

LGTS AD 2.1 AERODROME LOCATION INDICATOR AND NAME**LGTS - THESSALONIKI/ MAKEDONIA****LGTS AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

1	ARP coordinates and site at AD	403111.0N 0225815.3E Intersection RWY16/34 and 10/28
2	Direction and distance from (city)	BRG 170°, 7NM from city centre (White Tower)
3	Elevation/Reference temperature	6.83 M (22 FT) / 32°C
4	Geoid undulation at AD ELEV PSN	40.81 M (133 FT)
5	MAG VAR/Annual change	4°36'E (4.6°E) (JAN 2019) / 5'44"E (0.0956°E)
6	AD Administration, address, telephone, telefax, telex, AFS	Thessaloniki /Makedonia Airport Aerodrome operator: Fraport Greece SA Germanikis Scholis 10 15123 Maroussi GREECE Mobile: +30 698 5053 885 Email: SKGAOCC@FRAPORT-GREECE.COM Website: https://www.skg-airport.gr Civil Aviation Authority (CAA) P.O BOX 22605 GR 55103 KALAMARIA TEL: +30 2310 985000 FAX: +30 2310 475555 AFTN: LGTSYDYX e-mail: kathmgae1@hcaa.gr (CAA), d18b@hcaa.gr (CAA / ATC)
7	Types of traffic permitted (IFR/VFR)	IFR - VFR
8	Remarks	NIL

LGTS AD 2.3 OPERATIONAL HOURS

1	AD Administration	H24
2	Customs and immigration	H24
3	Health and sanitation	H24
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24 (TEL: +30 2310 985550)
6	MET Briefing Office	H24 (MET)
7	ATS	H24
8	Fuelling	H24
9	Handling	H24
10	Security	H24
11	De-icing	Winter Period
12	Remarks	NIL

LGTS AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	Conveyor belts, fork lift (2 tons), container loader (7 tons) high loader. Freezing warehouse (adjusted). 1 cargo terminal. Nearest railway siding 15 Km.
2	Fuel/oil types	Fuel: AVGAS 100 LL: NIL JET A1: by EKO, HAFCO, GISSCO Oil: NIL
3	Fuelling facilities/capacity	<p>Tank trucks. EKO: Summer: H24. Winter: 0800-2200 local time. Rest hours 1 HR PN. Payment: Credit card (PETROFER), cash, contract (night fare feed 80 USD). TEL: +30 2310 985309, +30 2310 476334. FAX: +30 2310 472638. e-mail: thessaloniki@eko.gr</p> <p>HAFCO: Summer: H24. Winter: 0630-2230 local time. Rest hours 1 HR PN. Payment: contract Uvair. TEL: +30 2310 985353. FAX: +30 2310 475053. e-mail: hafcoskg@otenet.gr</p> <p>GISSCO: H24. Payment: carnet, cash, contract, credit card. TEL: +30 2310 985316, +30 2310 476161. FAX: +30 2310 472902. e-mail: skg01@gissco.gr</p>
4	De-icing facilities	Aircraft de/anti-icing activities are performed under the responsibility of the aircraft operator and/or the ground handler. Aircraft de/anti-icing is allowed at all parking stands. No de/anti-icing pad available. Prior coordination with the Airport Operator (Airport Operations Control Centre) is necessary.
5	Hangar space for visiting aircraft	NIL
6	Repair facilities for visiting aircraft	NIL
7	Remarks	NIL

LGTS AD 2.5 PASSENGER FACILITIES

1	Hotels	At AD vicinity and Thessaloniki city.
2	Restaurants	Restaurant, Snack bars, cafeteria.
3	Transportation	Bus (through city center to railway station and regional buses station), charter buses, taxis and car rental.
4	Medical facilities	Airport medical station. Hospitals in Thessaloniki city distance 7 NM.
5	Bank and Post Office	ATM (cash machines). Exchange office part-time available.
6	Tourist Office	Part time available.
7	Remarks	NIL

LGTS AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CIV CAT: 8
2	Rescue equipment	Equivalent for CAT 8 requirements.
3	Capability for removal of disabled aircraft	Trucks, tractors, Tow-barless, Paymover provided by Handling Agents.
4	Remarks	NIL

LGTS AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Types of clearing equipment	Snow removal equipment available. Snow plough with broom and blower, Sprayer, Sweeper.
2	Clearance priorities	RWY(s) and ILS systems, TWYs servicing active RWY(s), RFFS emergency access roads, parking stands, airside service roads, GSE staging areas, landside roads.
3	Remarks	All seasons. Caution advised on certain days of spring and autumn, morning hours, when mist may appear.

LGTS AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	Surface: concrete and asphalt Strength: PCN 40/F/B/X/U
2	Taxiway width, surface and strength	Width: TWY A, B, C, D, E, F, G, J, K, L: 23 M, S: 11M Surface: asphalt Strength: TWY A & D: PCN 63/F/B/X/T All other TWYs (except S): PCN 40/F/B/X/U
3	Altimeter checkpoint location and elevation	Established(see LGTS AD chart ICAO)
4	VOR checkpoints	Not established
5	INS checkpoints	Established (see LGTS AD chart ICAO).
6	Remarks	TWY F parallel to RWY 10/28, length: 2440 M.

