS RDH 54'

Straight in Approach

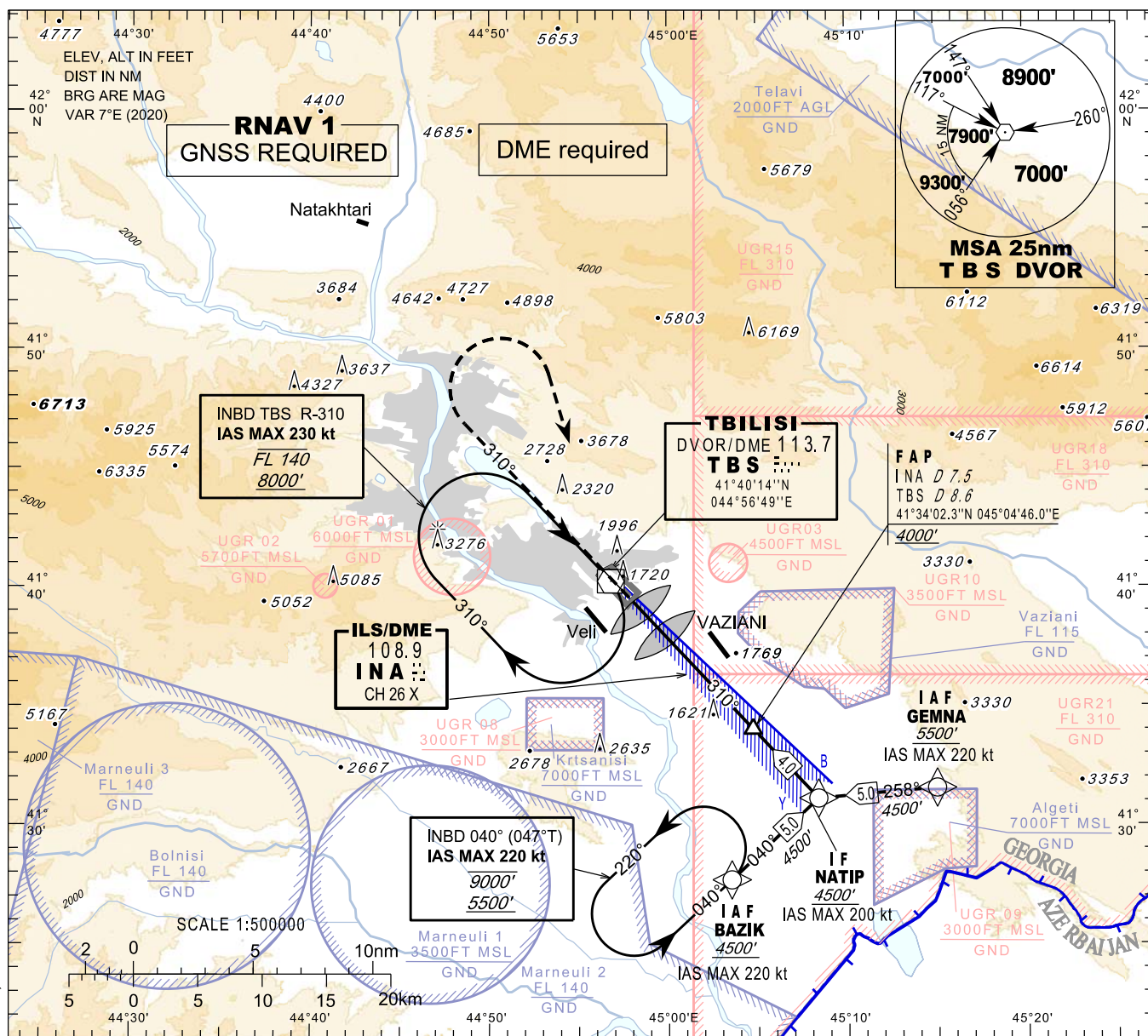
Straight in Approach										
Missed APCH climb gradient	OCA(H)									
	A	B	C	D						
2.5%	2376 (863)	2394 (881)	2403 (890)		ELEV 1513'	0	0.6	2.1	7.5	11.5
4.0%	1703 (190)	1713 (200)	1723 (210)		DME INA ➡	1.1	1.7	3.2	8.6	12.6
DME INA NM				7	6	5	4	3	2	1
DME TBS NM				8.1	7.1	6.1	5.1	4.1	3.1	2.1
ALT (HGT) ft				3839 (2326)	3510 (1997)	3181 (1668)	2855 (1342)	2530 (1017)	2208 (695)	1886 (373)

HEIGHTS RELATED TO
THR RWY 31L - ELEV 1513'

TRANSITION ALTITUDE 11000'

APP	134.600
TWR	119.000 (Primary)
	128.000 (Secondary)
ATIS	132.800

**ILS z
RWY 31L**

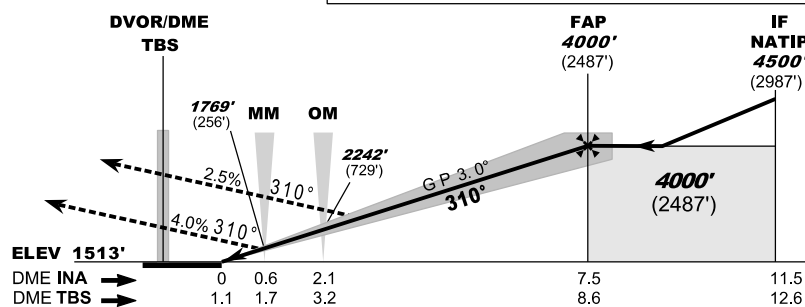


Climb straight ahead to **8000'**, when passing **6000'** turn right to **TBS**, hold as published, when ready make new approach (ILS y or LOC y or VOR).

ILS RDH 54'

Straight in Approach			
Missed APCH climb gradient	OCA(H)		
	A B	C	D
2.5%	2376 (863)	2394 (881)	2403 (890)
4.0%	1703 (190)	1713 (200)	1723 (210)
DME INA NM			7
DME TBS NM			8.1
ALT (HGT) ft			3839 (2326)

1. **DO NOT CONFUSE** TBILISI/Tbilisi airport with VAZIANI military aerodrome located 4 nm south-east of TBILISI/Tbilisi airport.
2. Possibility of **WIND SHEAR** and **TURBULENCE** on final (including short final) should be considered during strong winds due to local topography.



Changes: New procedures, MSA, Transition ALT, MAG VAR, THR ELEV

RNAV Transition Coding Tables - RWY 31L (ILS)

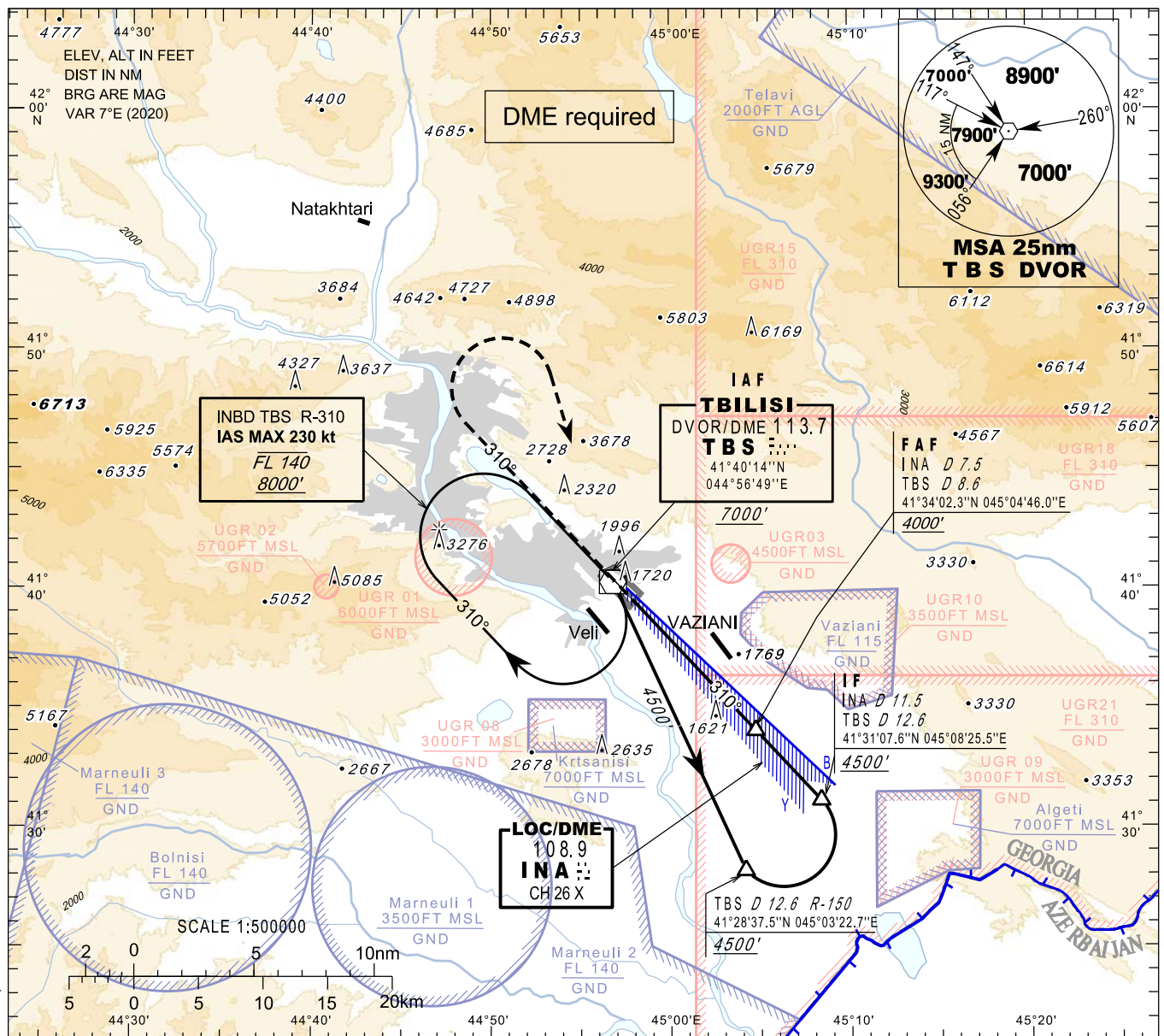
BAZIK transition										
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification	
	Identifier	Flyover	Coordinates				Level	Speed kt		
IF	BAZIK	-	41°27'41.5"N 045°03'35.1"E	-	-	-	+A4500	-220	RNAV1	
TF	NATIP	-	41°31'07.6"N 045°08'25.5"E	40° (46.5°)	5	-	+A4500	-200	RNAV1	

GEMNA transition										
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification	
	Identifier	Flyover	Coordinates				Level	Speed kt		
IF	GEMNA	-	41°31'34.7"N 045°15'03.4"E	-	-	-	+A5500	-220	RNAV1	
TF	NATIP	-	41°31'07.6"N 045°08'25.5"E	258° (264.9°)	5	-	+A4500	-200	RNAV1	

RNAV Holding Coding Table								
Fix Identifier	Inbound course °MAG(°True)	Time (min)	Turn Direction	Min alt.	Max alt.	Speed limit (kt)	Mag. VAR	Navigation Specification
BAZIK	40° (47.0°)	1.0	L	A5500	A9000	220	-7°	RNAV1

**INSTRUMENT
APPROACH
CHART - ICAO**HEIGHTS RELATED TO
THR RWY 31L - ELEV 1513'

TRANSITION ALTITUDE 11000'

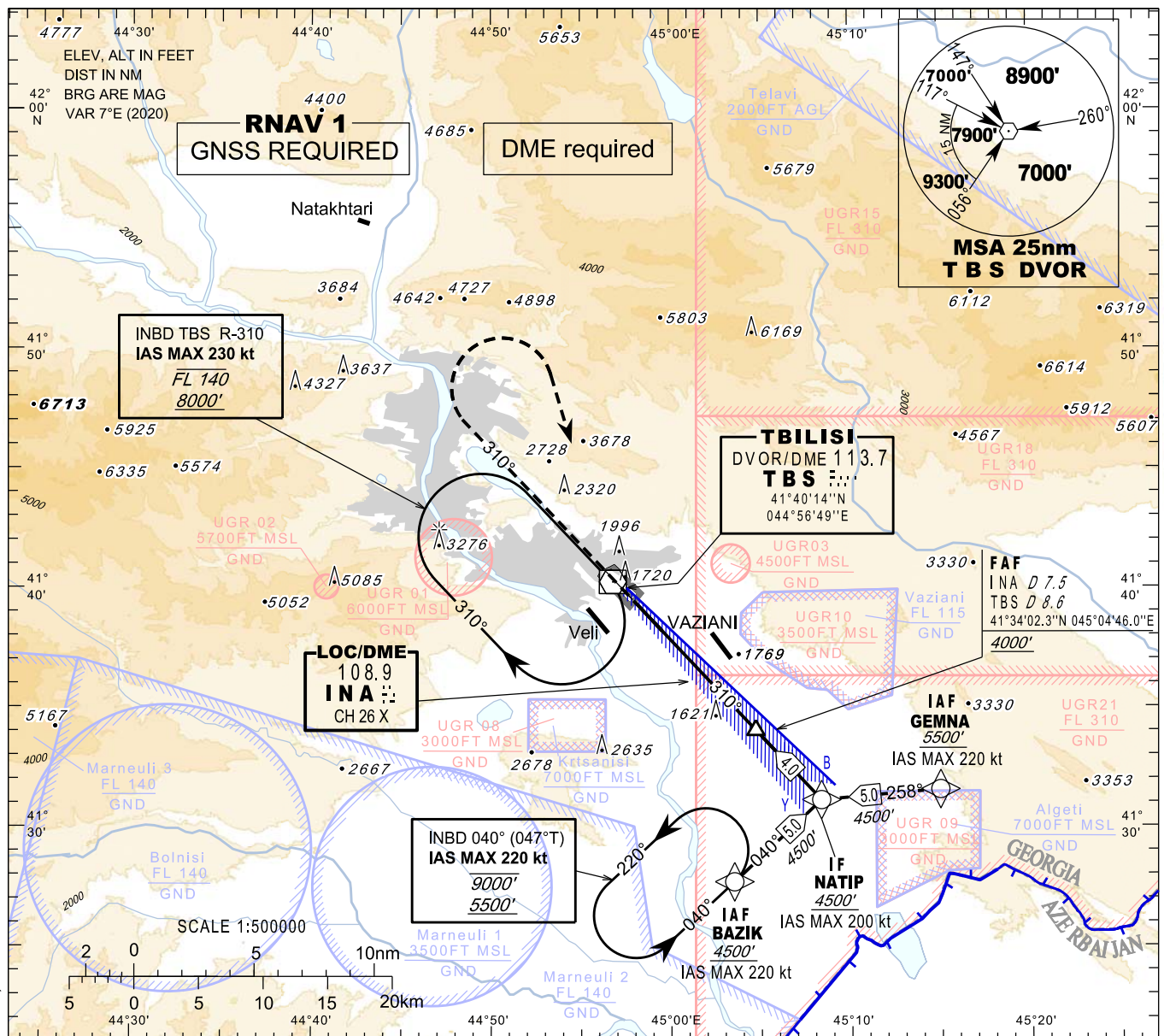
APP 134.600
TWR 119.000 (Primary)
128.000 (Secondary)
ATIS 132.800**TBILISI/Tbilisi (UGTB)****LOC y
RWY 31L****MISSED APPROACH****Normal:**Climb straight ahead to **7000'**, when passing **6000'** turn right to **TBS**, then as directed by **ATC**.**TBS DVOR Unserviceable:**Climb straight ahead to **7000'**, when passing **6000'** turn right heading **170**, expect vectoring.**Radio Communication Failure:**Climb straight ahead to **8000'**, when passing **6000'** turn right to **TBS**, hold as published, when ready make new approach.Timing is not authorised
for defining the MAPT

Straight in Approach				
Misssed APCH	OCA(H)			
climb gradient	A	B	C	D
2.5%	2550 (1030)			
4.0%	1910 (390)			

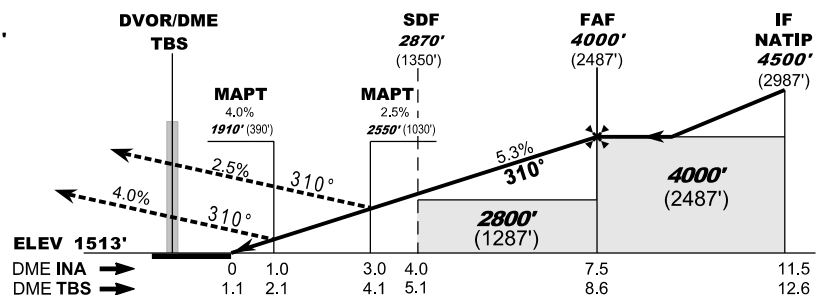
DME INA NM	7	6	5	4	3	2	1
DME TBS NM	8.1	7.1	6.1	5.1	4.1	3.1	2.1
ALT (HGT) ft	3837 (2324)	3512 (1999)	3187 (1674)	2862 (1349)	2537 (1024)	2212 (699)	1887 (374)

**INSTRUMENT
APPROACH
CHART - ICAO**HEIGHTS RELATED TO
THR RWY 31L - ELEV 1513'

TRANSITION ALTITUDE 11000'

APP 134.600
TWR 119.000 (Primary)
128.000 (Secondary)
ATIS 132.800**TBILISI/Tbilisi (UGTB)****LOC z
RWY 31L****MISSED APPROACH****Normal:**Climb straight ahead to **7000'**, when passing **6000'** turn right to **TBS**, then as directed by **ATC**.**TBS DVOR Unserviceable:**Climb straight ahead to **7000'**, when passing **6000'** turn right heading **170°**, expect vectoring.**Radio Communication Failure:**Climb straight ahead to **8000'**, when passing **6000'** turn right to **TBS**, hold as published, when ready make new approach (ILS y or LOC y or VOR).Timing is not authorised
for defining the MAPT**WARNING:**

1. **DO NOT CONFUSE** Tbilisi airport with VAZIANI military aerodrome located 4 nm south-east of TBILISI/Tbilisi airport.
2. Possibility of **WIND SHEAR** and **TURBULENCE** on final (including short final) should be considered during strong winds due to local topography.



