AD 2. AERODROMES

OIMM AD 2.1 AERODROME LOCATION INDICATOR AND NAME

OIMM - MASHHAD / SHAHID HASHEMI NEJAD International

OIMM AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	*ARP coordinates and site at AD*	361403N 0593842E 312° MAG / 1562 M from THR RWY 31R
2	*Direction and distance from (city)*	E, 1.6 NM from Mashhad
3	*Elevation* *Reference mean high temperature* *Reference mean low temperature*	3266 FT 36°C 0°C
4	*Geoid undulation at AD ELEV PSN*	-55 FT
5	*MAG VAR / Annual change*	4° E (2016) / Information not available
6	*AD Administration, address, telephone, telefax, telex, AFS*	Iran Airports & Air Navigation Company (IAC) Mashhad / Shahid Hashemi Nejad International Airport Postal code: 9165968844 Mashhad - Islamic Republic of Iran Tel: +9851 - 33100000, 33108000 Telefax: +9851 - 33400042 Telex: NIL AFS: OIMMYDYX http://mashhad.airport.ir
7	*Types of traffic permitted (IFR/VFR)*	IFR/VFR
8	*Remarks*	NIL

OIMM AD 2.3 OPERATIONAL HOURS

1	*AD Administration*	AD administrative 0330 - 1200 except Thursdays and Fridays and official holidays
2	*Customs and immigration*	H24
3	*Health and sanitation*	H24
4	*AIS Briefing Office*	NIL
5	*ATS Reporting Office (ARO)*	NIL
6	*MET Briefing Office*	NIL
7	*ATS*	H24
8	*Fuelling*	H24
9	*Handling*	H24
10	*Security*	H24
11	*De-icing*	H24
12	*Remarks*	NIL

OIMM AD 2.4 HANDLING SERVICES AND FACILITIES

1	*Cargo - handling facilities*	Available by main carrier, Saman air services and Hamrah Kousha Kish airport service
2	*Fuel / oil types*	Jet A1 - 100LL
3	*Fuelling facilities/capacity*	Jet A1 : 4 trucks 20000 litres, 1 trucks 60000 litres, 25 litres/sec 2 trucks 45000 litres, 1 trucks 80000 litres, 45 litres/sec 1 truck 25000 litres, 18 litres/sec 100LL : Available in 200 litres barrel
4	*De - icing facilities*	Available by Saman and Arman Air Services and Hamrah Kousha Kish airport services on TWY C and by IRAN AIR on parking stands
5	*Hanger space for visiting aircraft*	Asseman, Taban, Mahan
6	*Repair facilities for visiting aircraft*	Cessna aero club, MD 80 series, F100
7	*Remarks*	NIL

OIMM AD 2.5 PASSENGER FACILITIES

1	*Hotels*	Hotels in vicinity
2	*Restaurants*	Restaurant and buffet
3	*Transportation*	Taxis and subway
4	*Medical facilities*	First aid available. Doctors and ambulance at AD, Hospital in the city
5	*Bank and Post Office*	bank at terminal 2 and post office are available
6	*Tourist Office*	Available at AD
7	*Remarks*	NIL

OIMM AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	*AD category for fire fighting*	CAT 8
2	*Rescue equipment*	Available in accordance with AD category for firefighting
3	*Capability for removal of disabled aircraft*	Heavy duty crane and tow car/truck available (suitable for B747)
4	*Remarks*	NIL

OIMM AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	*Types of clearing equipment*	1 tractor, 6 blades fitted into trucks, 1 urea spreader combined with bladed truck, 2 snow blowers,2 graders,1 Surface Friction Tester (SFT)
2	*Clearance priorities*	1- RWY 13L/31R 2- TWY F and A 3- Apron 4- TWY C, C1, C2 and D 5- TWY J, G, B and E 6- RWY 13R/31L 7- TWY H, M, C3, and K
3	*Remarks*	NIL