LGTS AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Via signs, markings and "FOLLOW ME" car O/R. Markings according to ICAO Annex 14 requirements.
2	RWY and TWY markings and LGT	LGT: RWY/ TWY: see LGTS AD 2.14 & AD 2.15 Markings: RWY: THR, designations, centre line, side stripes, TDZ, aiming points. TWY: Centreline, taxi-holding position, side stripes, on A,B,C,D,F,G,J and K.
3	Stop bars	Red
4	Remarks	Mandatory and information signs. See also LGTS AD chart ICAO

LGTS AD 2.10 AERODROME OBSTACLES

In approach/TKOF areas			In circling area and at AD		Remarks
1			2		3
RWY NR/Area affected	Obstacle type Elevation Markings/LGT	Coordinates	Obstacle type Elevation Markings/LGT	Coordinates	
a	b	c	a	b	
10	See relevant LGTS AOC charts-ICAO				Obstructions marked and lighted.
28	See relevant LGTS AOC charts-ICAO				
16	See relevant LGTS AOC charts-ICAO				
34	See relevant LGTS AOC charts-ICAO				

LGTS AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	THESSALONIKI/ MAKEDONIA
2	Hours of service MET Office outside hours	H24 REGIONAL CENTRE MAKEDONIA
3	Office responsible for TAF preparation Period of validity	24 HR REGIONAL CENTRE MAKEDONIA
4	Trend forecast Interval of issuance Office responsible for Trend preparation	TREND with every METAR REGIONAL CENTRE MAKEDONIA
5	Briefing/consultation provided	Personal consultation telephone
6	Flight documentation Language(s) used	Charts, Tabular forms Greek, English
7	Charts and other information available for briefing or consultation	S, U ₈₅ , U ₅₀ , P ₈₅ , P ₇₀ , P ₅₀ , P ₄₀ , P ₃₀ , P ₂₅ , P ₂₀ SWH, SWL, W.T, MW
8	Supplementary equipment available for providing information	On line connection to meteorological database, weather radar, weather satellite image.
9	ATS units provided with information	MAKEDONIA TWR, MAKEDONIA APP
10	Additional information (limitation of service, etc.)	All data over FL 50 are issued by World Area Forecast Centre London. Runway visual range (RVR) runway equipment. -16 (400 M) -MID (1500 M) -34 (2100 M) from THR RWY 16. TEL: +30 2310 473355, +30 2310 985343 TLX: 0215039

LGTS AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG (degrees and one-hundredth of a degree)	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
10	104°	2440 x 50	PCN 40/F/B/X/U ASPH	403119.1N 0225732.6E	THR 2.07 M/ 6.79 FT TDZ: 2.45M/8.04FT
28	284°	2440 x 50	PCN 40/F/B/X/U ASPH	403100.1N 0225913.1E	THR 5.66 M/ 18.56 FT TDZ: NIL
16	166°	2410 x 60	PCN 40/F/B/X/U ASPH	403149.0N 0225803.3E 403033.0N 0225827.5E 40.90 M/ 134 FT	THR 3.64 M/ 11.11 FT TDZ: 3.72M/12.20 FT
34	346°	2410 x 60	PCN 40/F/B/X/U ASPH	403033.0N 0225827.5E 403149.0N 0225803.3E 40.81 M/ 133 FT	THR 6.73 M/ 22.09 FT TDZ: NIL

Slope of RWY-SWY		SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	OFZ	Remarks
7		8	9	10	11	12
RWY 10	See relevant LGTS AD and AOC charts-ICAO			2560 x 150	NIL	a) RWY 10/28 outer part of shoulders on reduced strength. First 100 M on both sides concrete. b) RWY 10/28 turning cycles on both ends 50 M radius and 5 M shoulders concrete Strip surface: Dirt (both RWYS) c) Portion of RWY 16/34 strip incorporates TWY A.
RWY 28	See relevant LGTS AD and AOC charts-ICAO			2560 x 150	NIL	
RWY 16	See relevant LGTS AD and AOC charts-ICAO			2530 x 300	Available	
RWY 34	See relevant LGTS AD and AOC charts-ICAO			2530 x 300	Available	

LGTS AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
10	2380	2380	2380	2440	NIL
28	2440	2440	2440	2440	NIL
16	2410	2410	2410	2410	NIL
34	2410	2410	2410	2410	NIL

LGTS AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT Type Length Intensity	THR LGT Colour Wingbars	PAPI VASIS Angle Distance from THR (MEHT)	TDZ, LGT Length	RWY Centre-line LGT Length Spacing, Colour Intensity	RWY edge LGT Length Spacing Colour Intensity	RWY End LGT Colour Wingbars	SWY LGT Length Colour	Remarks
1	2	3	4	5	6	7	8	9	10
10	Simple Approach lighting system 300 M LIH	Green No Wingbars	PAPI Left/3,1° (16,0M)	NIL	NIL	White 2400M,60M spacing, LIH	Red No Wingbars	NIL	See also LGTS AD chart-ICAO
28	Precision Approach lighting system Cat I 900 M LIH	Green No Wingbars	PAPI Left/3,07° (15,0M)	NIL	NIL	White 2400M, 60M spacing, LIH	Red No Wingbars	NIL	
16	Precision Approach lighting system, CAT II 600 M LIH	Green No Wingbars	PAPI Right/3°02' (19,3M)	TDZ Lights CAT II White/ 860M	White 1500 M/ Red- White 600 M/ Red 300 M 15M spacing, LIH	White 1800m/Yellow 600m,60m spacing LIH	Red No Wingbars	NIL	
34	Simple Approach lighting system 300 M with a cross bar at 300 M. LIH	Green No Wingbars	PAPI Left/3,78° (27,0M)	NIL	White 1500 M/ Red- White 600 M/ Red 300m 15M spacing, LIH	White 1800m/Yellow 600m, 60m spacing LIH	Red No Wingbars	NIL	

LGTS AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and operational hours	ABN: at the Tower building, ALTN FLG WG, every 5 sec, H24: HN and IMC. IBN: at the Tower building, FLG green, coding "THS", every 6 sec, H24: HN and IMC.
2	LDI location and LGT Anemometer location and LGT	LDI: NIL WDI: on both sides of each RWY lighted Anemometer: NIL
3	TWY edge and centre line lighting	TWY: Edge: on E,F,G,J, and K : Blue Centre line: on A,B,C,D: Green. On RWY 16/34 exits: Green-Yellow.
4	Secondary power supply/switch-over time	Available / 1 second (RWY 16/34)
5	Remarks	Apron: Flood lights Flares in extraordinary cases. Signaling lamp.