Straight in Approach	
Missed APCH	OCA(H)
climb gradient	A B C D
2.5%	2550 (1030)
4.0%	1910 (390)

DME INA NM	7	6	5	4	3	2	1
DME TBS NM	8.1	7.1	6.1	5.1	4.1	3.1	2.1
ALT (HGT) ft	3837 (2324)	3512 (1999)	3187 (1674)	2862 (1349)	2537 (1024)	2212 (699)	1887 (374)

RNAV Transition Coding Tables - RWY 31L (LOCz)

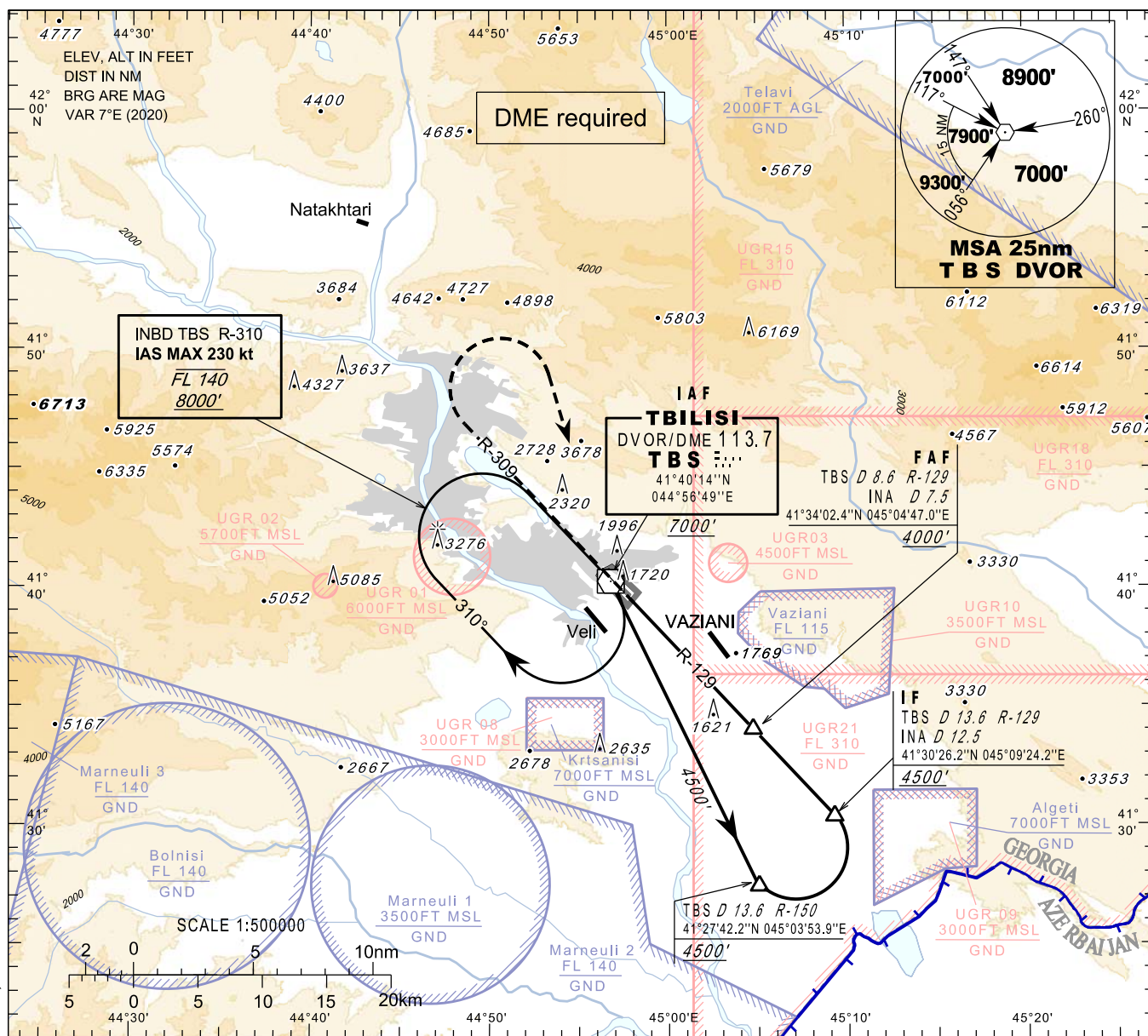
BAZIK transition										
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification	
	Identifier	Flyover	Coordinates				Level	Speed kt		
IF	BAZIK	-	41°27'41.5"N 045°03'35.1"E	-	-	-	+A4500	-220	RNAV1	
TF	NATIP	-	41°31'07.6"N 045°08'25.5"E	40° (46.5°)	5	-	+A4500	-200	RNAV1	

GEMNA transition										
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification	
	Identifier	Flyover	Coordinates				Level	Speed kt		
IF	GEMNA	-	41°31'34.7"N 045°15'03.4"E	-	-	-	+A5500	-220	RNAV1	
TF	NATIP	-	41°31'07.6"N 045°08'25.5"E	258° (264.9°)	5	-	+A4500	-200	RNAV1	

RNAV Holding Coding Table								
Fix Identifier	Inbound course °MAG(°True)	Time (min)	Turn Direction	Min alt.	Max alt.	Speed limit (kt)	Mag. VAR	Navigation Specification
BAZIK	40° (47.0°)	1.0	L	A5500	A9000	220	-7°	RNAV1

**INSTRUMENT
APPROACH
CHART - ICAO**HEIGHTS RELATED TO
THR RWY 31L - ELEV 1513'

TRANSITION ALTITUDE 11000'

APP 134.600
TWR 119.000 (Primary)
128.000 (Secondary)
ATIS 132.800**TBILISI/Tbilisi (UGTB)****VOR
RWY 31L**

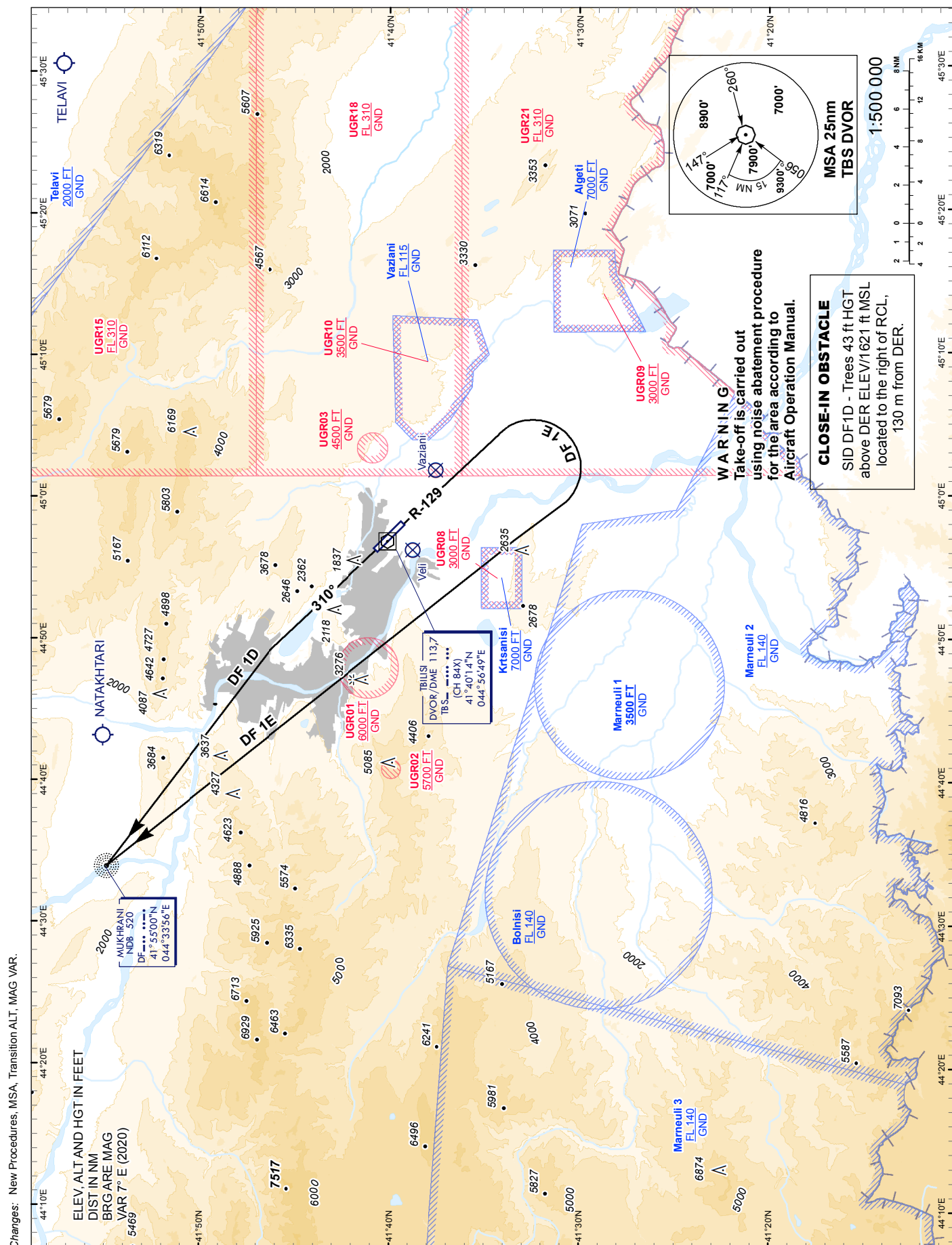
Changes: New procedures, MSA, Transition ALT, MAG VAR, THR ELEV

TRANSITION ALTITUDE
11000'

APP 134.600
TWR 119.000 (Primary)
128.000 (Secondary)

TBILISI/Tbilisi (UGTB)
RWY 13R/31L

DF1D DF1E



STANDARD DEPARTURE ROUTES - INSTRUMENT - RWY 13R / 31L

RWY	SID	ROUTING AND ALTITUDES	MIN.CLIMB GRAD.
31L	DF 1D	DELTA FOXTROT ONE DELTA Climb on heading 310°, when passing 5000 FT proceed direct to DF. Cross DF at or above 9000 FT.	5.4% to 9000FT
13R	DF 1E	DELTA FOXTROT ONE ECHO Climb on R-129 TBS , when passing 4000 FT turn right direct to DF.	NIL

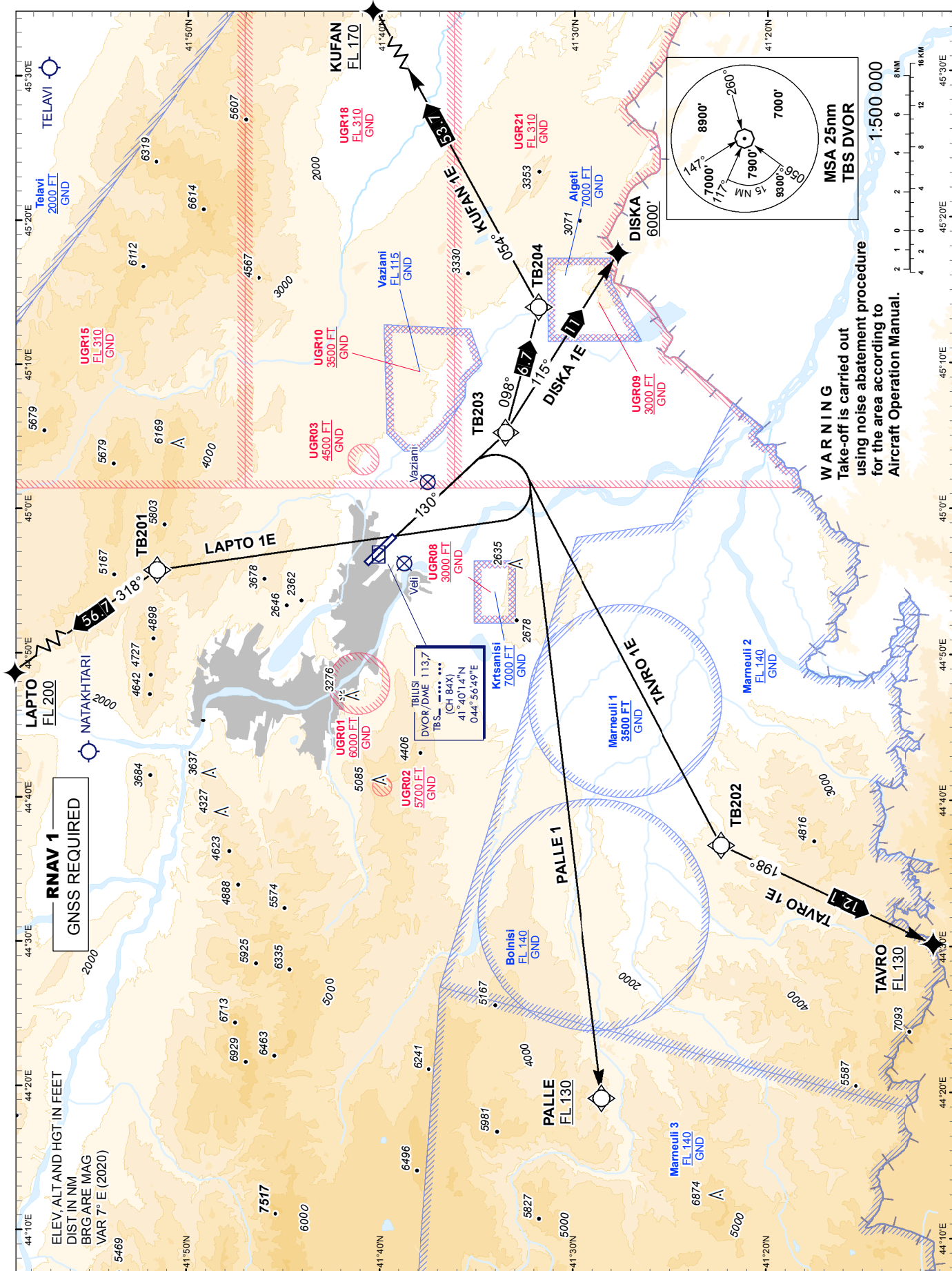
NOTE :

- When cleared level requires an a/c to level-off on SID, ATC Surveillance Minimum Altitudes will be respected by controller.
- As an alternative to any SID, controller may instruct to "CONTINUE RUNWAY HEADING" or "CLIMB STRAIGHT AHEAD".
In such cases climb gradient of 5.4 % or greater shall be maintained up to 7000 FT for departures from RWY 31L.
Climb gradient of 3.9 % or greater shall be maintained up to 4500 FT for departures from RWY 13R.
Expect direct routing or vectoring.

TRANSITION ALTITUDE
11000'

APP	134.600
TWR	119.000 (Primary)
	128.000 (Secondary)

PALLE1 LAPTO1E KUFAN1E
DISKA1E TAVRO1E



Changes: New Procedures, MSA, Transition ALT, MAG VAR.