OIMM AD 2.8 APRONS, TAXIWAYS

1	*designation, surface and strength of aprons*	Surface: Concrete Strength: PCN 65/R/B/X/T
2	*designation, width, surface and strength of taxiways*	Width: All TWY 30 M except TWY K is 25 M, TWY G is 35 M and TWY H & D are 85 M. Surface: Surface: TWYs A, C, C1, C2, C3, D, K and L asphalt and TWYs B, E, J, M, N, P and Q concrete. Strength: TWY A, C, C1, C2, C3, D and K PCN: 60/F/B/X/T, And TWY B, E, J, Q PCN: 70/R/B/W/T. for other TWY information not available
3	*location and elevation of altimeter checkpoints*	NIL
4	*location of VOR checkpoints*	Coordinates:361448.5N 0593731.1E, on TWY H Radial:303°; Distance:1.5NM, Site ELEV 3232 FT Coordinates:361317.9N 0593918.0E, on TWY C2 Radial:155°; Distance:0.6NM, Site ELEV 3270 FT
5	*position of INS checkpoints*	NIL
6	*Remarks*	TWY L, M, N and P AVBL for military necessity

OIMM AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	*Use of aircraft stand ID signs,* *TWY guide lines and parking guidance system of aircraft stands*	Taxing guidance signs at all intersections with TWY and RWY and at all holding positions Guide lines at apron Nose-in guidance at aircraft stand
2	*RWY and TWY markings and LGT*	RWY marking: Designation, THR, TDZ, centre line, edge & RWY end at all holding positions RWY lighting: See OIMM AD 2.14 TWY marking: Centre line, edge, holding position at all TWY/RWY intersection marked TWY lighting: See OIMM AD 2.15
3	*Stop bars*	NIL
4	*Remarks*	NIL

OIMM AD 2.10 AERODROME OBSTACLES

In approach / TKOF areas			*In circling area and at AD*		*Remarks*
1			2		3
RWY/Area affected	*Obstacle type Elevation/ HGT Markings/LGT*	*Coordinates*	*Obstacle type Elevation / HGT Markings/LGT*	*Coordinates*	
a	b	c	a	b	
13L/R / APCH 31R/L / TKOF	Grove 65 FT AGL NIL	beyond 400 M from THR RWY 13L/R	TWR building 3284 FT AMSL LGTD	361343N 0593831E	140M left side of RWY 13L Centerline and 1981M from THR RWY 13L
13L/R / APCH 31R/L / TKOF	Building 3715 FT AMSL NIL	361706N 0593342E	PAR antenna 3282 FT AMSL NIL	361412N 0593836E	
13L/R / APCH	Building 3681 FT AMSL NIL	361659N 0593404E	Building 3400 FT AMSL NIL	361630N 0593706E	
13L / APCH 31R / TKOF	Building 3429 FT AMSL NIL	361619N 0593611E	Building 3445 FT AMSL NIL	361633N 0593637E	
13L / APCH 31R / TKOF	Building antenna 3461 FT AMSL NIL	361619N 0593611E	Building 3465 FT AMSL NIL	361631N 0593621E	
13L / APCH 31R / TKOF	Building 3457 FT AMSL NIL	361641N 0593555E	Building 3286 FT AMSL NIL	361427N 0593739E	
13L / APCH 31R / TKOF	Tower crane 3533 FT AMSL NIL	361638N 0593559E	COM Antenna 3395 FT AMSL NIL	361351N 0593816E	
31L / APCH 13R / TKOF	Mast (BTS) 3379 FT AMSL NIL	361229N 0594010E	Mast (BTS) 3421 FT AMSL NIL	361256N 0593909E	
			Mast (BTS) 3399 FT AMSL NIL	361228N 0594006E	
			Water Tank 3326 FT AMSL NIL	361425N 0593738E	
			Karavan 3262 FT AMSL NIL	361445N 0593753E	
			GSM antenna 3410 FT AMSL NIL	361510N 0593751E	675m from RWY 13L CL 197m AGL
			Mast (RVR sensor) 3263 FT AMSL NIL	361334N 0593910E	
			Building 3478 FT AMSL NIL	361358N 0593712E	

Cont.