LGTS AD 2.16 HELICOPTER LANDING AREA

1	Coordinates TLOF or THR of FATO Geoid undulation	NIL
2	TLOF and/or FATO elevation M/FT	NIL
3	TLOF and FATO area dimensions, surface, strength, marking	NIL
4	True BRG of FATO	NIL
5	Declared distance available	NIL
6	APP and FATO lighting	NIL
7	Remarks	See LGTS AD 2.20.4

LGTS AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	THESSALONIKI MAKEDONIA CTR A circle, 10 NM radius centred at 403111N 0225815E.
		THESSALONIKI MAKEDONIA ATZ A circle, 5 NM radius centred at 403111N 0225815E (ARP)
2	Vertical limits	CTR: SFC to FL 100 MSL
		ATZ: SFC to 2000 FT ALT
3	Airspace classification	Class D
4	ATS unit call sign Language(s)	CTR: THESSALONIKI RADAR Greek, English
		ATZ: MAKEDONIA TOWER Greek, English
5	Transition altitude	6000 FT
6	Remarks	For MAKEDONIA TMA see ENR 2.1.5.9

LGTS AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency/ VHF CH	Operational hours	Remarks
1	2	3	4	5
APP	THESSALONIKI APPROACH	120.800 118.275 362.300 MHz 122.100 121.500 243.000 MHz	H24 H24 H24 H24 H24 H24	Primary freq Cover. FL 150/ 40 NM Coverage FL 250/ 50 NM MIL RGA Emergency MIL Emergency
TAR	THESSALONIKI RADAR	120.800 362.300 MHz	H24	Coverage FL150/ 40 NM MIL
	THESSALONIKI DIRECTOR	118.275	H24	Coverage FL 250 / 50 NM
TWR	MAKEDONIA TOWER	118.100 118.050 122.100 257.800 MHz 121.500 243.000 MHz	H24 H24 H24 H24 H24 H24	Primary freq Cover. FL 40 / 25 NM Coverage FL 40 / 25 NM RGA MIL RGA Emergency MIL Emergency

TWR (cont.)	MAKEDONIA DELIVERY	118.050	Operating on ATC instructions	Coverage FL 40/ 25NM Clearance Delivery
	MAKEDONIA GROUND	121.700	H24	Cover. Aerodrome Surface / 5 NM ACFT Start up & Taxi Clearance
G/A/G	MAKEDONIA RADIO	5637 kHz 2989 kHz	H24: 0400–1700 H24: 1700-0400	Primary Primary
ATIS (ARR / DEP)	THESSALONIKI MAKEDONIA AIRPORT INFORMATION	127.550	H24	Coverage FL 200 / 60 NM
All ATS Communication Facilities under responsibility of CAA. For TAR services see ENR 1.6 & LGTS AD 2.22.4 , for ATIS see also ENR 1.1.1.5.3.3				

LGTS AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid MAG VAR CAT of ILS/MLS (For VOR/ILS/MLS, give declination)	ID	Frequency (CH)	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna (Ft aMSL)	Remarks
1	2	3	4	5	6	7
THESSALONIKI VOR/DME 4°01'E JAN 2013)	TSL	112.10 MHz CH 58X	H24	402724.51N 0225927.81E	773 FT / 235.71 M	Coverage FL 500 / 150 NM
FISKA VOR/DME 4°01'E (JAN 2013)	FSK	116.40 MHz CH 111X	H24	410555.37N 0225929.36E	1299 FT / 395.91 M	Coverage FL 500 / 150 NM
MIKRA VOR/DME 4°01'E (JAN 2013)	MKR	110.80 MHz CH 45X	H24	403107.41N 0225811.28E	27 FT / 8.28 M	Coverage FL 250 / 40 NM
THESSALONIKI NDB 4°01'E (JAN 2013)	THS	345 kHz	H24	403536.96N 0225653.11E	-	Coverage 80 NM
FISKA L 4°01'E (JAN 2013)	FIS	314 kHz	H24	410553.33N0225 930.34E	-	Coverage 40 NM
THESSALONIKI ILS/DME CAT I, RWY 10 ILS/LLZ 4°01'E (JAN 2013) 4°01'E (JAN 2013) GP DME	IMAK	109.50 MHz 332.60 MHz CH 32X	H24	403057.51N 0225926.57E 403120.40N 0225746.98E 403120.40N 0225746.98E	3 FT / 0.88 M	Coverage FL 62.5 / 25 NM Coverage FL 23 / 10 NM GP Angle 3° Coverage. FL 100 / 25 NM
THESSALONIKI ILS/DME CAT II, RWY 16 ILS/LLZ 4°01'E (JAN 2013) 4°01'E (JAN 2013) GP DME	ITSL	110.30 MHz 335.00 MHz CH 40X	H24	403023.85N 0225830.37E 403136.57N 0225802.10E 403136.57N 0225802.10E	4 FT / 1.23 M	Coverage FL 62.5 / 25 NM Coverage FL 23/ 10 NM GP Angle 3°, RDH 52 FT Coverage FL 100 / 25 NM
All Radio Navigation and Landing Aids under responsibility of CAA. See also GEN 2.5 and ENR 4.1						

LGTS AD 2.20 LOCAL TRAFFIC REGULATIONS

2.20.1 Airport Regulations

2.20.1.1 Slots for all commercial air transport flights must be cleared with Slot Coordination Authority. Contact details can be found in AIP GREECE GEN 1.1.

2.20.1.2 In case of a long stay (more than 2 hours), all operators of inbound flights must obtain a prior permission by the Airport Operations Department (through their nominated handling agent).

2.20.1.2.1 Operators are required to have made arrangements for ground handling prior to their arrival at THESSALONIKI/MAKEDONIA Airport. However, nothing in this procedure shall prevent an aircraft that has declared an emergency, from landing.

