AD 2 AERODROMES

RJSM AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJSM - MISAWA

RJSM AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	404211N 1412206E
2	Direction and distance from (city)	3nm NE of Misawa Railway Station
3	Elevation/ Reference temperature	119ft / -
4	Geoid undulation at AD ELEV PSN	Nil
5	MAG VAR/ Annual change	8.7°W(2016)/ 0.0°W
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	USAF 35 OSS/OSAA Unit 5011 APO AP 96319-5011 Tel: 0176-77-1110 ext.226.3110 Fax: 0176-77-1110 ext.226.9145 e-mail: 35oss.amops@us.af.mil www.misawa.af.mil
7	Types of traffic permitted(IFR/VFR)	IFR/VFR
8	Remarks	Misawa Airport Office(Civil Aviation Bureau) Shimotazawa, Misawa, Aomori Prefecture TEL:0176-53-2461, 53-2463

RJSM AD 2.3 OPERATIONAL HOURS

1	AD Administration	H24
2	Customs and immigration	On request Customs: 0178-33-0423 Immigration: 017-777-2939
3	Health and sanitation	Quarantine(human): On request(017-722-7687) Quarantine(animal, plant): Nil
4	AIS Briefing Office	Nil
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24(SENDAI)
7	ATS	H24
8	Fuelling	Nil
9	Handling	Nil
10	Security	Nil
11	De-icing	Nil
12	Remarks	HR of service at CAB OPS section 2330 - 1100

RJSM AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	Nil	
2	Fuel/ oil types	JET A-1 (For CIV ACFT) , JET A-1 PLUS (For JSDF ACFT)	
3	Fuelling facilities/ capacity	Fuel truck refueling(For CIV ACFT)	
4	De-icing facilities	Nil	
5	Hangar space for visiting aircraft	Nil	
6	Repair facilities for visiting aircraft	Nil	
7	Remarks	Nil	

RJSM AD 2.5 PASSENGER FACILITIES

1	Hotels	In Misawa city	
2	Restaurants	At the Airport, not continuous	
3	Transportation	Buses, Taxis and Rent-a-car	
4	Medical facilities	Hospitals in Misawa city	
5	Bank and Post Office	In Misawa city	
6	Tourist Office	In Misawa city	
7	Remarks	Nil	

RJSM AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 10
2	Rescue equipment	(CAB) Emergency medical equipments conveyance truck x 1 Lighting power supply truck x 1
3	Capability for removal of disabled aircraft	Available via GOJ IAW Support Agreements
4	Remarks	Nil

RJSM AD 2.7 SEASONAL AVAILABILITY-CLEARING

1	Types of clearing equipment	Snow remove equipments *(CAB): Rotary x 1, Loader x 2, Motor grader x 1, Anti-freezing sprayer x 1, Dump trucks, etc.
2	Clearance priorities	Nil
3	Remarks	*For Civil apron and TWY A8

RJSM AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	Civil apron : Surface : Cement Concrete, Strength : PCN 50/R/C/X/T				
2	Taxiway width, surface and strength	A: Width 23m A1: Width 96m A2: Width 66m A3: Width 23m A4: Width 23m A5: Width 55m B1: Width 91m B2: Width 23m B3: Width 23m B5: Width 23m B5: Width 23m B7: Width 23m Civil TWY A8: Width Surface: Cement Co	23m Increte, Strength: P	Strength: PCN 54/R/B/W/T Strength: PCN 71/R/A/W/T Strength: PCN 72/R/B/W/T Strength: PCN 45/R/B/W/T Strength: PCN 65/F/C/W/T Strength: PCN 42/R/B/W/T Strength: PCN 53/R/B/W/T Strength: PCN 44/R/C/W/T Strength: PCN 38/R/C/W/T Strength: PCN 38/R/C/W/T Strength: PCN 23/R/C/W/T Strength: PCN 23/R/C/W/T		
3	ACL and elevation	Not available				
4	VOR checkpoints	TWY A1, A2, B1				
5	INS checkpoints	Nil				
6	Remarks	Nil				