STANDARD DEPARTURE ROUTES - RNAV (GNSS) INSTRUMENT - RWY13R

SID	ROUTING AND ALTITUDES			MIN.CLIMB GRAD.	Comment				
PALLE 1	PALLE ONE Climb on course 130°, when passing 4000 FT turn right direct to PALLE. Cross PALLE at or above FL130.			4.4% to FL130	- From PALLE direct routes (en-route DCTs) are available to NOLGA, TETRO and BARUS. - For RWY 31L expect ZAGOT 1 departure.				
RNAV 1 SID Coding Table of PALLE 1									
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
CA	-	-	-	130° (136.6°)	-	-	A4000	-	RNAV1
DF	PALLE	-	41°28'35.0"N 044°19'25.0"E	-	-	R	+FL130	-	RNAV1

SID	ROUTING AND ALTITUDES			MIN.CLIMB GRAD.	Comment				
LAPTO 1E	LAPTO ONE ECHO			4% to FL140	NIL				
	Climb on course 130°, when passing 4000 FT turn right direct to TB201, track to LAPTO. Cross LAPTO at or above FL200.								
RNAV 1 SID Coding Table of LAPTO 1E									
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
CA	-	-	-	130° (136.6°)	-	-	A4000	-	RNAV1
DF	TB201	-	41°51'43.0"N 044°55'44.0"E	-	-	R	-	-	RNAV1
TF	LAPTO	-	42°37'53.0"N 044°11'19.0"E	318° (324.7°)	56.7	-	+FL200	-	RNAV1

SID	ROUTING AND ALTITUDES				MIN.CLIMB GRAD.		Comment			
KUFAN 1E	KUFAN ONE ECHO				4% to FL150		NIL			
	To TB203 on course 130°, to TB204, to KUFAN. Cross KUFAN at or above FL170.									
RNAV 1 SID Coding Table of KUFAN 1E										
Path Terminator	Waypoint				Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates					Level	Speed kt	
CF	TB203	-	41°33'40.0"N 045°05'13.0"E		130° (136.6°)	-	-	-	-	RNAV1
TF	TB204	-	41°31'57.0"N 045°13'51.0"E		098° (104.8°)	6.7	-	-	-	RNAV1
TF	KUFAN	-	41°57'18.0"N 046°17'08.0"E		054° (61.3°)	53.7	-	+FL170	-	RNAV1

SID	ROUTING AND ALTITUDES				MIN.CLIMB GRAD.		Comment			
DISKA 1E	DISKA ONE ECHO To TB203 on course 130°, to DISKA. Cross DISKA at or above 6000FT.				3.9% to 6000 FT		NIL			
	RNAV 1 SID Coding Table of DISKA 1E									
Path Terminator	Waypoint				Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates					Level	Speed kt	
CF	TB203	-	41°33'40.0"N 045°05'13.0"E		130° (136.6°)	-	-	-	-	RNAV1
TF	DISKA	-	41°27'50.0"N 045°17'34.0"E		115° (122.1°)	11	-	+A6000	-	RNAV1

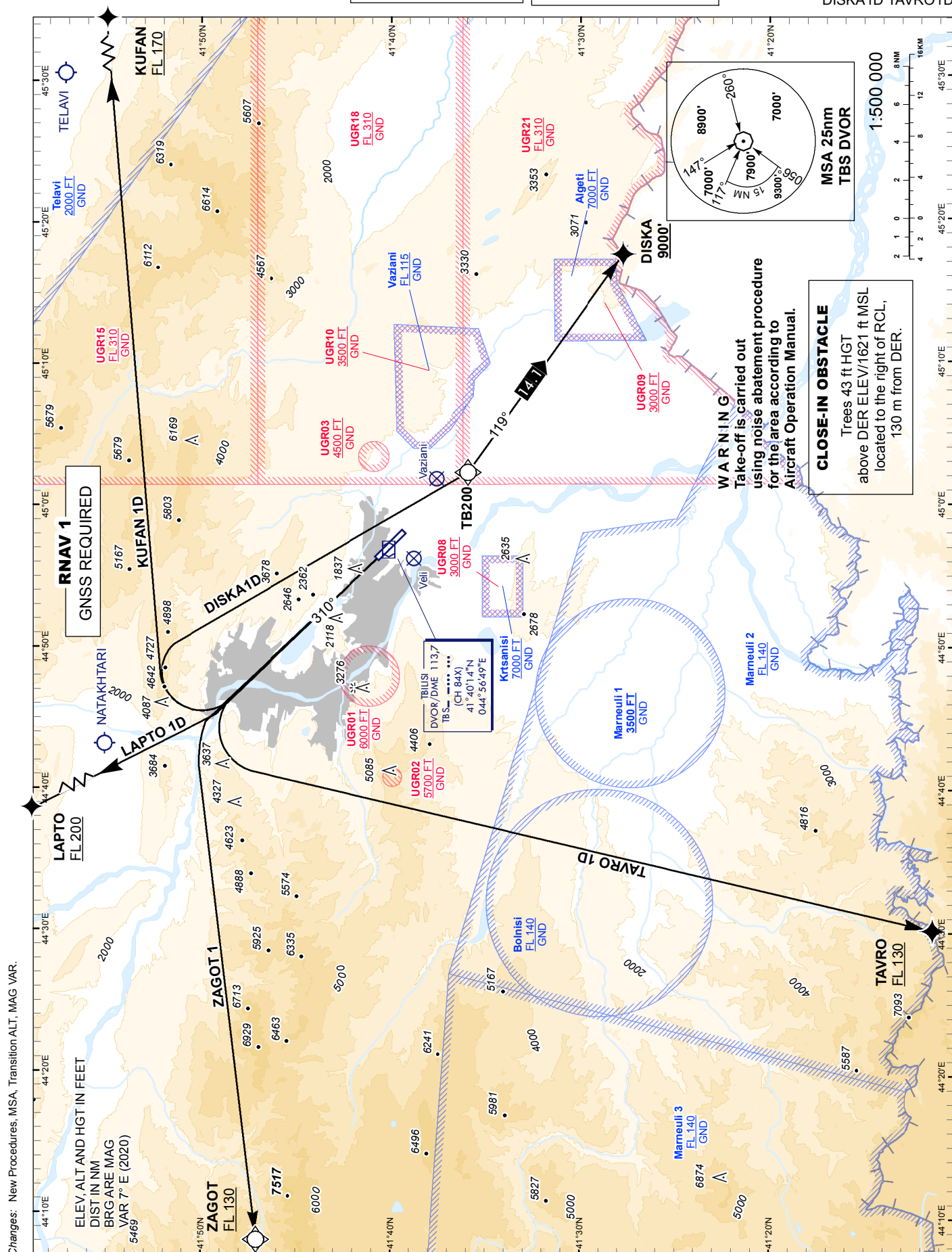
For continuation see AD 2.UGTB-SID-RNAV-13R-5

STANDARD DEPARTURE ROUTES - RNAV (GNSS) INSTRUMENT - RWY 13R (Continuation)

SID	ROUTING AND ALTITUDES			MIN.CLIMB GRAD.	Comment				
TAVRO 1E	TAVRO ONE ECHO			4.3% to FL130	NIL				
	Climb on course 130°, when passing 4000 FT turn right direct to TB202, track to TAVRO. Cross TAVRO at or above FL130.								
RNAV 1 SID Coding Table of TAVRO 1E									
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
CA	-	-	-	130° (136.6°)	-	-	A4000	-	RNAV1
DF	TB202	-	41°22'29.0"N 044°36'51.0"E	-	-	R	-	-	RNAV1
TF	TAVRO	-	41°11'29.0"N 044°30'09.0"E	198° (204.7°)	12.1	-	+FL130	-	RNAV1

NOTE :

- When cleared level requires an a/c to level-off on SID, ATC Surveillance Minimum Altitudes will be respected by controller.
 - As an alternative to any SID, controller may instruct to "CONTINUE RUNWAY HEADING" or "CLIMB STRAIGHT AHEAD".
- In such cases climb gradient of 3.9 % or greater shall be maintained up to 4500 FT and direct routing or vectoring should be expected.

**STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO**TRANSITION ALTITUDE
11000'APP 134.600
TWR 119.000 (Primary)
128.000 (Secondary)**TBILISI/Tbilisi (UGTB)****RNAV RWY 31L**ZAGOT1 LAPTO1D KUFAN1D
DISKA1D TAVRO1D

STANDARD DEPARTURE ROUTES - RNAV (GNSS) INSTRUMENT - RWY31L

SID	ROUTING AND ALTITUDES			MIN.CLIMB GRAD.	Comment				
ZAGOT 1	ZAGOT ONE Climb on course 310°, when passing 7000 FT turn left direct to ZAGOT. Cross ZAGOT at or above FL130.			5.4% to 7000 FT. 4% from 7000 FT to FL130	- From ZAGOT direct routes (en-route DCTs) are available to NOLGA, TETRO and BARUS. - For RWY 13R expect PALLE 1 departure.				
	RNAV 1 SID Coding Table of ZAGOT1								
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
CA	-	-	-	310° (316.5°)	-	-	A7000	-	RNAV1
DF	ZAGOT	-	41°47'06.0"N 044°08'11.0"E	-	-	L	+FL130	-	RNAV1

SID	ROUTING AND ALTITUDES			MIN.CLIMB GRAD.			Comment		
LAPTO 1D	LAPTO ONE DELTA			5.4% to 6000 FT.			NIL		
	Climb on course 310°, when passing 6000 FT turn right direct to LAPTO. Cross LAPTO at or above FL200.			4.4% from 6000 FT to FL200					
RNAV 1 SID Coding Table of LAPTO 1D									
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
CA	-	-	-	310° (316.5°)	-	-	A6000	-	RNAV1
DF	LAPTO	-	42°37'53.0"N 044°11'19.0"E	-	-	R	+FL200	-	RNAV1

SID	ROUTING AND ALTITUDES			MIN.CLIMB GRAD.			Comment		
KUFAN 1D	KUFAN ONE DELTA			5.4% to 6500 FT			NIL		
	Climb on course 310°, when passing 6500 FT turn right direct to KUFAN. Cross KUFAN at or above FL170.								
RNAV 1 SID Coding Table of KUFAN 1D									
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
CA	-	-	-	310° (316.5°)	-	-	A6500	-	RNAV1
DF	KUFAN	-	41°57'18.0"N 046°17'08.0"E	-	-	R	+FL170	-	RNAV1

SID	ROUTING AND ALTITUDES			MIN.CLIMB GRAD.	Comment				
DISKA 1D	DISKA ONE DELTA			5.4% to 6500 FT	NIL				
	Climb on course 310°, when passing 6500 FT turn right direct to TB200, track to DISKA. Cross DISKA at or above 9000 FT								
RNAV 1 SID Coding Table of DISKA 1D									
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
CA	-	-	-	310° (316.5°)	-	-	A6500	-	RNAV1
DF	TB200	-	41°36'04.0"N 045°02'15.0"E	-	-	R	-	-	RNAV1
TF	DISKA	-	41°27'50.0"N 045°17'34.0"E	119° (125.5°)	14.1	-	+A9000	-	RNAV1

For continuation see AD 2.UGTB-SID-RNAV-31L-5

STANDARD DEPARTURE ROUTES - RNAV (GNSS) INSTRUMENT - RWY 31L (Continuation)

SID	ROUTING AND ALTITUDES			MIN.CLIMB GRAD.			Comment		
TAVRO 1D	TAVRO ONE DELTA			5.4% to 6000 FT.			NIL		
	Climb on course 310°, when passing 6000 FT turn left direct to TAVRO. Cross TAVRO at or above FL130.			3.9% from 6000 FT to 9000 FT					
RNAV 1 SID Coding Table of TAVRO 1D									
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
CA	-	-	-	310° (316.5°)	-	-	A6000	-	RNAV1
DF	TAVRO	-	41°11'29.0"N 044°30'09.0"E	-	-	L	+FL130	-	RNAV1

NOTE :

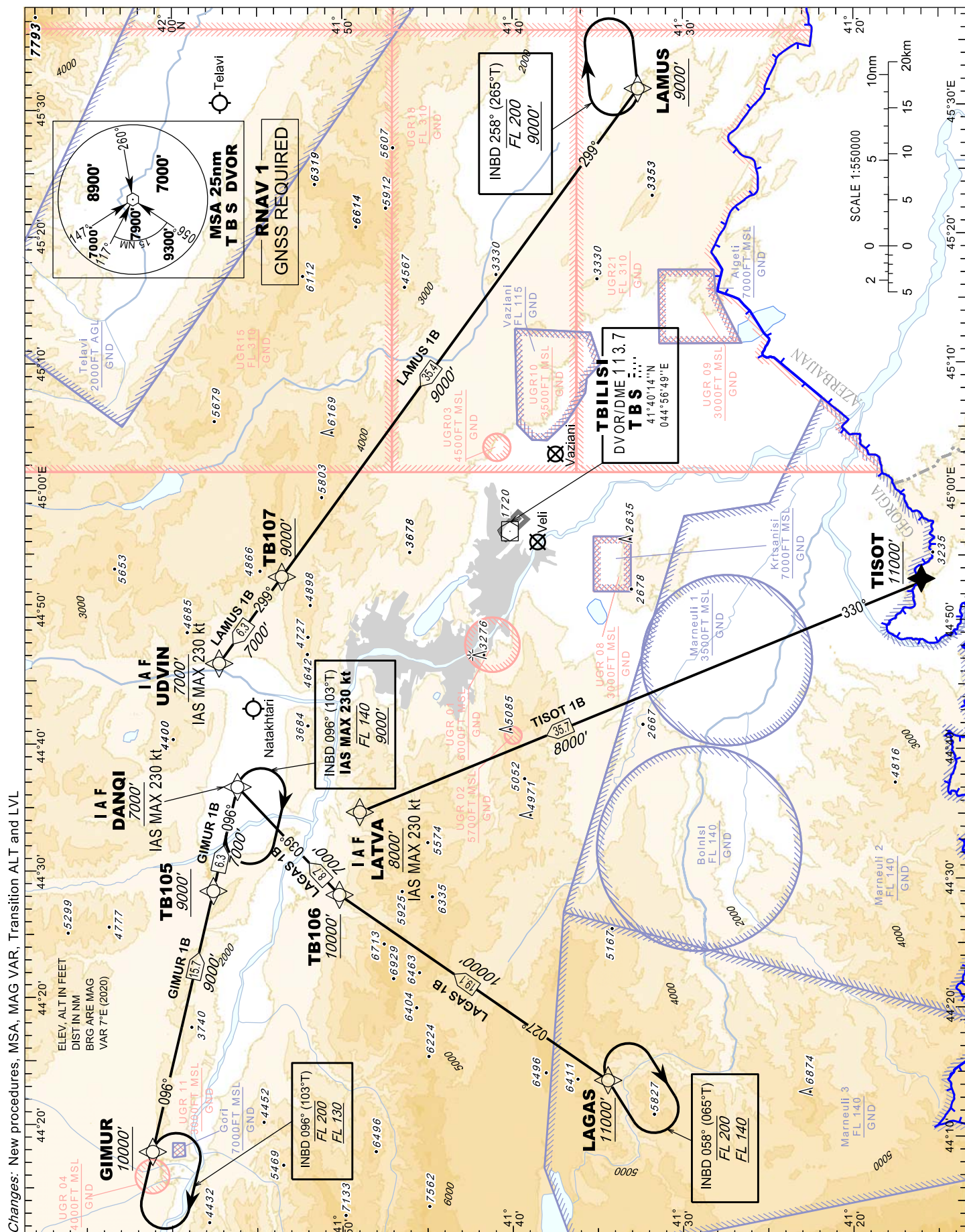
- When cleared level requires an a/c to level-off on SID, ATC Surveillance Minimum Altitudes will be respected by controller.
- As an alternative to any SID, controller may instruct to "CONTINUE RUNWAY HEADING" or "CLIMB STRAIGHT AHEAD".
In such cases climb gradient of 5.4 % or greater shall be maintained up to 7000 FT and direct routing or vectoring should be expected.

TBILISI/Tbilisi (UGTB)

APP	134.600
TWR	119.000 (Primary)
	128.000 (Secondary)
ATIS	132.800

RNAV RWY 13R

GIMUR 1B LAMUS 1B
TISOT 1B LAGAS 1B



STANDARD ARRIVAL ROUTES - RNAV (GNSS) INSTRUMENT - RWY 13R**RNAV 1 STAR Coding Table of GIMUR 1B**

Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
IF	GIMUR	-	42°01'00.0"N 044°07'56.0"E	-	-	-	+A10000	-	RNAV1
TF	TB105	-	41°57'34.0"N 044°28'29.0"E	96° (102.5°)	15.7	-	+A9000	-	RNAV1
TF	DANQI	-	41°56'11.3"N 044°36'40.5"E	96° (102.7°)	6.3	-	+A7000	-230	RNAV1

RNAV 1 STAR Coding Table of LAMUS 1B

Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
IF	LAMUS	-	41°32'40.0"N 045°31'24.0"E	-	-	-	+A9000	-	RNAV1
TF	TB107	-	41°53'37.0"N 044°53'11.0"E	299° (306.4°)	35.4	-	+A9000	-	RNAV1
TF	UDVIN	-	41°57'17.3"N 044°46'22.9"E	299° (305.9°)	6.3	-	+A7000	-230	RNAV1

RNAV 1 STAR Coding Table of TISOT 1B

Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
IF	TISOT	-	41°16'05.0"N 044°53'09.0"E	-	-	-	+A11000	-	RNAV1
TF	LATVA	-	41°49'00.0"N 044°34'45.0"E	330° (337.3°)	35.7	-	+A8000	-230	RNAV1

RNAV 1 STAR Coding Table of LAGAS 1B

Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
IF	LAGAS	-	41°34'19.0"N 044°13'53.0"E	-	-	-	+A11000	-	RNAV1
TF	TB106	-	41°50'10.0"N 044°28'15.0"E	27° (34.1°)	19.1	-	+A10000	-	RNAV1
TF	DANQI	-	41°56'11.3"N 044°36'40.5"E	39° (46.2°)	8.7	-	+A7000	-230	RNAV1

RNAV Holding Coding Tables

Fix Identifier	Inbound course °MAG(°True)	Time (min)	Turn Direction	Min alt.	Max alt.	Speed limit (kt)	Mag. VAR	Navigation Specification
GIMUR	96° (103.0°)	1.5*	R	FL130	FL200	280	-7°	RNAV1
LAGAS	58° (65.0°)	1.5*	R	FL140	FL200	280	-7°	RNAV1
LAMUS	258° (265.0°)	1.5*	R	A9000	FL200	280	-7°	RNAV1
DANQI	96° (103.0°)	1.0	R	A9000	FL140	230	-7°	RNAV1