2.20.1.2.2 Operators are advised that before selecting THESSALONIKI/MAKEDONIA Airport as an alternate aerodrome, arrangements for ground handling should be agreed in advance.

2.20.2 Taxiing to and from stands

2.20.2.1 Procedures for departing and arriving aircraft:

- a) All aircraft shall follow the apron and stand TWY lines. No deviations or short-cuts are permitted unless guided by a Follow Me car.
- b) All taxi instructions are issued by ATC via radio communication.
- c) Assistance from a Follow Me car can be requested via ATC.
- d) Unless guided by a Follow Me car, aircraft are permitted to taxi only if permanent radio contact with ATC can be maintained during the entire taxiing manoeuvre.
- e) Where applicable, the pilot shall always adhere to the signals of the Follow Me car.
- f) Aircraft are permitted to taxi only at the indispensable minimum engine speed.

2.20.2.2 Procedures for arriving aircraft:

- a) All aircraft stands are allocated by the Airport Operations Department and communicated to pilots via ATC, together with the relevant taxi instructions.
- b) All aircraft entering apron from TWY "C" shall turn right for parking stands 2 to 22.
- c) Parking of aircraft at the aircraft stands is permitted only under the instructions of a marshaller.
- d) Marshalling service is under the responsibility of the Handling Agents.
- e) Aircrafts with outer engines placed at a distance more than 15 M from the aircraft centreline shall –if possible– taxi with the engines shut-down, while on TWY "A" and the apron TWY. In all other cases no engine shall be shut-down.
- f) All aircraft allocated to General Aviation apron shall be guided by Follow Me car.

2.20.2.3 Procedures at the stands:

- a) Pilots in command, through their crew and/or handling agents, are responsible for the safety of persons and/or vehicles on the apron during aircraft towing, refuelling, engine start and engine ground runs.
- b) If applicable, when the Auxiliary Power Unit (APU) is known to be unserviceable, the pilot in-command (through his nominated handling agent) shall request a stand suitable for the cross-bleed-start procedure prior to arrival.
- c) Opening of the thrust reverser panels is not allowed in the apron irrespective of wind velocity/heading. If necessary, the engines must be covered by the suitable engine (inlet/exhaust) covers.

2.20.3 Parking area for small aircraft (General aviation)

2.20.3.1 Due to limited parking facilities, in case of a short stay (2 hours or less), operators of inbound General Aviation (corporate/ business aviation, personal/ private travel) and Air Taxi flights must pre-notify the Airport Operations Department (through their nominated handling agent) about their ETA and duration of stay.

2.20.4 Parking area for helicopters

2.20.4.1 Helicopters shall be assigned a parking area in the apron which, pending on the AD traffic and parking availability, is specified each time by the AD operator.

2.20.5 Apron - taxiing during winter conditions

2.20.5.1 Aircraft de/anti-icing activities are performed under the responsibility of the aircraft operator and/or the Ground Handler. Aircraft de/anti-icing is allowed at all parking stands. Prior coordination with the Airport Operations Department is required.

2.20.6 Taxiing – limitations

2.20.6.1 Turning for back-track on RWY 16/34 is permitted only on RWY threshold markings.

2.20.6.2 TWY Link S is to be used only by:

- a) Code letter "A" and "B" aeroplanes (wingspan less than 24 M and main gear wheel span, less than 6 M).
- b) Helicopters with largest overall width (rotors turning) less than 14.4 M for ground taxiing and less than 10.1 M for air-taxiing.
- c) Aircraft with MTOW less than 20,000 KG.

2.20.6.3 Stop bars

- a) Taxiing across stop bars, is strictly prohibited when they are switched on.
- b) Clearances of any kind do not cover permission for taxiing across an operating stop bar.
- c) In case of a complete failure of the stop bar system, the information is broadcast on the ATIS and crossing of an operating stop bar is permitted only under the guidance of a Follow Me car.

2.20.6.4 Towing of aircraft

- a) Towing of aircraft requires the prior permission of ATC.
- b) If towing of an aircraft is advised by the Airport Operations Department for operational or safety reasons, the aircraft operator shall make all necessary arrangements and follow this instruction without delay. In this case, towed aircraft guidance should always be provided by a Follow Me car.
- c) During night hours or during Low Visibility Procedures (LVP) in operation (see LGTS AD 2.22.9), towed aircraft shall be illuminated.

2.20.7 School and training flights - technical test flights - use of runways

2.20.7.1 Successive landings, touch-and-go and take-offs of one and the same aircraft for training purposes, require prior approval by the ATC.

2.20.8 Helicopter traffic – limitation

NIL

2.20.9 Removal of disabled aircraft from runways

NIL

LGTS AD 2.21 NOISE ABATEMENT PROCEDURES

Part I

2.21.1 Noise abatement procedures for jet aeroplanes irrespective of weight, and for propeller and turboprop aeroplanes with MTOM of or above 11 000 KG

2.21.1.1 General provisions

NIL

2.21.1.2 Use of the runway system during the day period 0600-2200 (0500-2100)

NIL

2.21.1.3 Use of the runway system during the night period 2200-0600 (2100-0500)

NIL

2.21.1.4 Restrictions

NIL

2.21.1.5 Reporting

NIL

Part II

2.21.2 Noise abatement procedures for propeller and turboprop aeroplanes with MTOM below 11 000 KG

2.21.2.1 Use of the runway system during the day period 0600-2300 (0500-2200)

NIL

2.21.2.2 Use of the runway system during the night period 2300-0600 (2200-0500)

NIL

2.21.2.3 Reporting

NIL

Part III

2.21.3 Noise abatement procedures for helicopters

2.21.3.1 General provisions

NIL

2.21.3.2 Use of the runway system during the day period 0600-2300 (0500-2200)

NIL

2.21.3.3 Use of the runway system during the night period 2300-0600 (local time)

NIL

2.21.3.4 Reporting

NIL

LGTS AD 2.22. FLIGHT PROCEDURES

2.22.1 General

2.22.1.1 The responsibility for the provision of ATS in specific segments of ATS Routes within ATHINAI FIR/ HELLAS UIR in accordance with the airspace classification, has been delegated from MAKEDONIA ACC to MAKEDONIA APP unit, as described in **ENR 3** section (see also note in **ENR 1.1.1.5.2.3**).