In approach / TKOF areas			*In circling area and at AD*		*Remarks*
1			2		3
RWY/Area affected	*Obstacle type Elevation/ HGT Markings/LGT*	*Coordinates*	*Obstacle type Elevation / HGT Markings/LGT*	*Coordinates*	
a	b	c	a	b	
			Building 3289 FT AMSL NIL	361429N 0593740E	
			Building 3523 FT AMSL NIL	361509N 0593553E	
			Building 3467 FT AMSL NIL	361627N 0593624E	
			Building 3476 FT AMSL NIL	361632N 0593625E	
			Building 3492 FT AMSL NIL	361634N 0593710E	
			Building crane 3536 FT AMSL NIL	361634N 0593711E	
			GP antenna 3261 FT AMSL NIL	361331N 0593912E	
			Building 3244 FT AMSL NIL	361433N 0593739E	
			Building 3243 FT AMSL NIL	361434N 0593737E	
			Tree 3261 FT AMSL NIL	361445N 0593723E	
			LOC antenna 3225 FT AMSL NIL	361500N 0593724E	
Cont.					

OIMM AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	*Associated MET Office*	Mashhad
2	*Hours of service* *MET Office outside hours*	H24 --
3	*Office responsible for TAF preparation* *Periods of validity*	Tehran MET office Intervals of 6 HR with 30 HR validity
4	*Type of landing forecast* *Interval of issuance*	-- Intervals of 1 HR between 0400 until 1500 UTC
5	*Briefing/consultation provided*	In person and by telephone: +9851 - 33400272 , 33400405
6	*Flight documentation* *Language(s) used*	Information not available English
7	*Charts and other information available for briefing or consultation*	Wind and temperature data for flight levels 180, 240, 300, 340, 390. SWL and SWM.
8	*Supplementary equipment available for providing information*	NIL
9	*ATS units provided with information*	Mashhad TWR Mashhad APP
10	*Additional information (limitation of service, etc.)*	NIL

OIMM AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	*TRUE BRG*	*Dimensions of RWY (M)*	*Strength(PCN) and surface of RWY and SWY*	*THR coordinates THR geoid undulation*	*THR elevation and highest elevation of TDZ of precision APP RWY*
1	2	3	4	5	6
13L	133.6°GEO	3810 x 45	60/F/B/X/T Asphalt	361451.71N 0593735.23E GUND –55FT	THR 3228 FT
31R	313.6°GEO	3810 x 45	60/F/B/X/T Asphalt	361326.45N 0593925.71E GUND –55FT	THR 3260 FT
13R	133.59°GEO	3920 x 45	60/F/B/X/T Asphalt	361448.01N 0593727.83E GUND –55FT	THR 3234 FT
31L	313.61°GEO	3920 x 45	60/F/B/X/T Asphalt	361320.29N 0593921.51E GUND –55FT	THR 3266 FT

Slope of RWY - SWY	*SWY dimensions (M)*	*CWY dimensions (M)*	*Strip dimensions (M)*	*RESA*	*OFZ*
7	8	9	10	11	12
0.25 %	302 x 45	302 x 150	NIL	NIL	NIL
0.25 %	303 x 45	303 x 150	NIL	NIL	NIL
0.25 %	300 x 45	300 x 150	NIL	NIL	NIL
0.25 %	296 x 45	296 x 150	NIL	NIL	NIL

Remarks
13
- Distance between parallel RWY centrelines is 689 FT (210M). - AD reference code : 4E