* 1.0 min at or below FL140

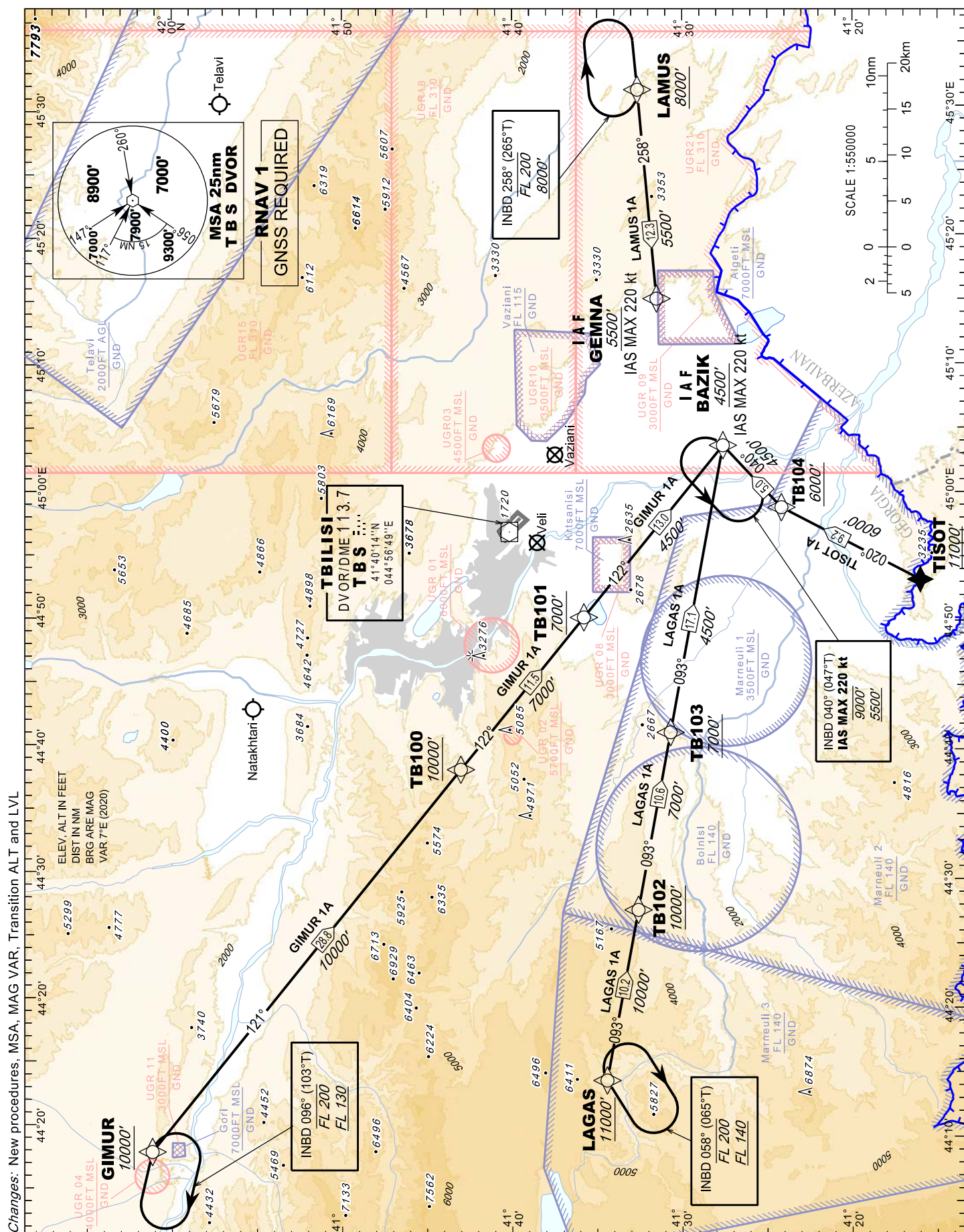
**STANDARD ARRIVAL CHART-
INSTRUMENT (STAR) - ICAO**

TRANSITION LEVEL FL 130
TRANSITION ALTITUDE 11000'

APP 134.600
TWR 119.000 (Primary)
ATIS 128.000 (Secondary)
132.800

TBILISI/Tbilisi (UGTB)**RNAV RWY 31L**

GIMUR 1A LAMUS 1A
TISOT 1A LAGAS 1A



STANDARD ARRIVAL ROUTES - RNAV (GNSS) INSTRUMENT - RWY 31L**RNAV 1 STAR Coding Table of GIMUR 1A**

Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
IF	GIMUR	-	42°01'00.0"N 044°07'56.0"E	-	-	-	+A10000	-	RNAV1
TF	TB100	-	41°43'03.0"N 044°38'09.0"E	121° (128.3°)	28.8	-	+A10000	-	RNAV1
TF	TB101	-	41°35'51.0"N 044°50'07.0"E	122° (128.7°)	11.5	-	+A7000	-	RNAV1
TF	BAZIK	-	41°27'41.5"N 045°03'35.1"E	122° (128.8°)	13	-	+A4500	-220	RNAV1

RNAV 1 STAR Coding Table of LAMUS 1A

Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
IF	LAMUS	-	41°32'40.0"N 045°31'24.0"E	-	-	-	+A8000	-	RNAV1
TF	GEMNA	-	41°31'34.7"N 045°15'03.4"E	258° (265.0°)	12.3	-	+A5500	-220	RNAV1

RNAV 1 STAR Coding Table of TISOT 1A

Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
IF	TISOT	-	41°16'05.0"N 044°53'09.0"E	-	-	-	+A11000	-	RNAV1
TF	TB104	-	41°24'15.0"N 044°58'45.0"E	20° (27.3°)	9.2	-	+A6000	-	RNAV1
TF	BAZIK	-	41°27'41.5"N 045°03'35.1"E	40° (46.6°)	5	-	+A4500	-220	RNAV1

RNAV 1 STAR Coding Table of LAGAS 1A

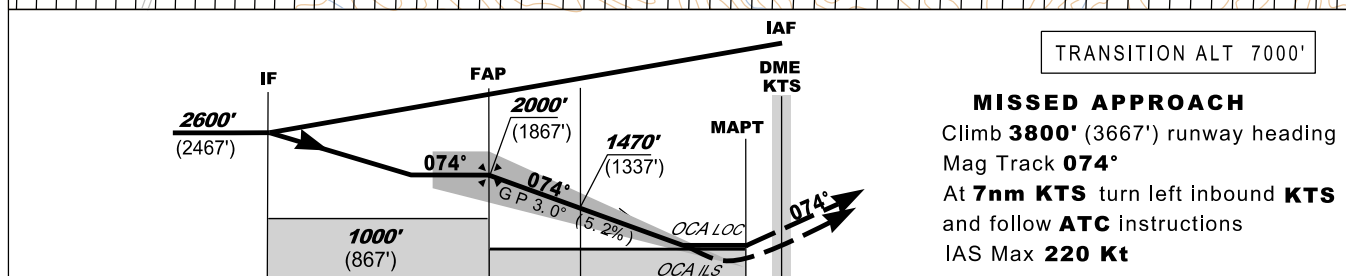
Path Terminator	Waypoint			Course/Track °MAG(°True)	DIST NM	Turn Direction	Constraints		Navigation Specification
	Identifier	Flyover	Coordinates				Level	Speed kt	
IF	LAGAS	-	41°34'19.0"N 044°13'53.0"E	-	-	-	+A11000	-	RNAV1
TF	TB102	-	41°32'34.0"N 044°27'15.0"E	93° (99.8°)	10.2	-	+A10000	-	RNAV1
TF	TB103	-	41°30'44.0"N 044°41'09.0"E	93° (99.9°)	10.6	-	+A7000	-	RNAV1
TF	BAZIK	-	41°27'41.5"N 045°03'35.1"E	93° (100.1°)	17.1	-	+A4500	-220	RNAV1

RNAV Holding Coding Tables

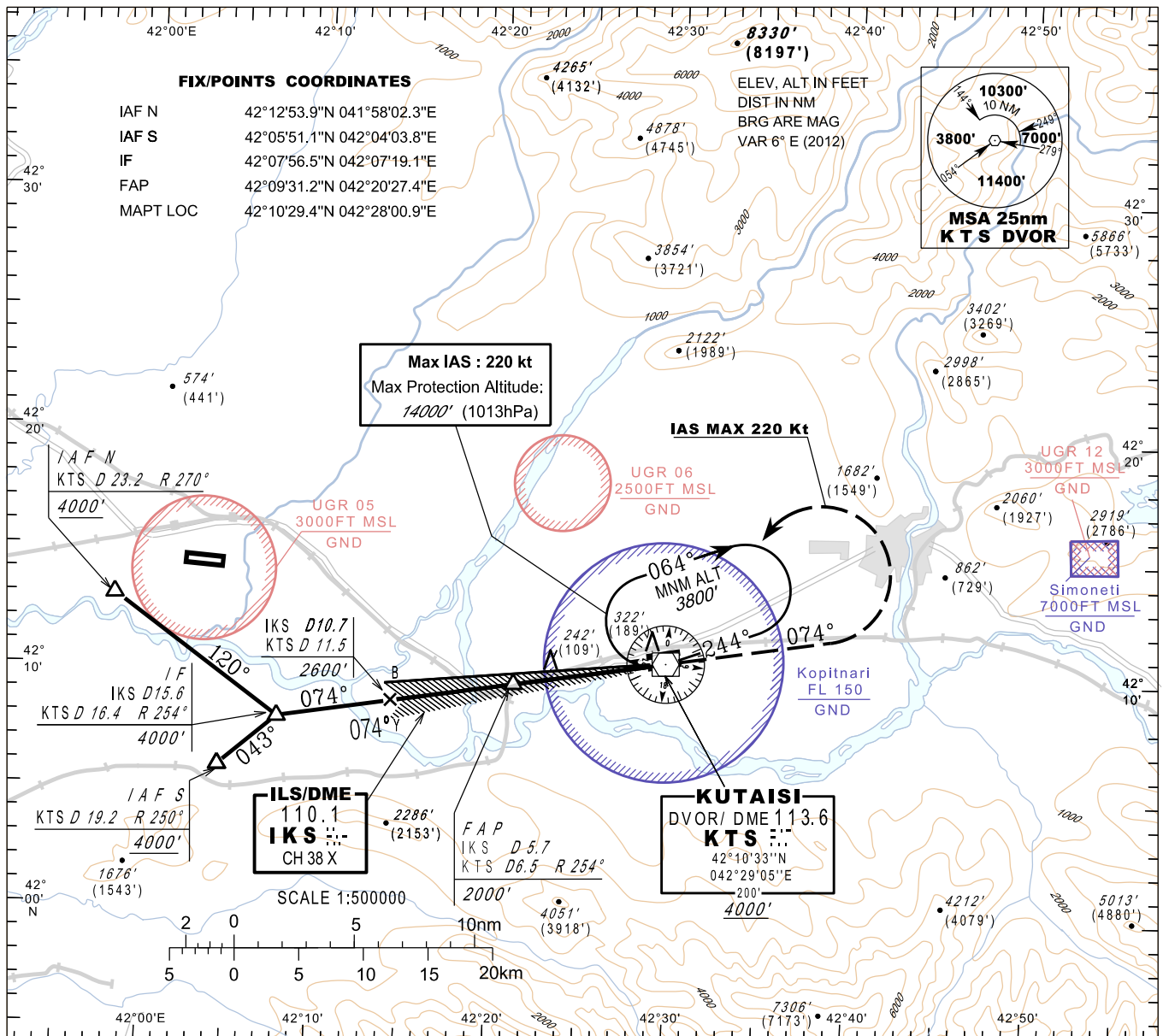
Fix Identifier	Inbound course M °MAG(°True)	Time (min)	Turn Direction	Min alt.	Max alt.	Speed limit (kt)	Mag. VAR	Navigation Specification
GIMUR	96° (103.0°)	1.5*	R	FL130	FL200	280	-7°	RNAV1
LAGAS	58° (65.0°)	1.5*	R	FL140	FL200	280	-7°	RNAV1
LAMUS	258° (265.0°)	1.5*	R	A8000	FL200	280	-7°	RNAV1
BAZIK	40° (47.0°)	1.0	L	A5500	A9000	220	-7°	RNAV1

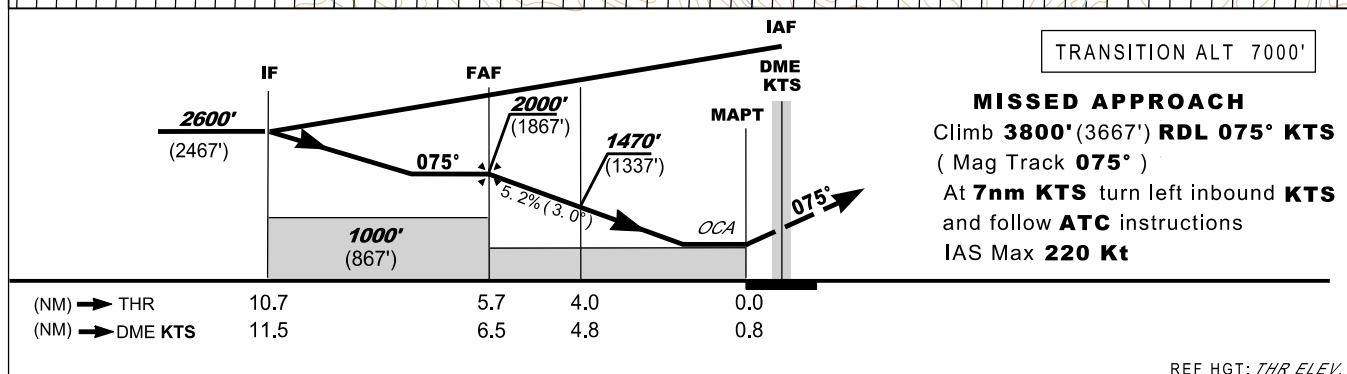
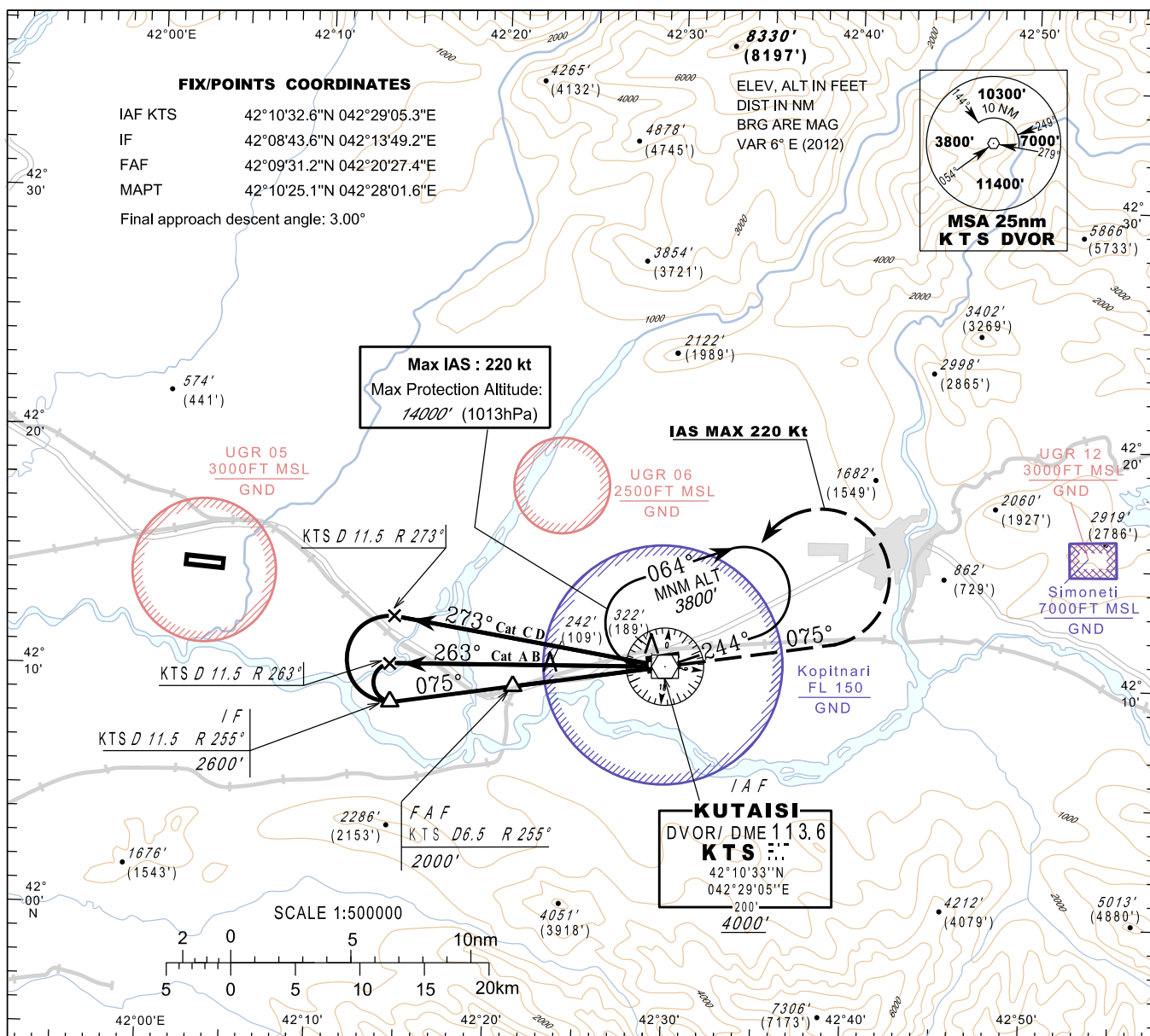
* 1.0 min at or below FL140