2.22.1.2 Departing aircraft pilots shall request start up clearance when ready to start engines immediately and after aircraft doors are closed. When the expected delay is less than 15 MIN at the holding point aircraft shall be cleared to start engines immediately.

→ 2.22.1.3 Pilots landing or taking off at THESSALONIKI / MAKEDONIA Airport should exercise caution on the occurrence of wind shear resulting in tail winds at both ends of RWY16/34 due to the sea breeze effect.

→ 2.22.1.3.1 The above is most likely to appear - when light winds prevail - during summer and less likely during spring and autumn noon /afternoon hours.

→ 2.22.1.3.2 Because such a phenomenon can be hazardous to aircraft operations pilots are urged to report wind shear to MAKEDONIA TWR or MAKEDONIA APP as soon as possible.

→ 2.22.1.3.3 It is suggested that pilots report in the following format:

- a) A simple warning of the presence of wind shear even if no further information can be given.
- b) The altitude or altitude band where the wind shear was encountered.
- c) Details of the effect of the wind shear on the aircraft i.e. airspeed gain or loss, vertical speed tendency, e.t.c.

2.22.2 Runway in use

2.22.2.1 RWYs in use 10/28 and 16/34

2.22.2.2 Traffic Circuit

2.22.2.2.1 Aircraft should enter right hand traffic circuit for RWY 10 and RWY 16.

2.22.2.2.2 To avoid conflict with the traffic of the near by LGSD - SEDES MIL aerodrome (see **AD 1.6.20**), all aircraft unless otherwise instructed by ATC, shall:

- a) enter traffic circuits at an altitude of 1500 FT,
- b) join the downwind leg of the RWY in use approximately at its midpoint at an angle of 45°.

2.22.3 Procedures for IFR flights within MAKEDONIA TMA

2.22.3.1 See relevant LGTS charts – ICAO (**LGTS AD 2.24**).

2.22.4 Radar procedures within MAKEDONIA TMA

2.22.4.1 GENERAL INFORMATION

2.22.4.1.1 A radar unit operates as an integral part of Makedonia Approach Control Unit for the purpose of providing radar services according to ICAO Doc4444-ATM/501 and Doc 7030, within the areas listed in para. **LGTS AD 2.22.4.3** below. Many factors such as radar coverage, controller workload and equipment capabilities may affect these services in any specific case.

2.22.4.1.2 When radar services are provided, the radar controller will use the call sign "THESSALONIKI RADAR" in the R/T communications with all aircraft under approach control. A dedicated radar controller will use the call sign "THESSALONIKI DIRECTOR" in the provision of radar services to arriving aircraft, during the intermediate and final approach segments.

2.22.4.2 SHORT DESCRIPTION OF THE TERMINAL AREA SURVEILLANCE RADAR SYSTEM

2.22.4.2.1 Makedonia Approach Control Unit operates one PSR/MSSR Terminal Area Surveillance Radar (TAR) station. The station comprises of the Radar Head Site located at Perea hill (402815.04N 0225540.62E), 3.5 NM South West of the airport, and the Operational Site (OPS) located at the ATS building of LGTS - THESSALONIKI/ MAKEDONIA airport.

2.22.4.2.2 The instrumented (end of processing) range of the PSR is 60 NM and of the MSSR is 200 NM.

2.22.4.2.3 Surveillance information updates enable the display to be updated every 3.8 seconds.

2.22.4.2.4 Radar data derived from the HERAS long range radar network, become available as system tracks (PALLAS tracks), to the local TAR for further processing (transformation to common stereographic plane, comparison to the local TAR tracks, etc.) and presentation. In this way the defects in the TAR coverage (e.g. screening, cone of silence) do not hinder the provision of radar services to the maximum extent practical.

→ 2.22.4.3 THE APPLICATION OF RADAR CONTROL SERVICE

2.22.4.3.1 The radar control service is provided in areas of radar coverage, to aircraft operating IFR within controlled airspace. More explicitly:

- Within MAKEDONIA TMA (see **ENR 2.1.5.9**),
- Within the adjacent to the TMA AWYs (see **LGTS AD 2.22.1.1**)

2.22.4.3.2 The minimum horizontal radar separations are:

- a) 5 NM between radar tracks derived from TAR.
- b) 10 NM between system tracks (PALLAS) and between system tracks and TAR tracks.

2.22.4.3.3 The radar control service may include:

- a) Radar monitoring of arriving (including pilot interpreted approaches), departing and en-route traffic providing information and advise of any significant deviations, by aircraft from nominal flight paths as well as from the terms of their respective ATC clearances (cleared routes and levels), when appropriate.
- b) Radar vectoring of arriving traffic on to pilot interpreted final approach aids.
- c) Radar vectoring of arriving traffic to a point from which a visual approach can be completed.
- d) Radar vectoring to departing aircraft for the purpose of facilitating an expeditious and efficient departure flow and expediting climb to cruising level.
- e) Information to assist in the navigation of the aircraft.
- f) Information on observed areas of adverse weather.
- g) Assistance to aircraft in emergency.
- h) Radar separation between:
 - succeeding departing aircraft;
 - succeeding arriving aircraft; and
 - between departing and arriving aircraft.
- i) Collision hazard information according to the relevant provisions of ICAO Doc 4444-PANS/ATM.

2.22.4.3.3.1 However, the controller's suggestion for avoiding action does not relieve the pilot in command of his responsibility for continual vigilance to see and avoid the other aircraft.