RJSM 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	Nil
2	RWY and TWY markings and LGT	RWY: RWY10/28 (Marking): RWY designation, RWY CL, RWY THR, RWY THR stripe, Fixed DIST, TDZ, RWY Side stripe, RWY lead-on/lead-off lines, RWY Shoulder (LGT): RTHL, REDL, RENL, RWY DIST marker LGT, Arresting gear marker (AGM), RWY guard LGT (elev WIG-WAG) TWY: ALL TWY (EXC A8) (Marking): TWY side stripe, TWY CL (LGT): TWY edge LGT, TWY end LGT, Taxiing Guidance Sign Civil TWY: A8 (Marking): TWY side stripe, TWY CL (LGT): TWY edge LGT, TWY CL LGT
3	Stop bars	Nil
4	Remarks	Civil apron: (LGT): Apron flood LGT

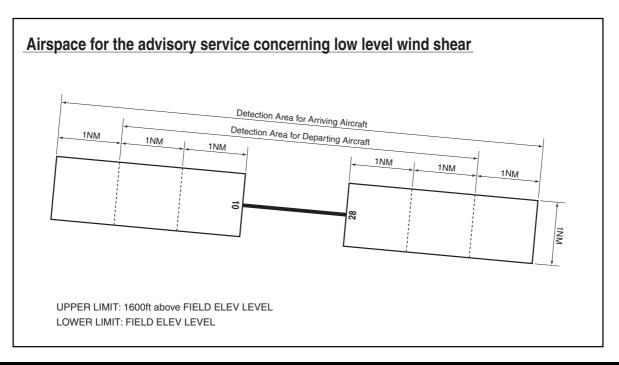
RJSM AD 2.10 AERODROME OBSTACLES

In circling area and at AD

Obstacle type	Coordinates	Elevation	Markings/ LGT	Remarks
Airfield Beacon/Water Tower	404115.9N 1412138.3E	293FT MSL		

RJSM AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	SENDAI
2	Hours of service	H24(SENDAI)
	MET Office outside hours	
3	Office responsible for TAF preparation	Nil
	Periods of validity	
4	Trend forecast	Nil
	Interval of issuance	
5	Briefing/ consultation provided	Briefing is available upon inquiry at SENDAI
6	Flight documentation	С
	Language(s) used	En
7	Charts and other information available	S ₆ , U ₈₅ , U ₇ , U ₅ , U ₃ , U ₂₅ , U ₂ /T _r , P _S , P ₅ , P ₃ , P ₂₅ , P _{SWE} , P _{SWF} , P _{SWG} , P _{SWI} ,
	for briefing or consultation	P _{SWM} , P _{SW} (domestic), E, C, W _E , W _F , W _G , W _I , W,N
8	Supplementary equipment	Doppler Radar for Airport Weather (See below figure)
	available for providing information	
9	ATS units provided with information	TWR, APP, ATIS
10	Additional information (limitation of	Observation is made by the Ministry of Defence.
	service, etc.)	



RJSM AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	Y IRIIF BRG		THR coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY	
1	1 2 3 4		4	5	6
10	to be issued later to be issued later	3050×45 3050×45	PCN 47/R/B/W/T Asphalt Concrete PCN 47/R/B/W/T Asphalt Concrete	404215.991N 1412101.361E 404207.194N 1412310.850E	THR 114FT TDZ 116FT THR 94FT TDZ 98FT
	Slope of RV	VY	Strip Dimensions(M)	Ren	narks
7		7 10 12		12	
from the crown of the RWY -0.26 from the crown of the RWY -0.148			3650×600 3650×600	Nil	

RJSM AD 2.13 DECLARED DISTANCES

	TORA	TODA	ASDA	LDA	
RWY Designator	(m)	(m)	(m)	(m)	Remarks
1	2	3	4	5	6

RJSM AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type LEN INTST	RTHL Color WBAR	PAPI (VASIS) Angle DIST FM THR MEHT	RTZL LEN	RCLL LEN Spacing Color INTST	REDL LEN Spacing Color INTST	RENL Color WBAR	STWL LEN Color
1	2	3	4	5	6	7	8	9
10	ALSF-1 900m	Green Green	PAPI 3.00°/Left 947ft	Nil	Nil	2440m 60m coded color Yellow/White LIH	Red Red	Nil
28	ALSF-1 900m	Green Green	PAPI 2.37°/Left 1113ft	Nil	Nil	2440m 60m coded color Yellow/White LIH	Red Red	Nil
				Remarks				
	10							
	RWY28 PAPI and ILS GS not coincidental. PAPI for RWY28 unuse beyond 8° right of RWY CL.							