KUTAI/Kopitnari (UGKO)
ILS/DME or LOC y
RWY 07

REF HGT: *THR ELEV.*

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**INSTRUMENT
APPROACH
CHART - ICAO**AERODROME ELEV 160'
HEIGHTS RELATED TO
THR RWY 07 - ELEV 133'APP 127.1
TWR 125.5**KUTAISI/Kopitnari (UGKO)****ILS/DME or LOC z
RWY 07**

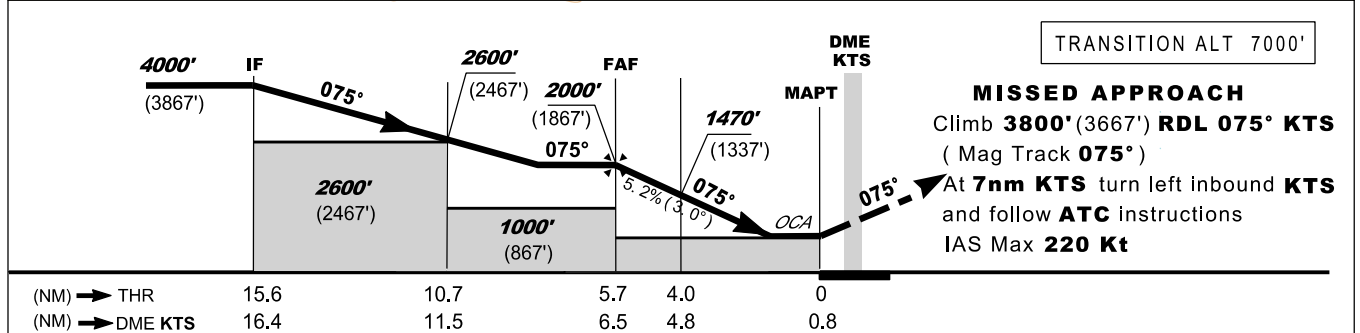
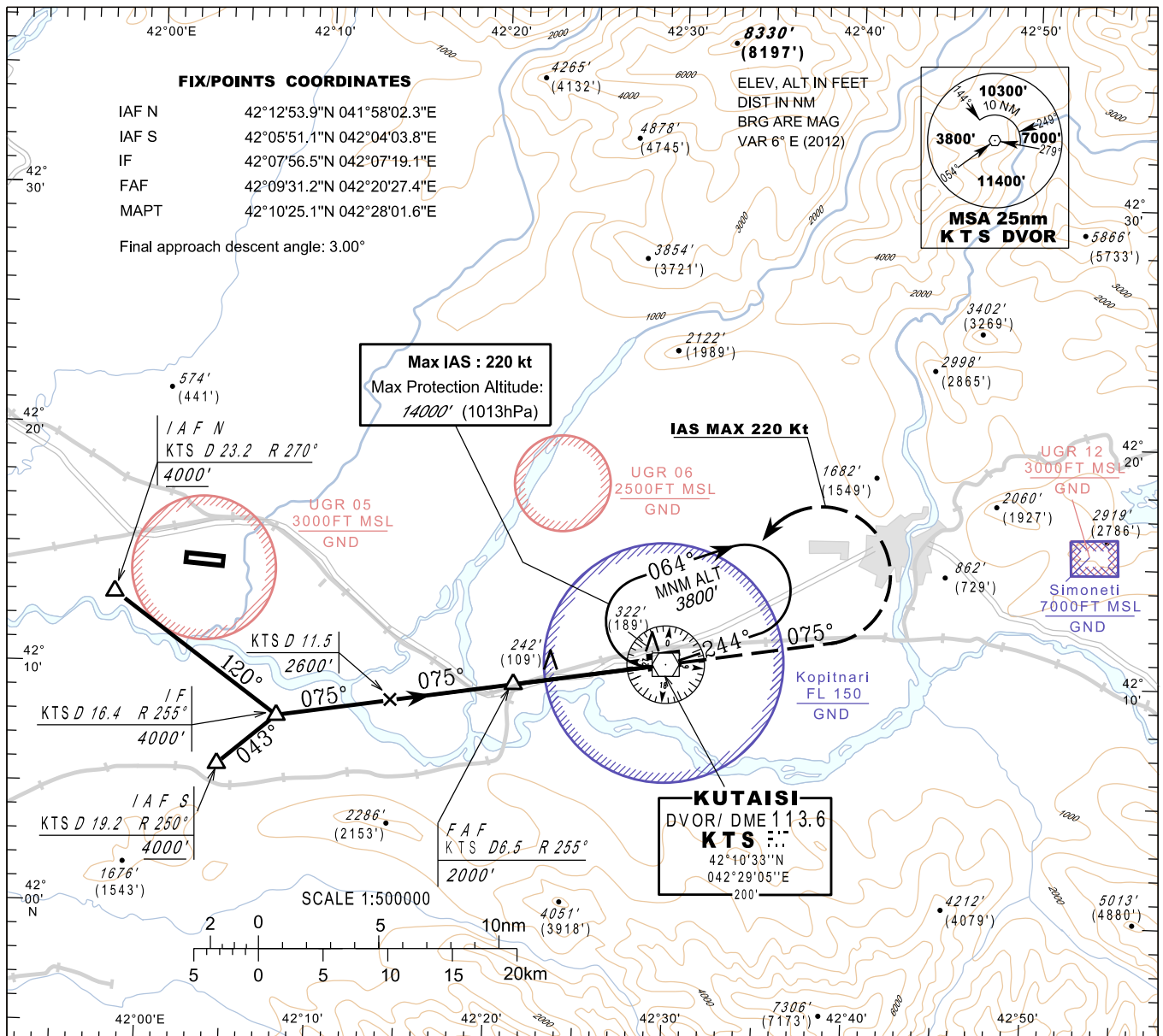
**INSTRUMENT
APPROACH
CHART - ICAO**AERODROME ELEV 160'
HEIGHTS RELATED TO
THR RWY 07 - ELEV 133'APP 127.1
TWR 125.5**KUTAISI/Kopitnari (UGKO)
VOR/DME y
RWY 07**

OCA/ H					A	B	C	D					
Straight-in Approach	VOR/DME	568 (435)	FAF - MAPT 5.7 nm		min:s	4: 53	4: 01	3: 25	2: 58	2: 38	2: 22	2: 08	1: 51
			Rate of descent		ft/min	372	452	531	611	690	770	850	982
			DME KTS NM		6	5	4	3	2				
			ALT (HGT) ft		1850 (1717)	1530 (1397)	1210 (1077)	890 (757)	570 (437)				

**INSTRUMENT
APPROACH
CHART - ICAO**

 AERODROME ELEV 160'
 HEIGHTS RELATED TO
 THR RWY 07 - ELEV 133'

 APP 127.1
 TWR 125.5

KUTAISI/Kopitnari (UGKO)
**VOR/DME z
RWY 07**


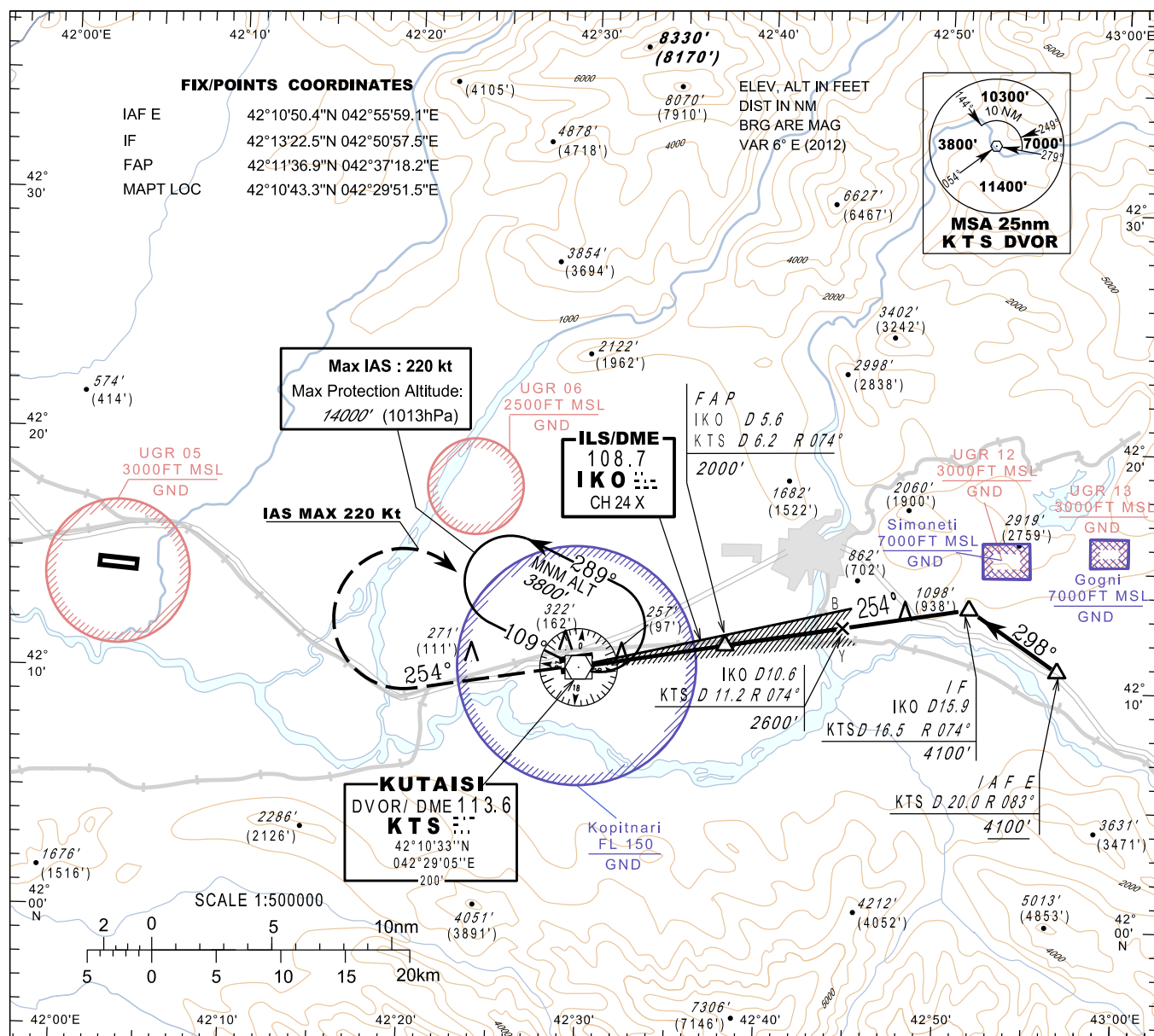
REF HGT: THR ELEV

					kt	70	85	100	115	130	145	160	185	
					FAF - MAPT 5.7 nm	min: s	4: 53	4: 01	3: 25	2: 58	2: 38	2: 22	2: 08	1: 51
					Rate of descent	ft/min	372	452	531	611	690	770	850	982
OCA/ H		A	B	C	D									
Straight-in Approach	VOR/DME	568 (435)			DME KTS NM	6	5	4	3	2				
					ALT (HGT) ft	1850 (1717)	1530 (1397)	1210 (1077)	890 (757)	570 (437)				

**INSTRUMENT
APPROACH
CHART - ICAO**

 AERODROME ELEV 160'
 HEIGHTS RELATED TO
 THR RWY 25 - ELEV 160'

 APP 127.1
 TWR 125.5

**KUTAISI/Kopitnari (UGKO)
ILS/DME or LOC z
RWY 25**

MISSED APPROACH

 Climb **3800'** (3640') runway heading

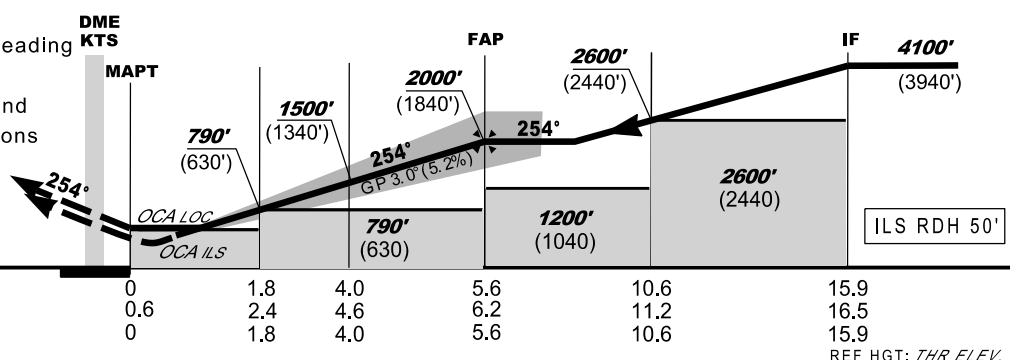
 Mag Track **254°**

 At **7nm KTS** turn right inbound

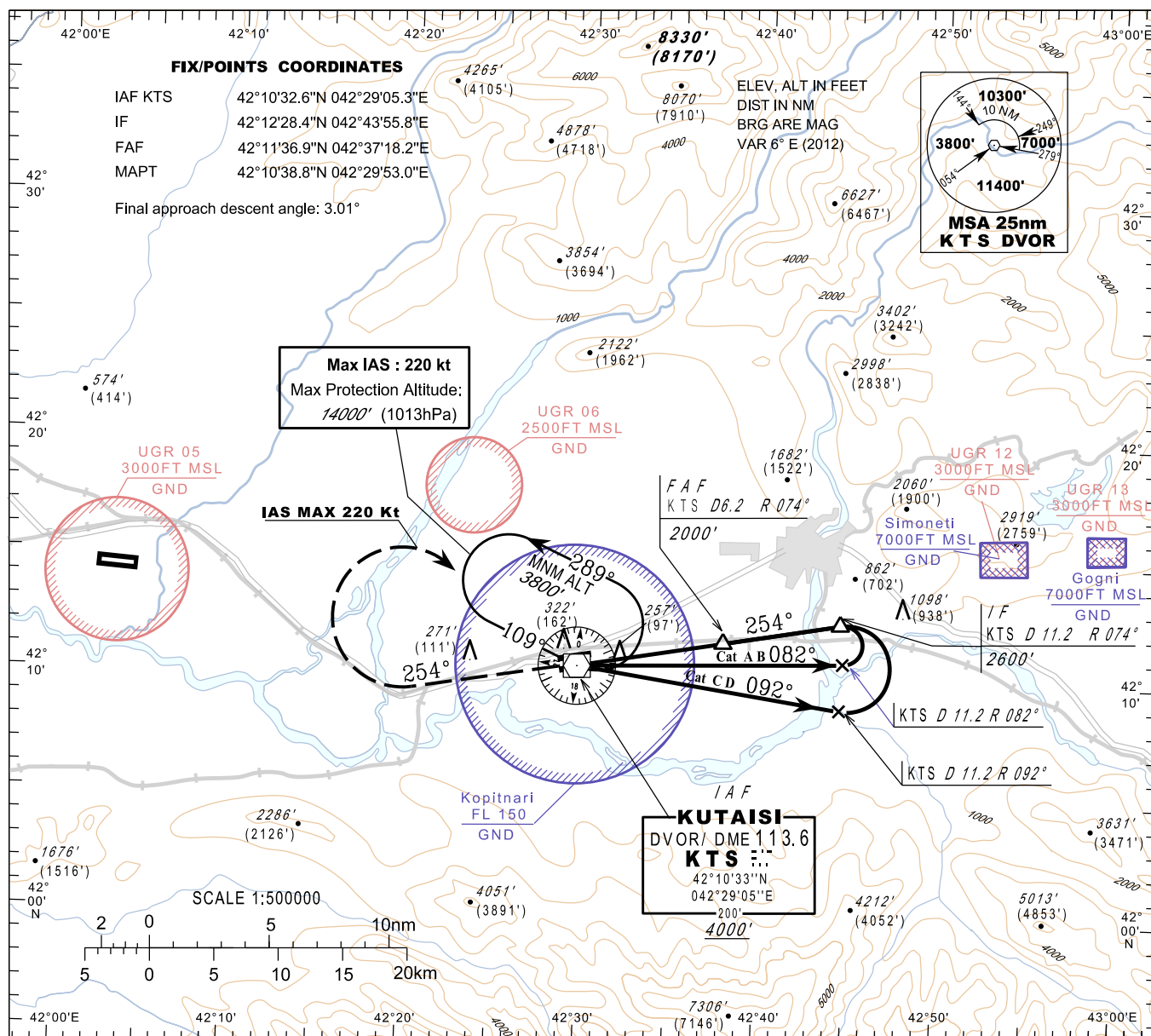
KTS and follow **ATC** instructions

 IAS Max **220 Kt**

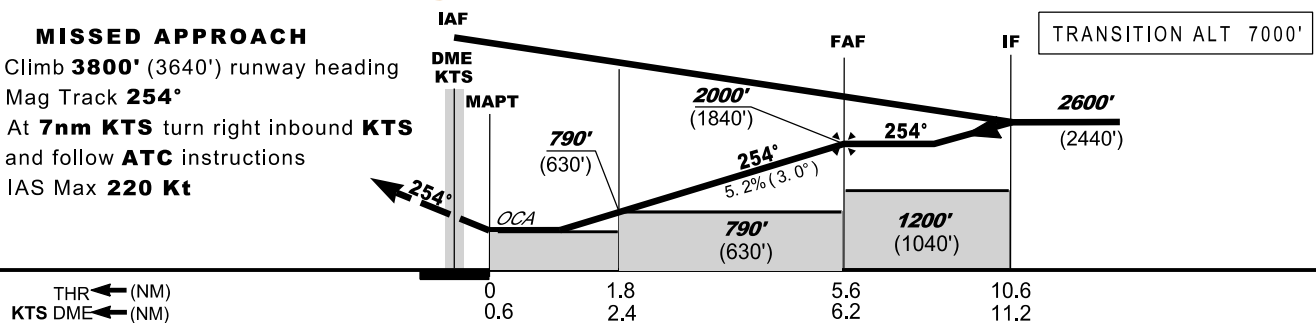
TRANSITION ALT 7000'