2.22.4.3.3.2 Furthermore the controller may not be in the position to provide traffic information on aircraft not carrying a functioning transponder, due to known deficiencies of PSR.

2.22.4.4 LIMITATIONS TO THE PROVISION OF RADAR SERVICE.

2.22.4.4.1 Radar service to aircraft not equipped or with malfunctioning transponder and with radar cross-section (RCS):

- a) less than that of aircraft types ATR, T134, B717 is limited up to 35 NM from the airport,
- b) equal or more than that of aircraft types ATR, T134, B717 is extended up to 50 NM from the airport.

2.22.4.4.2 When TAR derived tracks are not available, radar monitoring based on system tracks (PALLAS), will be provided from 5500 FT and above.

2.22.4.5 EMERGENCY, HAZARDS AND EQUIPMENT FAILURE PROCEDURES

2.22.4.5.1 According to the relevant provisions of ICAO Doc 4444-ATM/501 and Doc 7030.

2.22.4.5.2 Additionally, in the event of a complete aircraft communication failure (RCF) and in absence of alternative ATC instructions the pilot in command should:

- a) if unable to execute a visual approach, continue by his own navigational means to execute the instrument approach he was vectored for;
- b) in case he was vectored for a visual approach and still in IMC, should proceed, by his own navigational means to MKR VOR/DME maintaining the last assigned altitude if higher or equal to 5500 FT (QNH) and execute MKR VOR/DME instrument approach as appropriate for the RWY in use.
- c) If he was vectored for a visual approach to RWY 28, he should proceed to MKR VOR/DME and execute the MKR VOR/DME for RWY 34 followed by a circling approach to RWY 28.

Attention: a) Aircraft below 5500 ft (QNH) must proceed to MKR VOR/DME, making an initial climbing turn to 5500 FT (QNH), taking into account high terrain and obstacles in the vicinity of the airport.
b) In case MKR VOR/DME is U/S, the pilot in command should use the TSL VOR/DME and execute the TSL VOR/DME approach for RWY 34 followed by a circling approach to RWY in use.

2.22.4.6 SSR TRANSPONDERS OPERATION AND PROCEDURES

2.22.4.6.1 Transponder operation during the flight.

2.22.4.6.1.1 The use of a functioning transponder with Codes 4096 capability on Mode A and automatic altitude transmission on Mode C within MAKEDONIA TMA is mandatory for all IFR and General Air Traffic VFR flights.

2.22.4.6.1.2 Pilots shall operate the transponder and select modes and codes in accordance with ATC instructions.

2.22.4.6.1.3 Unless otherwise instructed, the pilot of an IFR flight entering MAKEDONIA TMA shall maintain the most recently assigned code.

2.22.4.6.2 Transponder operation while on ground

2.22.4.6.2.1 While on ground the transponder shall be switched OFF in order to avoid undesirable transponder replies.

2.22.4.6.2.2 The transponder must be switched ON immediately after clearance for take-off.

2.22.4.7 TAR SYSTEM COVERAGE

2.22.4.7.1 See relevant AD 2-LGTS-VEC chart (TAR system coverage chart including the minimum altitudes for Radar vectoring) in **LGTS AD 2.24**.

2.22.5 Procedures for VFR flights within MAKEDONIA TMA

2.22.5.1 See relevant LGTS VFR routes chart (**LGTS AD 2.24**).

2.22.6 Procedures for VFR flights within THESSALONIKI MAKEDONIA CTR

2.22.6.1 VFR flights –including helicopters- shall contact initially on the respective Start-Up/Clearance Delivery frequency (see **LGTS AD 2.18**, call sign MAKEDONIA DELIVERY), to give the specifics of their flight (route, ETO, reporting points, ETA, etc) and to get a transponder code.

2.22.6.2 Special VFR clearances' for flights within THESSALONIKI MAKEDONIA CTR may be requested and will be given whenever traffic conditions permit. These flights are subject to the general conditions laid down for Special VFR flights in **ENR 1.2.4.6**. Aircraft may be given a radar service whilst within the CTR if, due to the traffic situation, ATC considers it advisable. It rests, however, with the pilot:

- a) to remain at all times in flight conditions which will enable him to determine his flight path and to keep clear of obstacles, and
- b) to ensure that he is able to comply with the relevant low flying restrictions of Rule 5 of the Rules of the Air Regulations.

2.22.6.3 Pilots must inform Radar Controller (see **LGTS AD 2.22.4** above) if compliance with the above entails a change of heading or height.

2.22.6.4 In addition to the exceptional circumstances under which a VFR flight at night is authorized (see **ENR 1.2.4.7**), the appropriate ATC unit of LGTS – THESSALONIKI/ MAKEDONIA may authorize a VFR flight at night strictly within MAKEDONIA TMA (see **ENR 2.1.5.9**) and only as a part of the JAR Night Qualification Course. The provisions remain the same as in the other exceptional circumstances, but the previous arrangement with the ATC unit must be made well in advance.

ATTENTION: Non-radio equipped aircraft flying under VFR are not permitted to land, take-off or operate in THESSALONIKI MAKEDONIA ATZ, unless special permission has been obtained from the MAKEDONIA TWR unit (TEL: +30 2310 985119 or +30 2310 472177).

2.22.7 Standard instrument departure procedure (SID)

2.22.7.1 See relevant LGTS SID charts (**LGTS AD 2.24**).

2.22.8 Procedures for departing aircraft

2.22.8.1 Start-up and ATC clearance

2.22.8.1.1 Pilots shall request clearance for starting the engines and ATC clearances on the respective Start-Up/ Clearance Delivery frequency (see **LGTS AD 2.18**, call sign MAKEDONIA DELIVERY).

2.22.8.1.2 Request for ATC clearance may take place at the earliest 10 minutes prior to engine start-up.

2.22.8.1.3 Upon receiving Start-Up and ATC clearance, pilots will be instructed to contact the appropriate TWR frequency (see **LGTS AD 2.18**, call sign MAKEDONIA TOWER) for Taxi clearance.