RJSM AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: 404108N/1412145E , White/Green EV10sec, HN&HO
2	LDI location and LGT Anemometer location and LGT	Nil
3	TWY edge and centerline lighting	TWY edge LGT for A8:AVBL TWY CL LGT for A8:AVBL
4	Secondary power supply/ switch-over time	Nil
5	Remarks	Nil

RJSM AD 2.16 HELICOPTER LANDING AREA

Nil

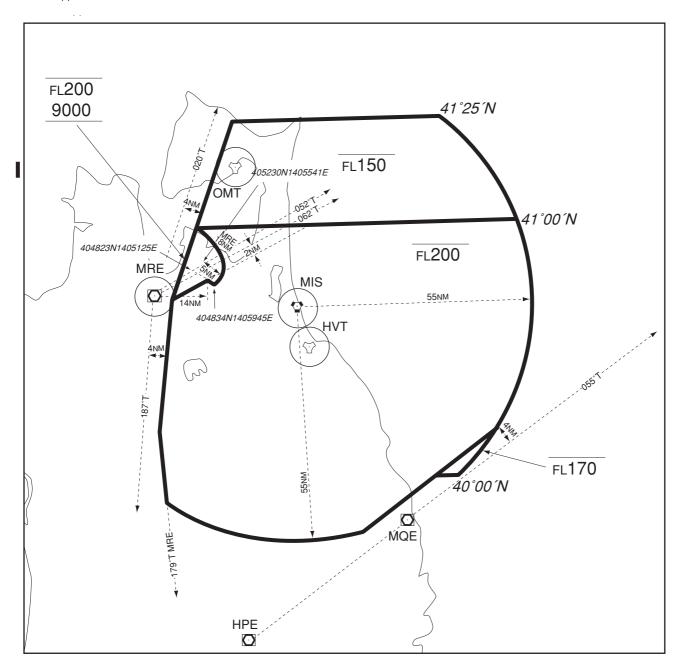
RJSM AD 2.17 ATS AIRSPACE

	Designation and lateral limits	Vertical limits (ft)	Airspace classification	ATS unit call sign Language	Remarks
	1	2	3	4	6
MISAWA	Area within a radius of 5nm of MISAWA ARP	6000 or	D	MISAWA	
CTR	(40°42'N/141°22'E)	below		TOWER	
				En	
MISAWA	SEE ATTACHED CHART		С	SEE	
PCA				ATTACHED	
				CHART	
MISAWA ACA	SEE ATTACHED CHART		E		
MISAWA TCA	SEE ATTACHED CHART	Е			