REF: NOT/77X/2227														
					kt	70	85	100	115	130	145	160	185	
					FAF - MAPT 5.6 nm	min:s	4: 48	3: 58	3: 22	2: 55	2: 35	2: 19	2: 06	1: 49
					Rate of descent	ft/min	372	452	531	611	690	770	850	982
OCA/ H		A	B	C	D	DME IKO NM		6	5	4	3	2.4	2	1
Straight-in Approach	ILS Cat I	301 (141)	310 (152)	322 (165)	334 (179)	ALT (HGT) ft		1930 (1770)	1610 (1450)	1300 (1140)	980 (820)	790 (630)	660 (500)	340 (180)
	GP INOP	503 (343)												

**INSTRUMENT
APPROACH
CHART - ICAO**AERODROME ELEV 160'
HEIGHTS RELATED TO
THR RWY 25 - ELEV 160'APP 127.1
TWR 125.5**KUTAISI/Kopitnari (UGKO)
VOR/DME y
RWY 25****MISSSED APPROACH**

Climb **3800'** (3640') runway heading
Mag Track **254°**
At **7nm KTS** turn right inbound **KTS**
and follow **ATC** instructions
IAS Max **220 Kt**

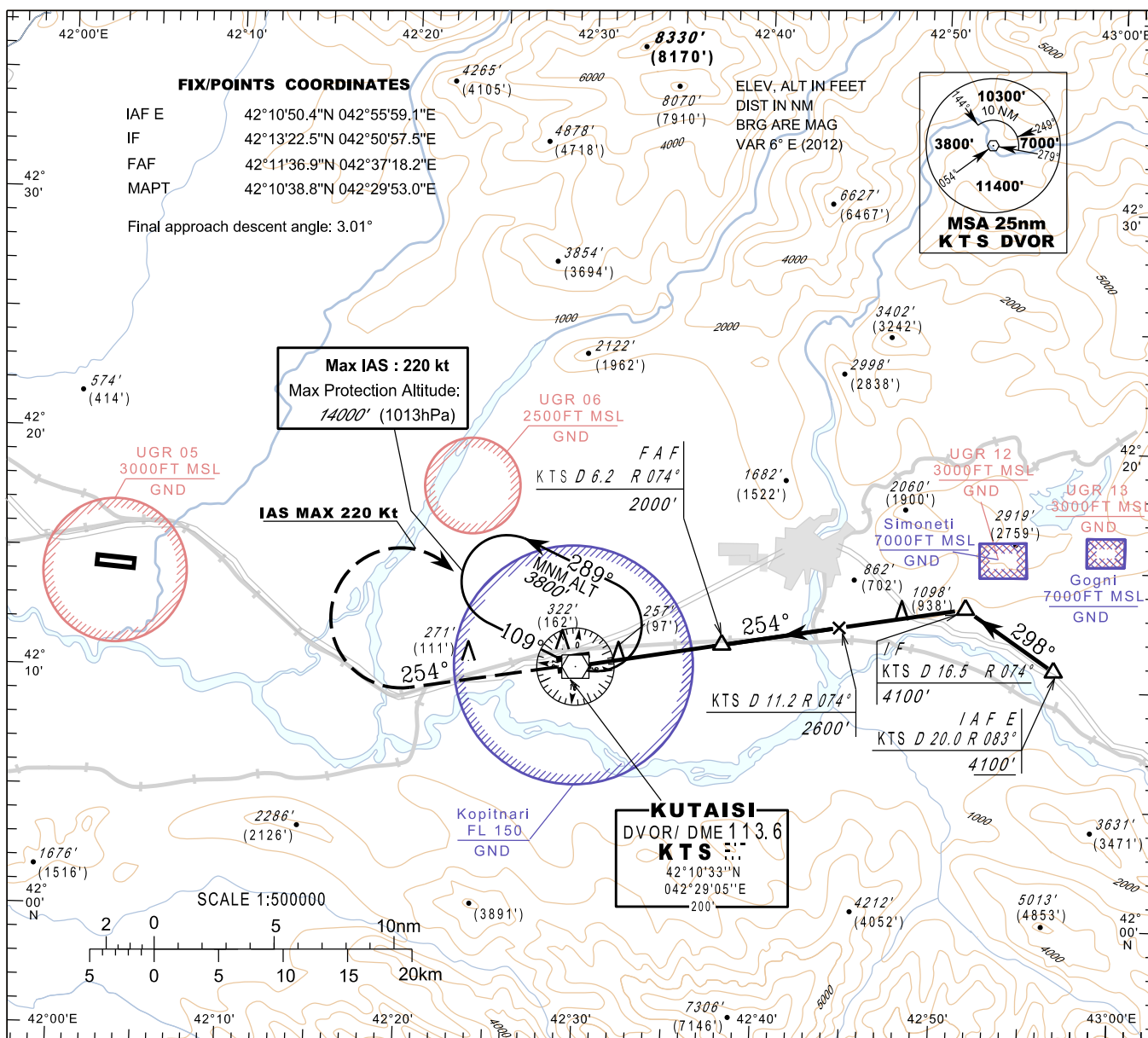


										kt	70	85	100	115	130	145	160	185	
										FAF - MAPT 5.6 nm	min:s	4: 48	3: 58	3: 22	2: 55	2: 35	2: 19	2: 06	1: 49
OCA/ H					A	B	C	D	Rate of descent										
										ft/min	372	452	531	611	690	770	850	982	
Straight-in Approach	VOR/DME	503 (343)				DME KTS NM		6	5		4		3		2.4		2		
						ALT (HGT) ft		1930 (1770)	1610 (1450)		1300 (1140)		980 (820)		790 (630)		660 (500)		

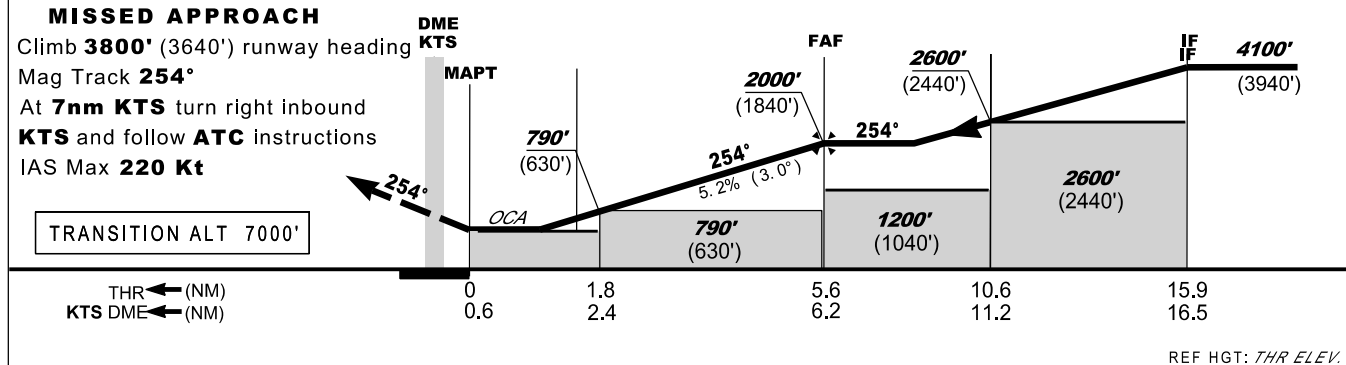
AERODROME ELEV 160'
HEIGHTS RELATED TO
THR RWY 25 - ELEV 160'

APP	127.1
TWR	125.5

**VOR/DME z
RWY 25**



Climb **3800'** (3640') runway heading
Mag Track **254°**
At **7nm KTS** turn right inbound
KTS and follow **ATC** instructions
IAS Max **220 Kt**



							kt	70	85	100	115	130	145	160	185
					FAF - MAPT 5.6 nm		min:s	4: 48	3: 58	3: 22	2: 55	2: 35	2: 19	2: 06	1: 49
					Rate of descent		ft/min	372	452	531	611	690	770	850	981
OCA/ H		A	B	C	D										
Straight-in Approach	VOR/DME	503 (343)				DME KTS NM	6	5	4	3	2.4	2			
						ALT (HGT) ft	1930 (1770)	1610 (1450)	1300 (1140)	980 (820)	790 (630)	660 (500)			

STANDARD DEPARTURE ROUTES – INSTRUMENT (SID) RWY 07

SID	ROUTING AND ALTITUDES	MIN. CLIMB GRAD.
ALIKA 1D	ALIKA ONE DELTA Climb runway heading (MAG Track 074°) to FL90 or above. At 1500 FT turn left to intercept and follow RDL 014° KTS (MAG Track 194°) inbound KTS. Then proceed to ALIKA RDL 270° KTS (MAG Track 270°). Do not turn before the DER. IAS Max during the turns 250 Kt .	
NEDEK 1D	NEDEK ONE DELTA Climb runway heading (MAG Track 074°) to 7000 FT or above. At 1500 FT turn left to intercept and follow RDL 014° KTS (MAG Track 194°) inbound KTS. Then proceed to NEDEK RDL 250° KTS (MAG Track 250°). Do not turn before the DER. IAS Max during the turns 250 Kt .	
LOBIN 1D	LOBIN ONE DELTA Climb runway heading (MAG Track 074°) to FL90 or above. At 1500 FT turn right MAG Track 113° to intercept and follow RDL 083° KTS (MAG Track 083°) inbound LOBIN. Do not turn before the DER. IAS Max during the turns 250 Kt .	5.3% up to FL90

STANDARD DEPARTURE ROUTES – INSTRUMENT (SID) RWY 25

SID	ROUTING AND ALTITUDES	MIN. CLIMB GRAD.
ALIKA 2D	ALIKA TWO DELTA Climb runway heading (MAG Track 254°) to FL90 or above. At 1500 FT turn right MAG Track 300° to intercept and follow RDL 270° KTS (MAG Track 270°) inbound ALIKA. Do not turn before the DER. IAS Max during the turns 250 Kt.	4.0% up to 4000 FT
NEDEK 2D	NEDEK TWO DELTA Climb runway heading (MAG Track 254°) to 7000 FT or above. Then intercept and follow RDL 250° KTS (MAG Track 250°) inbound NEDEK. Do not turn before the DER. IAS Max during the turns 250 Kt.	
LOBIN 2D	LOBIN TWO DELTA Climb runway heading (MAG Track 254°) to FL90 or above. At 1500 FT turn right to intercept and follow RDL 312° KTS (MAG Track 132°) inbound KTS. Then proceed to LOBIN RDL 083° KTS (MAG Track 083°). Do not turn before the DER. IAS Max during the turns 250 Kt.	

STANDARD ARRIVAL ROUTES – INSTRUMENT (STAR) RWY 07

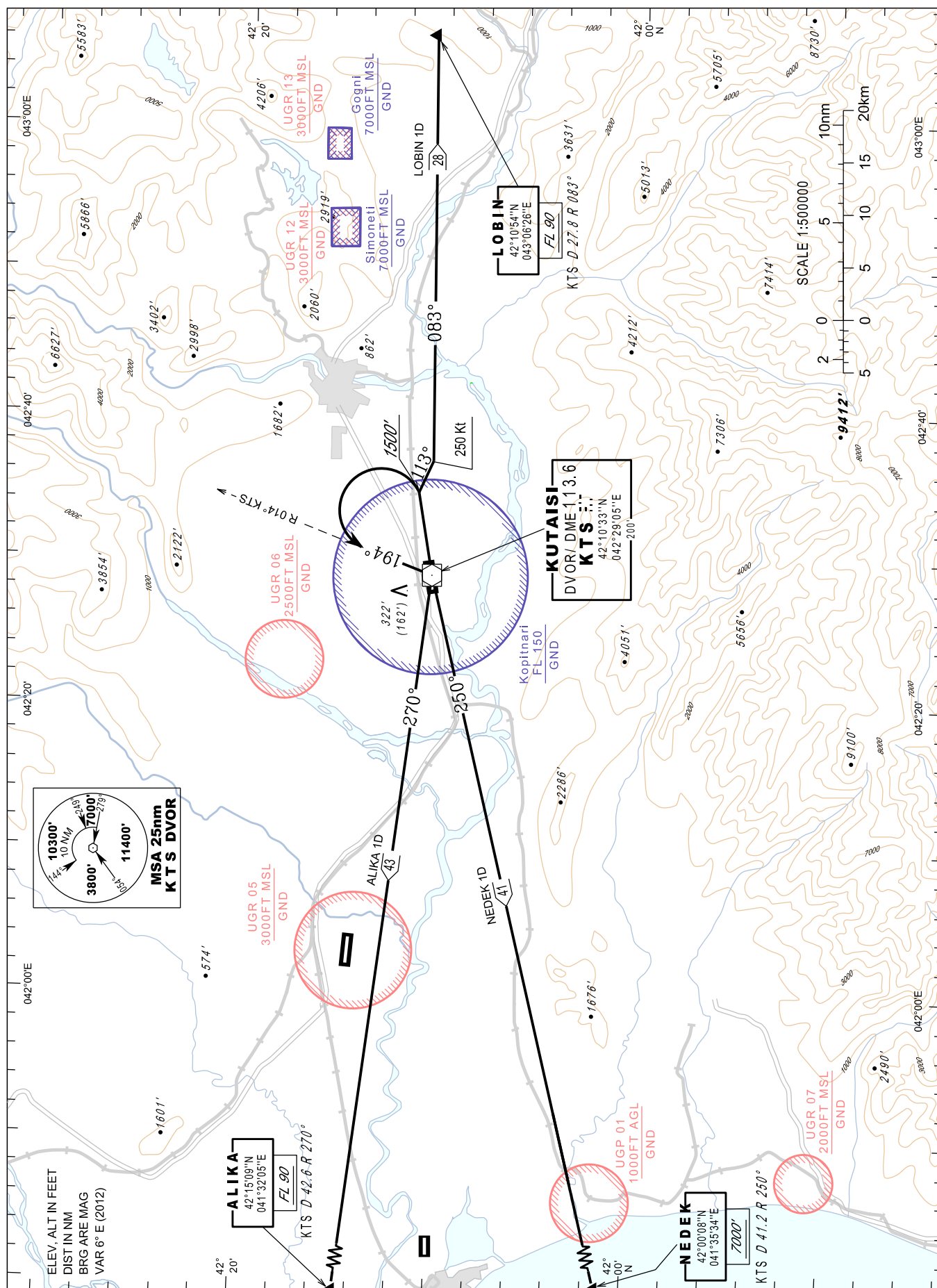
STAR	ROUTING AND ALTITUDES
ALIKA 1C	ALIKA ONE CHARLIE After passing ALIKA proceed on RDL 270° KTS (MAG Track 090°) to IAF N 270° / 23.2 NM KTS descending to 4000 FT or above. For future details see Instrument Approach Charts - ILS or LOC z RWY 07 ; VOR z RWY 07
ALIKA 3C	ALIKA THREE CHARLIE After passing ALIKA proceed on RDL 270° KTS (MAG Track 090°) to IAF KTS descending to 4000 FT or above. For future details see Instrument Approach Charts - ILS or LOC y RWY 07 ; VOR y RWY 07
NEDEK 1C	NEDEK ONE CHARLIE After passing NEDEK proceed on RDL 250° KTS (MAG Track 070°) to IAF S 250° / 19.2 NM KTS descending to 4000 FT or above. For future details see Instrument Approach Charts - ILS or LOC z RWY 07 ; VOR z RWY 07
NEDEK 3C	NEDEK THREE CHARLIE After passing NEDEK proceed on RDL 250° KTS (MAG Track 070°) to IAF KTS descending to 4000 FT or above. For future details see Instrument Approach Charts - ILS or LOC y RWY 07 ; VOR y RWY 07
LOBIN 1C	LOBIN ONE CHARLIE After passing LOBIN proceed on RDL 083° KTS (MAG Track 263°) to IAF KTS descending to 4000 FT or above. For future details see Instrument Approach Charts - ILS or LOC y RWY 07 ; VOR y RWY 07