2.22.8.1.4 Pilots shall inform the ATC unit in the appropriate start-up/clearance delivery frequency, if unable to be ready to taxi within 10 minutes from start-up time.

2.22.8.1.5 When pilots request Taxi, they shall indicate their aircraft parking stand. Taxi-out clearance may only be requested if the pilot can perform the manoeuvre immediately.

2.22.8.2 Intersection Take-offs

2.22.8.2.1 Intersection take offs are permitted during aviation daytime only when visibility is not less than 5 KM.

2.22.8.2.2 An aircraft may be cleared to depart from an intersection take-off position:

- a) Upon request of the pilot and acceptance by the ATC, or
- b) If initiated by ATC and accepted by the pilot in command.

2.22.8.2.3 When a departure from an intersection take-off position is requested by the pilot, phraseology will be as follows:

«REQUEST DEPARTURE FROM RUNWAY (number), INTERSECTION (name of intersection)».

2.22.8.2.4 The aircraft operator / pilot in command shall ensure that the reduced declared distances for an intersection take-off are sufficient and in compliance with the aircraft operations regulations.

2.22.8.2.5 Pilots in command shall state their position when calling the TWR unit from a runway intersection when calling the tower for departure from a runway intersection, as follows:

«MAKEDONIA TOWER (aircraft call sign), AT THE INTERSECTION (name), READY FOR DEPARTURE RUNWAY (name) »

2.22.8.2.6 Declared distances in case of Intersection take-off are as follows:

RWY	TWY	Declared distances	Distances (M)
16	TWY B	TORA/TODA/ASDA	1885
	TWY C	TORA/TODA/ASDA	1335
34	TWY D	TORA/TODA/ASDA	1635
	TWY C	TORA/TODA/ASDA	840

2.22.8.3 Aeroplanes with outer engines placed at a distance more than 15 M from the aeroplane centreline shall –if possible– taxi with these engines set at idle, while on TWY “A” and the apron TWY.

2.22.9 **Low Visibility Procedures (LVP) Operations**

2.22.9.1 Runway 16 is equipped with ILS and is approved for CAT II operations.

2.22.9.2 The operations phase will be commenced when the RVR falls to 800 M or below or the ceiling is at or below 200 FT.

2.22.9.3 LVPs will be terminated when RVR is greater than 1400 M and ceiling is greater than 400 FT and a continuing improvement in these conditions is anticipated.

2.22.9.4 Aircraft landing on RWY 16 must exit either at the end of the runway or via taxi link D. When on TWY A, pilots shall report «Runway vacated» in order to denote that the aircraft is out of the ILS Localizer sensitive area.

2.22.9.5 Pilots will be informed by ATIS or RTF when LVPs are in operation and must request a CAT II approach on first contact with THESSALONIKI APP unit. When indicated RVR is below 400 M and/or ceiling is below 150 FT (height), pilots shall be informed that:

«INDICATED RVR VALUES (or CEILING or RVR VALUES AND CEILING) BELOW PUBLISHED MINIMA FOR CAT II OPERATIONS»

2.22.9.6 Pilots will not be refused permission to land or take off on “pilot’s discretion”, solely because of bad weather conditions.

2.22.9.7 When Low Visibility Procedures are in force a reduced landing rate can be expected due to the requirement for increased spacing between arriving aircraft. In addition to the prevailing weather conditions, such factors as equipment serviceability may also have an effect on actual landing rates. For information and planning purposes, the approximate landing rate during the operations phase is expected to be 6 arrivals per hour.

2.22.9.8 Guided take-off is not provided.

2.22.9.9 Taxiing is restricted to TWY A and TWY Links C and D, equipped with centre line lights as indicated on the aerodrome chart (see **LGTS AD 2.24**). Upon receiving Taxi clearance, aircraft must proceed only when a green centre line path is illuminated. In the event of failure of the TWY lights and/or stop-bars, aircraft are to taxi only on the direction of a Follow Me car. During operations phase, guidance of a Follow Me car can be provided upon request.

2.22.9.10 Intersection take-offs are not permitted.

2.22.9.11 During LVPs RWY 16 is used for landings and take-offs. It is however possible for an aircraft -due to performance requirements- to use RWY 34 for take-off on pilot's request and ATC's approval. Delays and, probably, a CTOT extension must be anticipated.

2.22.9.12 During LVP operations vehicles authorized to operate within the maneuvering area are kept to the minimum (i.e runway inspection, wildlife-bird hazards, emergency/hospital situations). For safe separation purposes, vehicles necessary to operate within the maneuvering area shall always hold position before (or abeam) a lighted visual aid of an intersection, which is at least two intersections away from the known position of a moving or stopped aircraft. In all cases crews of taxiing aircraft and vehicle drivers in the maneuvering area shall strictly comply with ATC instructions.

LGTS AD 2.23 ADDITIONAL INFORMATION

2.23.1 Bird concentrations in the vicinity of the airport

2.23.1.1 Bird concentration in AD vicinity. Caution is advised. See also **ENR 5.6**.

2.23.2 Instructions for the completion of the flight plan form

2.23.2.1 Due to use of an automated flight plan processing system and in order to avoid FPL rejections operators when filing a FPL with LGTS as ADEP or ADES are requested to start or end the route description with the first significant point to which a SID is ending or the last significant point from which a STAR is starting

2.23.2.2 Alternatively the AWY that connects the scheduled route with the TMA may be used. NAVAIDS designators and indications "DCT" or "DIRECT" in the route within TMA must be avoided.

2.23.2.3 All airline operators should send delay messages concerning delayed flights; otherwise expired flight plans will have to be filed again.