OIMM AD 2.13 DECLARED DISTANCES

RWY Designator	*TORA(M)*	*TODA(M)*	*ASDA(M)*	*LDA(M)*	*Remarks*
1	2	3	4	5	6
13L	3810	4112	4112	3810	NIL
31R	3810	4113	4113	3810	NIL
13R	3920	4220	4220	3920	NIL
31L	3920	4216	4216	3920	NIL

OIMM AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	*APCH LGT type LEN INTST*	*THR LGT colour WBAR*	*VASIS (MEHT) PAPI*	*TDZ LGT LEN*	*RWY Centre Line LGT LEN, spacing, colour INTST*	*RWY edge LGT LEN, spacing colour, INTST*	*RWY End LGT colour WBAR*	*SWY LGT LEN colour*	*Remarks*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
13L	*SALS 300M LIL*	*Green*	*PAPI Left /3.2 ° 66 FT*	*NIL*	*NIL*	*3810 M 60 M White, LIH*	*Red*	*302M RED*	*NIL*
31R	*PALS CAT I 800M LIH*	*Green*	*PAPI Left /3 ° 66 FT*	*NIL*	*NIL*	*3810 M 60 M White, LIH*	*Red*	*303M RED*	*NIL*
13R	*SALS 300M LIL*	*Green*	*PAPI Left /3.2 ° 61 FT*	*NIL*	*NIL*	*3920 M 60 M White, LIH*	*Red*	*300M RED*	*NIL*
31L	*SALS 420M LIH*	*Green*	*PAPI Left /3 ° 60 FT*	*NIL*	*NIL*	*3920 M 60 M White, LIH*	*Red*	*296M RED*	*NIL*

OIMM AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	*ABN location, characteristics and hours of operation*	PSN: 361336N 0593835E HGT 40FT, FLG G and W, 20 flashes per minutes. HN and during low visibility
2	*LDI location and LGT* *Anemometer location and LGT*	NIL
3	*TWY edge and centre line lighting*	Edge: All TWYs except TWYs C3, E, K, L, M, N, P Centre line: NIL
4	*Secondary power supply/switch-over time*	Available Switch-over time: 10-15 sec
5	*Remarks*	NIL

OIMM AD 2.16 HELICOPTER LANDING AREA

NIL

OIMM AD 2.17 ATS AIRSPACE

1	*airspace designation and geographical coordinates*	Mashhad CTR: A circle, radius 30 NM centred at 361352.2N 0593901.9E (DVOR/DME)	Mashhad ATZ: A circle, radius 7 NM centred at 361403N 0593842E (ARP)
2	*Vertical limits*	Lower limit: GND Upper limit: FL 125	Lower limit: GND Upper limit: 6500 FT AMSL
3	*Airspace classification*	D	
4	*ATS unit call sign* *Language(s)*	Mashhad Radar English / Persian	Mashhad TWR English / Persian
5	*Transition altitude*	8000 FT AMSL	
6	*hour of applicability*	H24	
7	*Remarks*	NIL	

OIMM AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	*Call sign*	*Frequency*	*Hours of operation*	*Remarks*
1	2	3	4	5
RADAR	Mashhad Radar	127.300 MHZ	H24	Primary frequency
		121.500 MHZ	H24	Emergency frequency
		119.500 MHZ	H24	Secondary frequency
		353.800 MHZ	H24	Military aircraft
APP	Mashhad Approach	127.300 MHZ	H24	Primary frequency
		121.500 MHZ	H24	Emergency frequency
		119.500 MHZ	H24	Secondary frequency
		353.800 MHZ	H24	Military aircraft
TWR	Mashhad Tower	118.100 MHZ	H24	Primary frequency
		119.500 MHZ	H24	Secondary frequency
		257.800 MHZ	H24	UDF, Military aircraft
		243.000 MHZ	H24	Military / Emergency
		121.900 MHZ	H24	For Ground Movement
GND	Mashhad Ground	121.700 MHZ	03:30-20:30	Military aircraft
		275.800 MHZ	03:30-20:30	
ATIS (INFO)	Mashhad Information	126.400 MHZ	H24	