STANDARD ARRIVAL ROUTES – INSTRUMENT (STAR) RWY 25

STAR	ROUTING AND ALTITUDES
ALIKA 2C	ALIKA TWO CHARLIE After passing ALIKA proceed on RDL 270° KTS (MAG Track 090°) to IAF KTS descending to 4000 FT or above. For future details see Instrument Approach Charts - ILS or LOC y RWY 25 ; VOR y RWY 25
NEDEK 2C	NEDEK TWO CHARLIE After passing NEDEK proceed on RDL 250° KTS (MAG Track 070°) to IAF KTS descending to 4000 FT or above. For future details see Instrument Approach Charts - ILS or LOC y RWY 25 ; VOR y RWY 25
LOBIN 2C	LOBIN TWO CHARLIE After passing LOBIN proceed on RDL 083° KTS (MAG Track 263°) to IAF E 083° / 20 NM KTS descending to 4100 FT or above. For future details see Instrument Approach Charts - ILS or LOC z RWY 25 ; VOR z RWY 25
LOBIN 4C	LOBIN FOUR CHARLIE After passing LOBIN proceed on RDL 083° KTS (MAG Track 263°) to IAF KTS descending to 4000 FT or above. For future details see Instrument Approach Charts - ILS or LOC y RWY 25 ; VOR y RWY 25

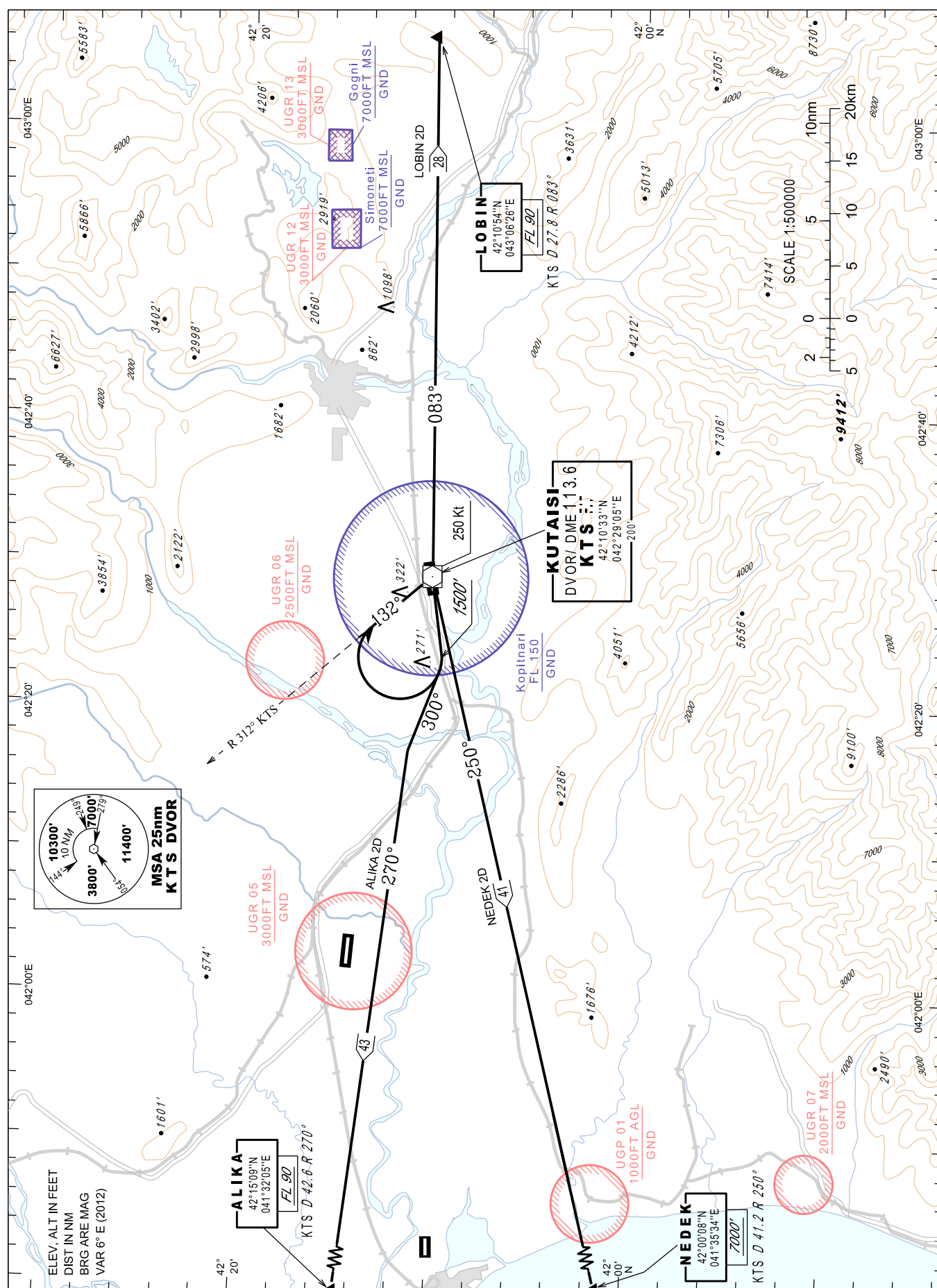
RWY 07

ALIIKA 1D NEDEK 1D LOBIN 1D



KUTAI SI/Kopitnari (UGKO)
RWY 25

ALIKA 2D NEDEK 2D LOBIN 2D



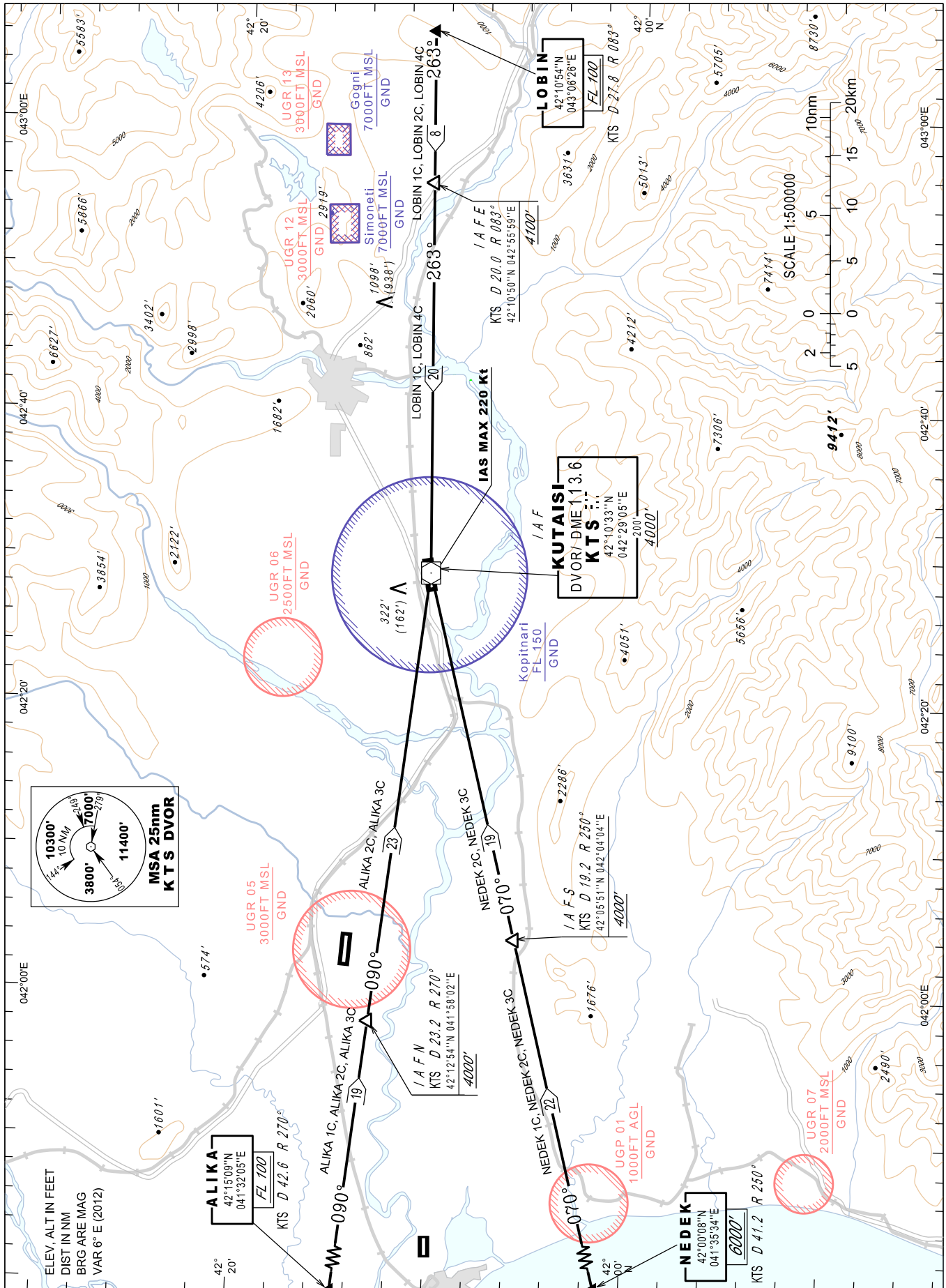
STANDART ARRIVAL
CHART - INSTRUMENT
(STAR) - ICAO

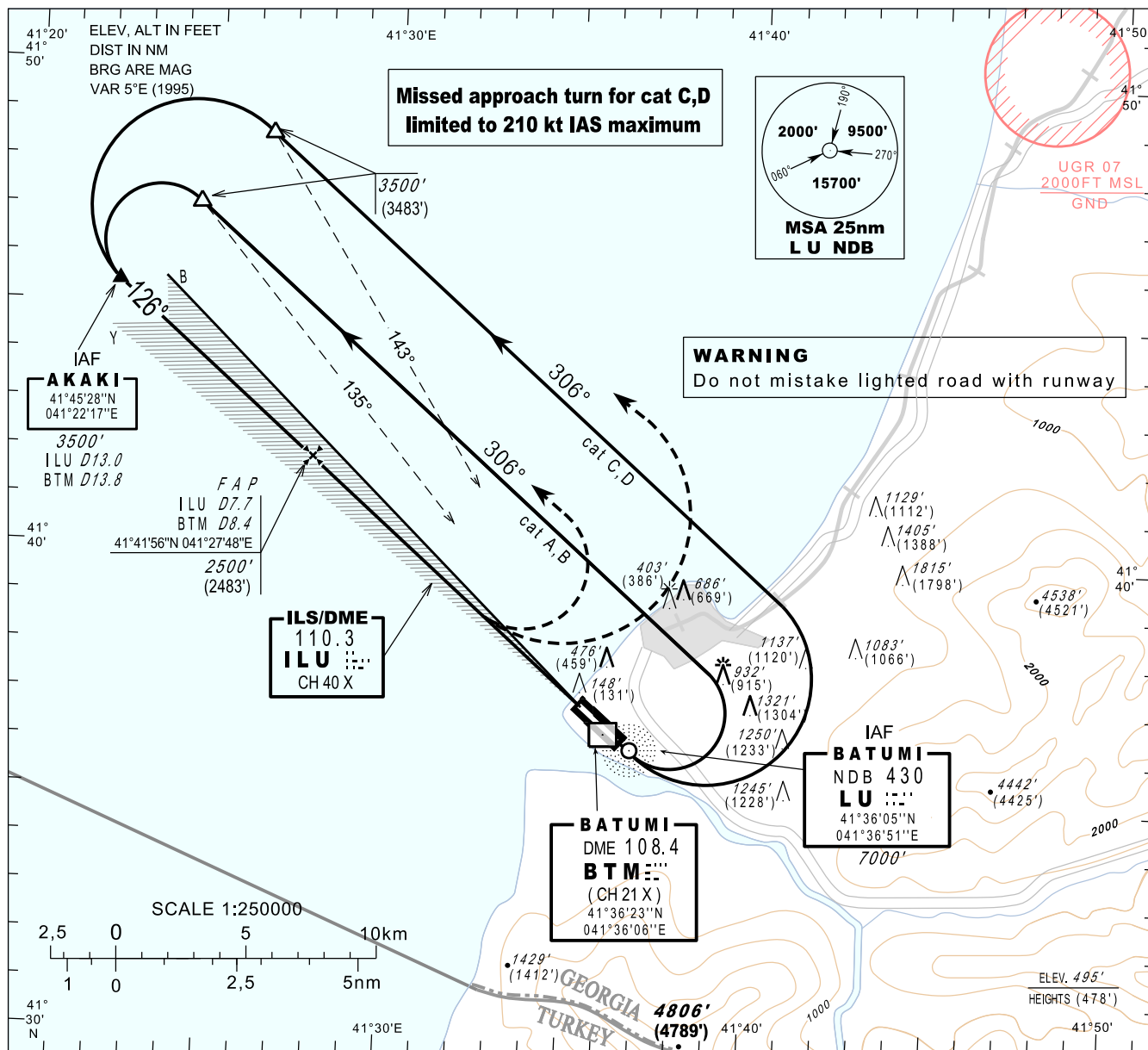
TRANSITION LEVEL FL 90
 TRANSITION ALTITUDE 7000'

APP 127.1
 TWR 125.5

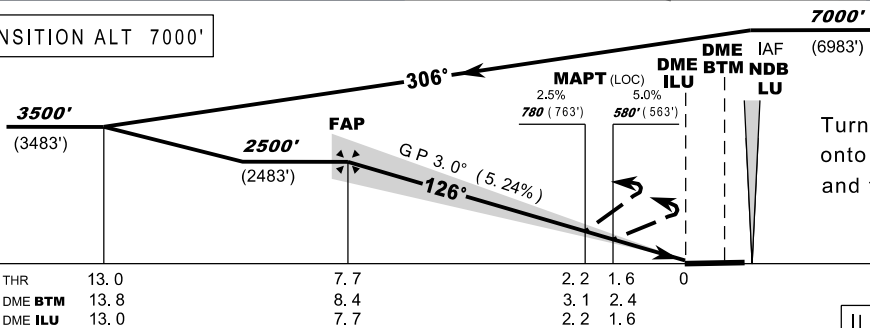
KUTAISI/Kopitnari (UGKO)
RWY 07 - 25

ALIKA 1C ALIKA 2C ALIKA 3C
 NEDEK 1C NEDEK 2C NEDEK 3C
 LOBIN 1C LOBIN 2C LOBIN 4C

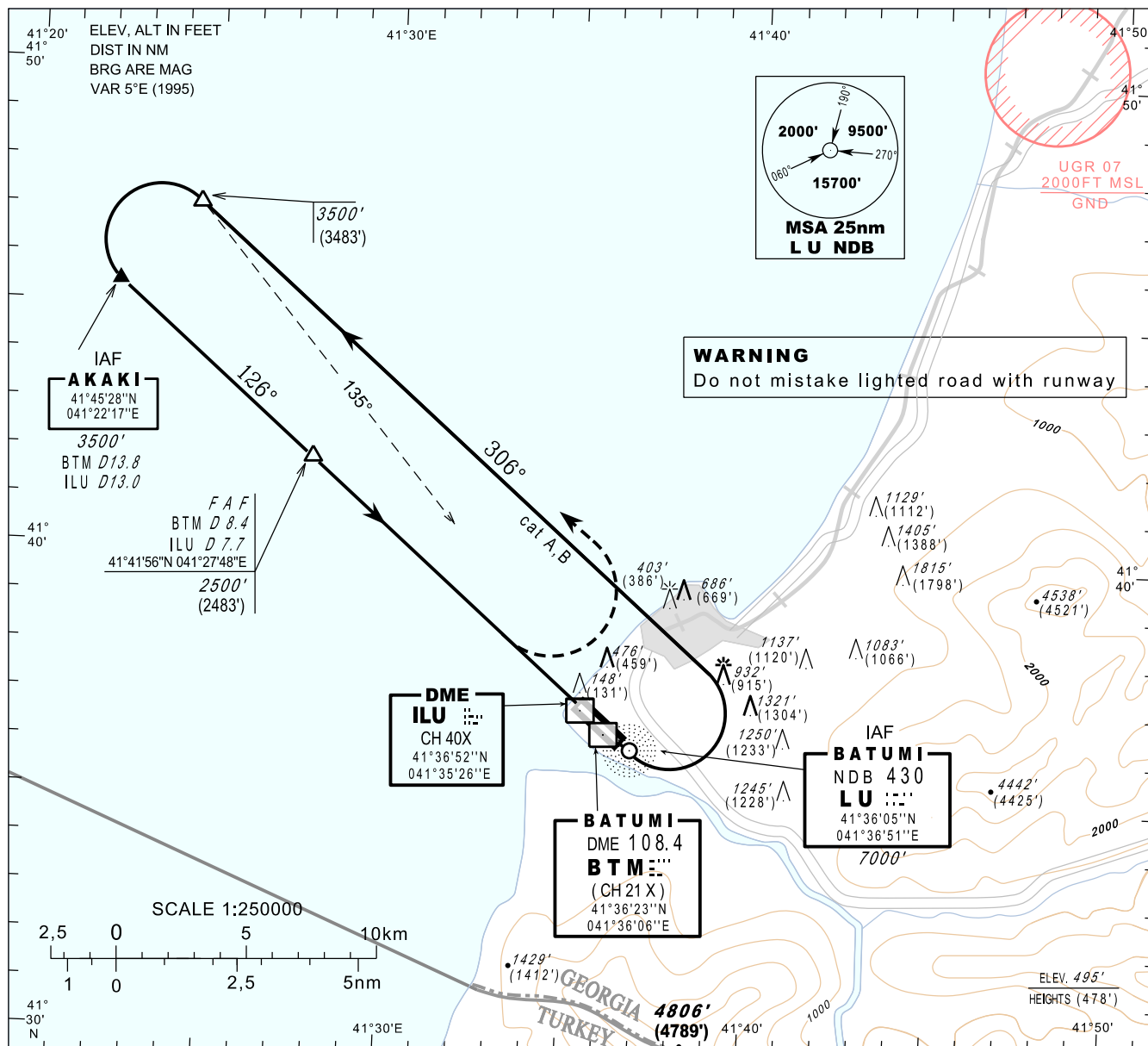


**INSTRUMENT
APPROACH
CHART - ICAO**AERODROME ELEV 37'
HEIGHTS RELATED TO
THR RWY 13 - ELEV 17'APP 124.425
TWR 118.600**BATUMI (UGSB)
ILS/DME or LOC
RWY 13**