2.23.3 Significant Lighted Obstacles in the vicinity of THESSALONIKI/ MAKEDONIA aerodrome

IDENT. NUMBER	COORDINATES (WGS 84)		ELEV (M aMSL)	TYPE	INTENSITY
1	403018.0 N	0225831.9 E	21.35	Terrain	LOW
2	402933.2 N	0225915.4 E	110.90	Terrain	LOW
3	402920.3 N	0225937.9 E	143.60	Terrain	LOW
4	402906.8 N	0225919.8 E	141.53	Terrain	LOW
5	402826.2 N	0225950.4 E	190.40	Terrain	LOW
6	402729.7 N	0225931.6 E	237.30	Building	MEDIUM
7	402725.7 N	0230003.4 E	258.17	Terrain	MEDIUM
8	402744.8 N	0225856.8 E	217.50	Building	MEDIUM
9	402821.5 N	0225855.2 E	163.35	Terrain	LOW
10	402839.4 N	0225855.1 E	145.47	Terrain	LOW
11	402849.2 N	0225829.2 E	152.50	Building	LOW
12	402903.2 N	0225843.1 E	117.20	Terrain	LOW
13	402932.7 N	0225832.7 E	97.65	Terrain	LOW
14	402851.0 N	0230049.0 E	163.10	Terrain	MEDIUM
15	402910.5 N	0230141.1 E	113.35	Terrain	LOW
16	402905.7 N	0230207.9 E	131.00	Terrain	LOW
17	402735.1 N	0230400.2 E	409.40	Terrain	LOW
19	402725.3 N	0230024.0 E	260.40	Terrain	LOW
20	402831.3 N	0230152.7 E	173.80	Terrain	LOW
21	402747.5 N	0225713.3 E	200.15	Terrain	LOW
23	402815.04N	0225540.62E	186.70	RADAR DOME	LOW
24	402856.1 N	0225538.8 E	126.94	Terrain	LOW
25	402943.2 N	0225529.7 E	92.50	Water tower	LOW
26	402902.4 N	0225546.9 E	114.10	Terrain	LOW
27	402941.0 N	0225641.2 E	89.52	Building	LOW
28	402847.4 N	0225929.2 E	185.40	Building	LOW

LGTS AD 2.24 CHARTS RELATED TO AERODROME

Chart name	Date	Page
Aerodrome Chart – ICAO: - THESSALONIKI/ MAKEDONIA	15 AUG 19	AD 2-LGTS-ADC
Aircraft Parking/ Docking Chart – ICAO: -	NIL	NIL
Aerodrome Obstacle Chart (AOC) – ICAO, Type A: - RWY 10/28 / LGTS AOC 1	11 DEC 14	AD 2-LGTS-AOC A-1
Aerodrome Obstacle Chart (AOC) - ICAO, Type A: - RWY 16/34 / LGTS AOC 2	11 DEC 14	AD 2-LGTS-AOC A-2
Aerodrome Obstacle Chart (AOC) – ICAO, Type B: -	NIL	NIL
Precision Approach Terrain Chart – ICAO: - THESSALONIKI/ MAKEDONIA RWY 16	10 NOV 01	AD 2-LGTS-PATC-1
Instrument Approach Chart (IAC) – ICAO: - ILS CAT I RWY 16	21 AUG 14	AD 2-LGTS-IAC-1
Instrument Approach Chart (IAC) – ICAO: - - ILS CAT II RWY 16	21 AUG 14	AD 2-LGTS-IAC-2
Instrument Approach Chart (IAC) – ICAO: - MKR VOR/DME RWY 16	21 AUG 14	AD 2-LGTS-IAC-3
Instrument Approach Chart (IAC) – ICAO: - VORz RWY 34	01 MAY 14	AD 2-LGTS-IAC-6
Instrument Approach Chart (IAC) – ICAO: - VORy RWY 34	01 MAY 14	AD 2-LGTS-IAC-7
Instrument Approach Chart (IAC) - ICAO: - RNAV (GNSS) - Z RWY 34	18 JUL 19	AD 2-LGTS-IAC-10
Instrument Approach Chart (IAC) - ICAO: - RNAV (GNSS) - Y RWY 34	18 JUL 19	AD 2-LGTS-IAC-11
Visual Approach Chart (VAC) – ICAO:	NIL	NIL
Standard Departure Chart - Instrument (SID) – ICAO: - RWY 16 (TSL VOR/DME)	21 AUG 14	AD 2-LGTS-SID-1
Standard Departure Chart - Instrument (SID) – ICAO: - RWY 34 (TSL VOR/DME)	21 AUG 14	AD 2-LGTS-SID-2
Standard Departure Chart - Instrument (SID) – ICAO: - RWY 16 (MKR VOR/DME)	21 AUG 14	AD 2-LGTS-SID-7
Standard Departure Chart - Instrument (SID) – ICAO: - RWY 34 (MKR VOR/DME)	21 AUG 14	AD 2-LGTS-SID-8
Standard Arrival Chart - Instrument (STAR) – ICAO: - RWY 16 (MKR VOR/DME)	06 MAR 14	AD 2-LGTS-STAR-1
Standard Arrival Chart - Instrument (STAR) – ICAO: - RWY 16 (TSL VOR/DME)	02 FEB 17	AD 2-LGTS-STAR-2
Standard Arrival Chart - Instrument (STAR) – ICAO: - RWY 34 (MKR VOR/DME)	06 MAR 14	AD 2-LGTS-STAR-3
Standard Arrival Chart - Instrument (STAR) – ICAO: - RWY 34 (TSL VOR/DME)	02 FEB 17	AD 2-LGTS-STAR-4
Terminal Area Chart - ICAO - VFR routes: - LGTS VFR	23 JUL 15	AD 2-LGTS-VFR
TAR System Coverage Chart – VEC area: - LGTS VEC AREA	06 MAR 14	AD 2-LGTS-VEC
ATC Surveillance Minimum Altitude Chart (ASMAC) – ICAO:	NIL	NIL