OIMM AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, CAT of ILS (For VOR/ILS give VAR)	*ID*	*Frequency*	*Hours of operation*	*Site of transmitting antenna coordinates*	*Elevation of DME transmitting antenna*	*Remarks*
1	2	3	4	5	6	7
NDB	MSD	385 KHZ	H24	361342.7N 0593816.4E		
DVOR/DME (4° E/2016)	MSD	114.000 MHZ CH 87X	H24	361352.2N 0593902.0E	3251 FT	
TACAN	MSD	CH 56X	H24	361359.2N 0593854.6E	3246 FT	IRIAF
LOC 31R ILS CAT I (4° E/2016)	IMSD	109.900 MHZ	H24	361500.4N 0593723.9E		Remote indicator available for ILS.
ILS GP RWY 31R		333.800 MHZ	H24	361331.4N 0593912.0E		3° ,RDH 70 FT
ILS DME RWY 31R	IMSD	CH 36X	H24	361331.4N 0593912.0E	3261 FT	

TACAN unusable in the FLW area:

1- 200°- 240° beyond 10 NM, BLW 12000 FT AMSL

2- 240°- 280° beyond 20 NM, BLW 15000 FT AMSL

DVOR/DME unusable in counter clockwise direction beyond 40 DME in the FLW area:

- 360°- 310° BLW 12000 FT AMSL
- 310°- 290° BLW 13000 FT AMSL
- 290°- 260° BLW 16000 FT AMSL
- 260°- 200° BLW 17000 FT AMSL
- 200°- 170° BLW 13000 FT AMSL
- 170°- 140° BLW 9000 FT AMSL
- 140°- 100° BLW 7000 FT AMSL
- 100°- 060° BLW 10000 FT AMSL
- 060°- 360° BLW 12000 FT AMSL

OIMM AD 2.20 LOCAL TRAFFIC REGULATIONS

1- The use of radar presentation system installed in control tower of Mashhad/Shahid Hashemi Nejad Airport is only authorized to perform the following functions:

a) Reducing verbal coordination between tower and approach.

b) Providing information to the tower controller about the sequencing of arriving and departing traffic.

2- Pilots have to taxi with idle power in apron.

3- Ground Movement Control clears aircraft to the runway holding position of runway 13R/31L.

Pilots shall stop at all runway holding position.

4- Start-up Procedures:

- Start-up procedures refer to ENR 1.9 and ENR 1.10
- Pilots are to report their aircraft type, stand number, QNH and the identification letter of the received ATIS information on first contact with Ground movement control.

5- Push back procedures:

- All parked aircraft at south stands of apron are required to be pushed back before start up.
- Pushback approval must be obtained from Ground movement control and the approval includes permission to start engines.
- Before flight crew calls for push-back, they must ensure that the tug driver is in the tug, ready to push, and able to listen to the communication with ATC.

6- Aircraft de-icing/anti-icing procedures:

a) De-icing/anti-icing is an off-stand service, except:

- Stands 101 and 103 which are provided by Iran air service provider;
- Stands 101 and 103 for heavy aircraft; and
- Elsewhere in case of approval by ATC unit.

b) De-icing/anti- icing service will be done in the following areas and according to airliners service providers:

De-icing service provider	De-icing/anti-icing area
Saman air services	TWY C and C1
Arman air service	
Hamrah Kousha Kish airport service	

7- Use of Runways

In weather conditions when the tail wind component is not greater than 8 knots on the main Runway 31R, this runway will normally be used in preference to Runway 13L.