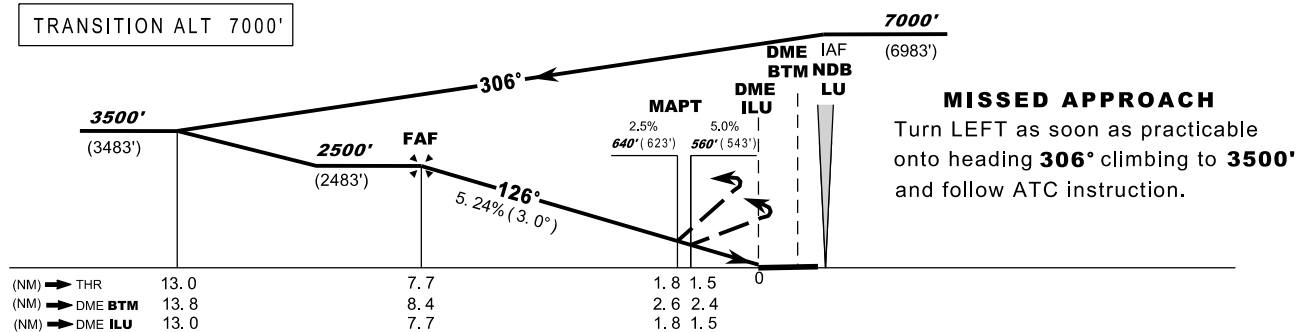
TRANSITION ALT 7000'



Straight-in Approach				Timing is not authorised for defining the MAPT								
Missed APCH climb gradient	ILS		LOC ONLY									
	A B	C D	A B C D									
OCA / OCH												
2.5%	640 (623)	710 (693)	780 (763)	DME ILU NM	9	8	7	6	5	4	3	2
5.0%	560 (543)	580 (563)	580 (563)	ALT (HGT) ft	2932 (2915)	2614 (2597)	2295 (2278)	1977 (1960)	1659 (1641)	1340 (1323)	1022 (1005)	703 (686)

**INSTRUMENT
APPROACH
CHART - ICAO**AERODROME ELEV 37'
HEIGHTS RELATED TO
THR RWY 13 - ELEV 17'APP 124.425
TWR 118.600**BATUMI (UGSB)
NDB/DME
RWY 13
(ACFT Cat A, B)**

TRANSITION ALT 7000'



REF HGT: THR ELEV.

Missed APCH climb gradient	Straight-in Approach	
	A	B
	OCA / OCH	
2.5%	640 (623)	
5.0%	560 (543)	

Timing is not authorised for defining the MAPT

DME ILU NM	9	8	7	6	5	4	3	2
ALT (HGT) ft	2932 (2915)	2614 (2597)	2295 (2278)	1977 (1960)	1659 (1641)	1340 (1323)	1022 (1005)	703 (686)

STANDARD DEPARTURE ROUTES – INSTRUMENT (SID) RWY 31

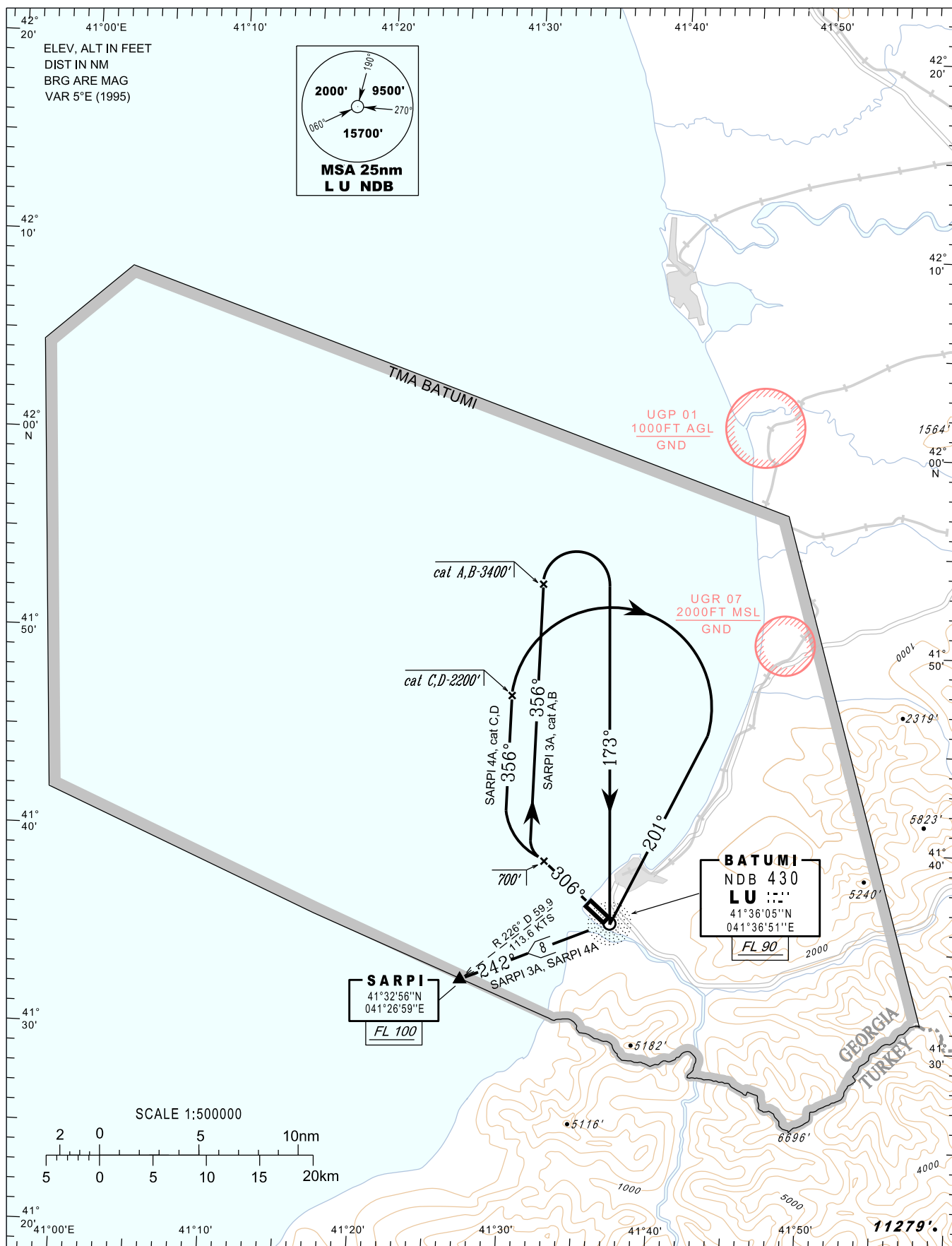
SID	ROUTING AND ALTITUDES	MIN. CLIMB GRAD.
SARPI 3A	SARPI THREE ALFA After take-off climb on RWY heading to 700 FT, continue climb to FL 100 turning RIGHT onto track 356°, at 3400 FT turn RIGHT to LU, therefrom on track 242° to SARPI to be over SARPI at FL 100 or above.	4.0%
SARPI 4A	SARPI FOUR ALFA After take-off climb on RWY heading to 700 FT, continue climb to FL 100 turning RIGHT onto track 356°, at 2200 FT turn RIGHT to LU, therefrom on track 242° to SARPI to be over SARPI at FL 100 or above.	4.0%

STANDARD DEPARTURE ROUTES – INSTRUMENT (SID) RWY 31 (SOSED)

SID	ROUTING AND ALTITUDES	MIN. CLIMB GRAD.
NEDEK 1A	NEDEK ONE ALFA After take-off climb on RWY heading to 700 FT, continue climb to 6000 FT turning RIGHT onto track 023° to intercept bearing 353° of LU NDB, therefrom on track 353° to NEDEK to be over NEDEK at 6000 FT or above.	
SARPI 1A	SARPI ONE ALFA After take-off climb on RWY heading to 3500 FT, continue climb to FL 100 turning RIGHT onto track 126° to intercept bearing 216° of LU NDB, then turn RIGHT to LU, therefrom on track 242° to SARPI to be over SARPI at FL 100 or above.	
SOSED 1A	SOSED ONE ALFA After take-off climb on RWY heading to 700 FT, continue climb to FL 90 turning RIGHT onto track 023° to intercept bearing 313° of LU NDB, therefrom on track 313° to SOSED to be over SOSED at FL 90 or above.	

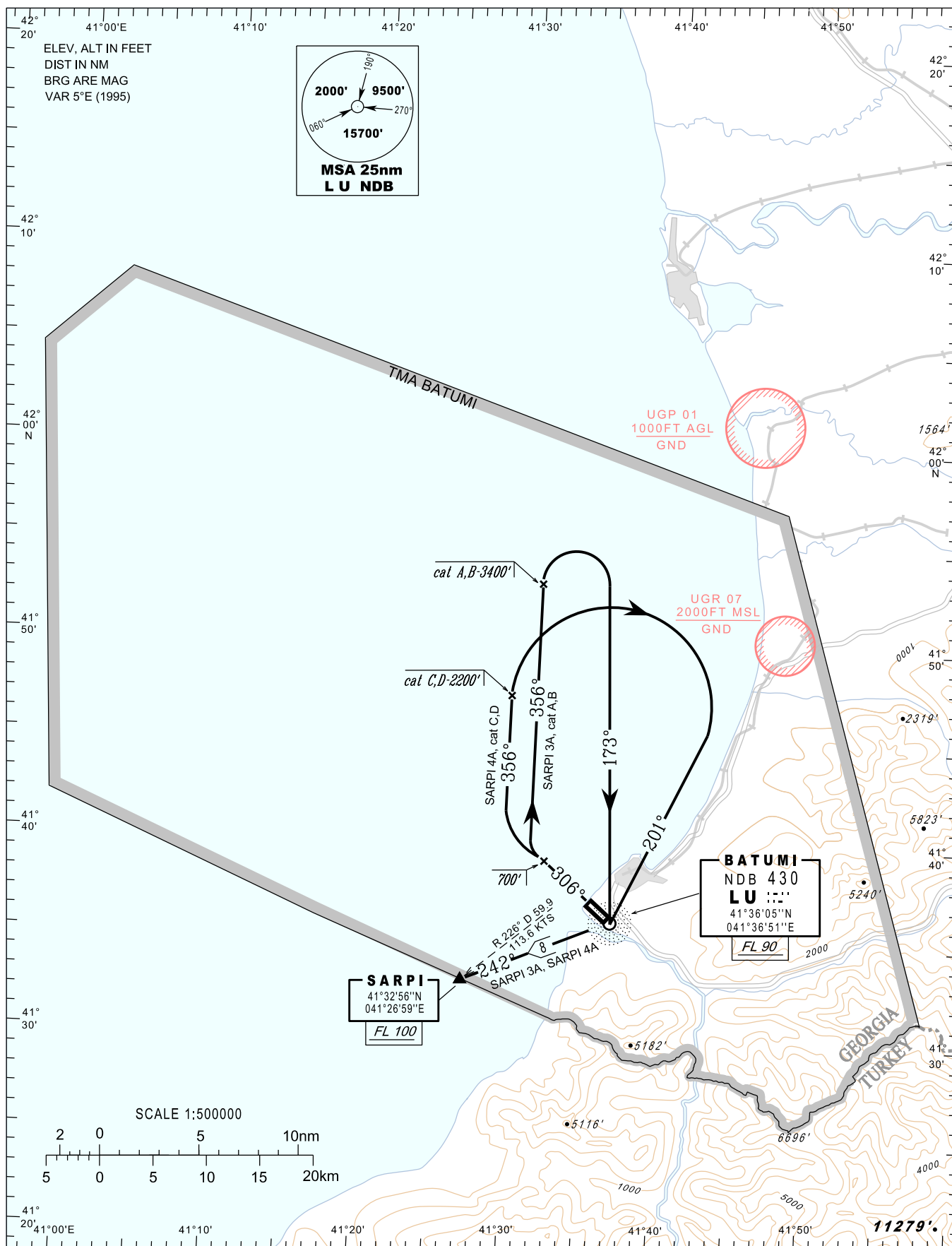
**STANDARD DEPARTURE CHART-
INSTRUMENT (SID) - ICAO**TRANSITION ALTITUDE
7000'APP 124.425
TWR 118.600**BATUMI (UGSB)
RWY 31**

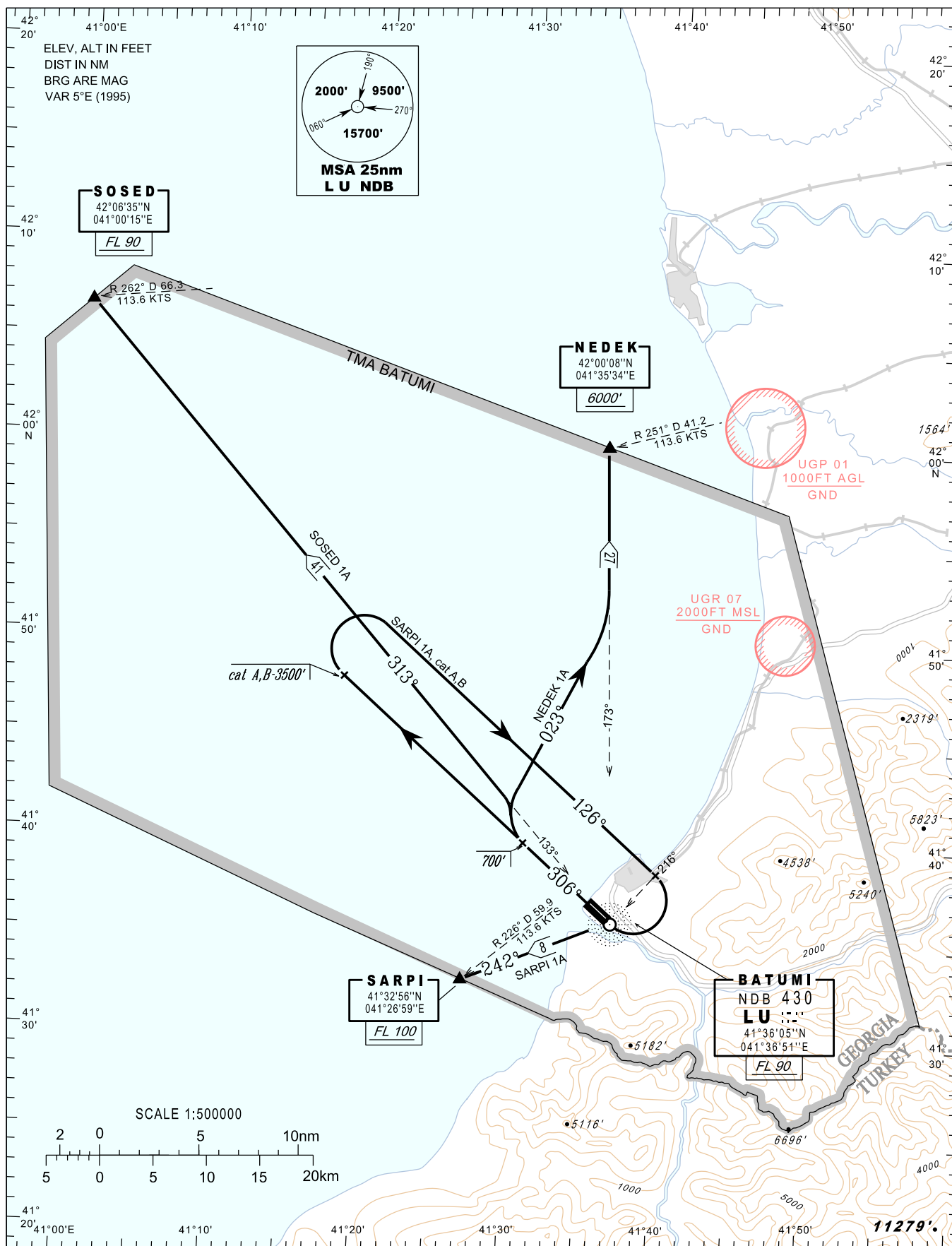
SARPI 3A, SARPI 4A



**STANDARD DEPARTURE CHART-
INSTRUMENT (SID) - ICAO**TRANSITION ALTITUDE
7000'APP 124.425
TWR 118.600**BATUMI (UGSB)
RWY 31**

SARPI 3A, SARPI 4A



**STANDARD DEPARTURE CHART-
INSTRUMENT (SID) - ICAO**TRANSITION ALTITUDE
7000'APP 124.425
TWR 118.600**BATUMI (UGSB)
RWY 31**NEDEK 1A, SOSED 1A,
SARPI 1A

**STANDARD ARRIVAL CHART-
INSTRUMENT (STAR) - ICAO**TRANSITION LEVEL FL 90
TRANSITION ALTITUDE 7000'APP 124.425
TWR 118.600**BATUMI (UGSB)
RWY 13**SOSED 1B, SOSED 2B, SARPI 1B
NEDEK 1B, NEDEK 2B