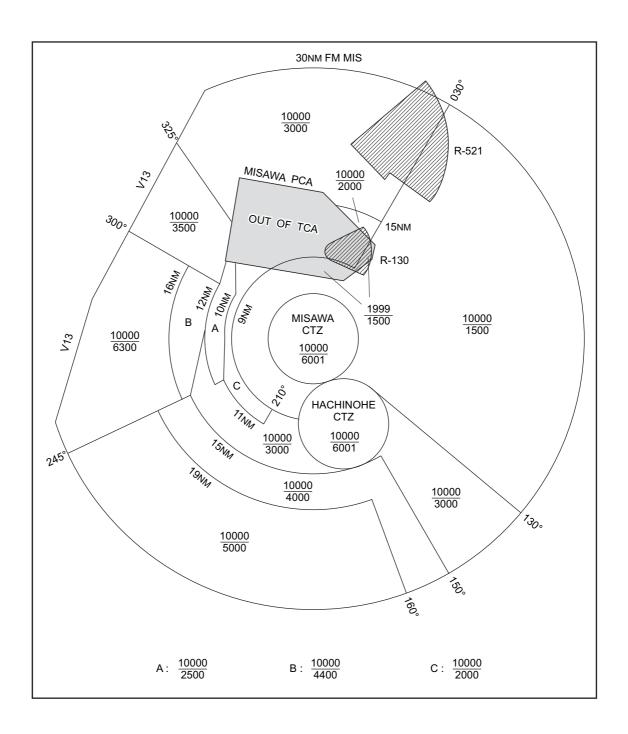
Misawa Positive Control Area

		UPPER LIMIT (AMSL)	UNIT	
NAME	LATERAL LIMITS	LOWER LIMIT (AMSL) M(ft)	PROVIDING SERVICE	REMARKS
1	2	3	4	5
三沢 Misawa	下記に示される区域 The area shown below (1)三沢第一特別管制区 Misawa NR 1 Positive Control Air Space		札幌ACC Sapporo ACC 124.5 MHz 303.8 MHz	当該空域を飛行しようとする VFR機は、札幌ACCIに連絡し 、飛行の許可を求めること。 VFR aircraft operating which will fly in the airspace above should contact Sapporo ACC and obtain the permission.
	(2) 三沢第二特別管制区 Misawa NR 2 Positive Control Air Space		三沢アプローチ Misawa APP RADAR	当該空域を飛行しようとする VFR機は、三沢アプローチ又 はレーダーに連絡し、飛行の 許可を求めること。 VFR aircraft operating which
			Primary 120.7 MHz 317.8 MHz	will fly in the airspace above should contact Misawa APP/RADAR and obtain the
			Secondary 261.2MHz	permission.
	IISAWA NR1 positive ONTROL AIRSPACE			ow FL230 (7000m) L200 (6100m)
_	At or below FL200 (6100m)		
	IISAWA NR2 positive ONTROL AIRSPACE At or above 2000ft ((600m)		
	405910N 1410717E	405910N 1412047E		
	10nm	2 8	 405310N 1412947E	
	404910N . 13.2nm		405115N 1412947E 404910N 112447E	
	404910N 1410717E 17nm		-	
		5	\	

Misawa Approach Control Area



Misawa Terminal Control Area



RJSM AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP/ASR	Misawa Approach/ Misawa Radar	317.8MHz(1) 261.2MHz(1) 362.3MHz(2) 120.7MHz(1) 120.1MHz(2) 243.0MHz(E) 121.5MHz(E)	H24	(1) VFR Radar advisory SER all ALT.(2) AVBL on request.(3) CLR delivery.(4) For rescue only.
TCA	Misawa TCA	124.05MHz 288.1MHz	2300 - 1100 SUN-THU (EXC HOL)	(5) Secondary.
DEP	Misawa Departure	363.8MHz(1) 125.3MHz(1)	H24	
TWR	Misawa Tower	315.8MHz 236.8MHz(5) 236.6MHz(2) 126.2MHz(5) 118.1MHz 138.05MHz(4) 247.0MHz(2)(4) 123.1MHz(2)(4) 121.5MHz(E) 243.0MHz(E)	H24	
GCA-ASR -PAR	Misawa Radar	258.2MHz 261.0MHz 270.8MHz 289.4MHz 335.8MHz 335.6MHz 134.1MHz 139.4MHz 125.15MHz 127.95MHz 121.5MHz(E) 243.0MHz(E)	H24	ASR, PAR RWY 10/28 Glide path 3.0° RWY10 Glide path 2.5° RWY28 if COM is lost on westerly HDG on downwind leg of radar APCH to RWY10, do not exceed 12 DME of MIS.
GND	Misawa Ground	275.8MHz(3) 126.2MHz(2) 118.65MHz(3)	H24	
ATIS	Misawa Airport	128.4MHz 315.35MHz	2200 - 1100 MON-FRI	
MET	Misawa Metro	344.6MHz	H24	PFSV

RJSM AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR (8° 30.0′ W)	MIS	115.4MHz	H24	404213.76N 1412251.99E		VOR Unusable: (1) R050-100 beyond 25nm BLW 5500ft. (2) R135-200 WI 20nm BLW 5500ft beyond 20nm BLW 15000ft. (3) R240-280 beyond 30nm BLW 9500ft. (4) R310-350 beyond 20nm all ALT. VOR Maintenance period: 1500-2200Z(SUN-THU)
TACAN (8° 30.0′ W)	MIS	Tx1188MHz (CH-101)	H24	404213.76N 1412251.99E	142ft	TACAN AZM and DME Unusable: 050°-065° beyond 25nm BLW 3000ft. TACAN DME unusable: 260°-275° beyond 39nm. TACAN Maintenance period: 1500-2200Z(SUN-THU)
ILS-LOC 28	I-MIS	109.7MHz	H24	-		LOC back course unusable for course guidance.
ILS-GP 28	-	333.2MHz	H24	-		ILS RWY 10/28 Maintenance period: 1500-2200Z(SUN-THU)
ILS-LOC10	I-MAS	109.7MHz	H24			
ILS-GP10		333.2MHz	H24			