8- Engine check (high power)

- In the apron areas minimum engine power shall be used as far as possible;
- For doing high engine check aircraft should be moved to TWY C3 headed toward TWY C

9- Back up frequency

If the designated frequencies were unavailable, the following frequencies will be available instead:

Service designation	*Call sign*	*channel(s)*	*Hours of operation*	*Back up channel(s)*
1	2	3	4	5
RADAR	Mashhad Radar	← 127.300 MHZ 353.800 MHZ (CH6)	H24 H24	‖ 119.500 MHZ 257.800 MHZ (CH2)
APP	Mashhad Approach	← 127.300 MHZ 353.800 MHZ (CH6)	H24 H24	‖ 119.500 MHZ 257.800 MHZ (CH2)
TWR	Mashhad Tower	118.100 MHZ 257.800 MHZ (CH2)	H24 H24	119.500 MHZ 353.800 MHZ (CH6)
GND	Mashhad Ground	121.700 MHZ	03:30-20:30	121.900 MHZ

10- Isolated area

Isolated aircraft parking position located at Taxiway C1.

OIMM AD 2.21 NOISE ABATEMENT PROCEDURES

Due to close proximity to residential areas, intersection take off is not authorized for RWY 31R/L.

OIMM AD 2.22 FLIGHT PROCEDURES

1- Traffic pattern is defined as below:

a) For fighter and heavy fix wing ACFT 5000 feet,

b) For other fix wing ACFT 4500 feet and

c) For helicopter 4000 feet.

VFR Traffics are not authorized to operate on right-hand pattern RWY 13L/R or left-hand pattern RWY 31L/R, except Air force JET ACFT and Aero club ACFT at or above 5500 ft.

2- Approach Procedures:

I. Speed control: pilots should expect the following speed restrictions:

- Between 60 NM and 30 NM from MSD DME and between FL245 and FL150 maximum IAS 280 KT;

- Within 30 NM from MSD DME and at or below FL150 maximum IAS 220 KT;
- 180 KT on base leg / closing heading to final approach;
- Between 180 KT and 160 KT when established on final approach and thereafter 160 KT to 4 NM to touchdown.

Note. These speeds are for ATC purposes and are mandatory and have to be flown as accurately as possible. If unable to comply inform ATC and state what speed to be used.

II. Arriving traffic should expect the following IAP when vectored for approach:

- If runway-in-use is 31R; ILS 2 (or in the event of ILS failure, for VOR/DME 3);
- If runway-in-use is 31L; VOR/DME 3;
- If runway-in-use is 13L/R; VOR/DME 6;

III. Missed approach: flight crew must follow missed approach procedures which are detailed on the appropriate instrument approach charts except otherwise is instructed by ATC.

OIMM AD 2.23 ADDITIONAL INFORMATION

1- Intensive birds' accumulation exists in the vicinity and particularly in west of AD.

2- Strolling animals exist on the movement area.

3- Heavy aircraft is permitted to make 180° turn only at the end of RWY in use.

4- Net barrier:
RWY 13L: PSN at SWY RWY 13L, 100 M before THR RWY 31R
RWY 13R: PSN at SWY RWY 13R, 91 M before THR RWY 31L
They will be engaged by prior arrangement and height are 20 FT.

5- Hook barriers:
RWY 13L:
PSN at SWY RWY 13L, 88 M before THR RWY 31R, height is 0.4 FT AGL (already engaged).
Operational facilities are located both sides of RWY, 31 M from RWY C/L (height 1.4 FT AGL) and 46 M from RWY C/L (height 1.7 FT).
RWY 13R:

a) PSN 820 M from THR RWY 13R. height is 0.4 FT AGL. It will be engaged by prior arrangement. Operational facilities are located both sides of RWY, 31 M from RWY C/L, height 1.4 FT and other equipment at 46 M from RWY C/L, height 3.3 FT;

b) PSN at SWY RWY 13R, 80 M before THR RWY 31L, height 0.4 FT AGL (already engaged). Operational facilities are located both sides of RWY, 31 M from RWY C/L, height 1.4 FT and 46 M from RWY C/L (height 1.7 FT AGL);

OIMM AD 2.24 CHARTS RELATED TO AN AERODROME