AIP Japan MISAWA

RJSM AD 2.20 LOCAL TRAFFIC REGULATIONS

1	١.	Air	port	regu	lations

- 1. Do not overfly Misawa City located S of AB below 3000FT VMC.
- 2. Do not overfly school building located APRX 1.5NM ESE of AB.
- 3. On take off all ACFT (including radar vectored ACFT) must MNTN RWY HDG at or below 1600FT until 3 DME for RWY28 or 2 DME for RWY10 unless otherwise cleared by ATC.

	TKOF restriction: To prevent jet blast damage to over run, all TKOF and ENG run by jet ACFT shall be performed at least 200ft FM RWY THR.
L	
Parki	ing area for small aircraft(General aviation)
	Nil
Parki	ing area for helicopters
	Nil
Apro	n - taxiing during winter conditions
	Nil
Гахііі	ng - limitations
	1. Alpha Taxilane is located between TWY A1 and A4 and is restricted to aircraft with wingspans of 170ft (C-17) or smaller. Aircraft with wingspans larger than 170ft requiring the use of Alpha Taxilane must receive approval from the AFM prior to use.
	2. TWY B between B2 and B5 restricted to C130, P8, CH-47 or smaller aircraft. B-737 operations authorized on full length of TWY B. Any other use requires coordination with the AFM and/or CES pavement engineer. NOTE: Intersection of TWY B and C3/B3 unrestricted.
	NOTE. Intersection of TWT B and Co/BS unrestricted.
	ool and training flights - technical test flights - use of runways
Scho	
Scho	Nil
	Nil opter traffic - limitation

Nil

RJSM AD 2.21 NOISE ABATEMENT PROCEDURES

- 1. Local established ACFT quiet HR at Misawa 1300-2100Z DLY. No ENG runs, ARR or DEP WO prior COOR approval; policy strictly enforced.
- 2. The south departure ACFT will delay turns until 3.5 DME for RWY28 and 2.5 DME for RWY10.

RJSM AD 2.22 FLIGHT PROCEDURES

1.Automated Radar Terminal System(ARTS)

三沢進入管制所の指示のもとに、当該進入管制区を飛行する航空機は、モード A/3 の二次レーダー個別コード及びモード C による応答を指示される。

二次レーダー個別コードを搭載していない航空機が当該 コードによる応答を指示された場合は、管制官に対し、そ の旨通報すること。 Aircraft flying within the approach control area under the control of Misawa approach control will be instructed to reply with discrete code on Mode A/3 and Mode C.

If an aircraft with non-discrete code capability be instructed to reply with the discrete code, it shall report a controller accordingly.

2.WX MINIMA CONCERNING PAR/ASR APCH PROCEDURE

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/HATI HAA	h CEIL-VIS
PAR ②	28 ④	3°/-/-	ABCDE	209/ 18	100	(100-1/4)
	10 ⑤	3°/-/-	ABCDE	219/ 24	100	(100-1/4)
ASR ②	10 ⑥		ABCDE	480/ 40	371	(400-3/4)
	28 ⑦		ABC	540/ 40	431	(500-3/4)
			DE	540/ 50	431	(500-1)
CIR ③	10-28		Α	540 -11/4	421	(500-11/4)
			В	580- 11/4	461	(500-11/4)
			С	580- 1½	461	(500-11/2)
			DE	680- 2	561	(600-2)

① a. LOST COMMUNICATIONS: If no transmissions are received for more than 30 seconds for Rwy 10 (1 minute for Rwy 28) during radar vectors to final, or for more than 5 seconds/15 seconds once established on PAR/ASR final approach, the pilot shall maintain VMC and attempt to contact Misawa Tower. If unable to maintain VMC, the pilot shall proceed to SHOJU IAF for the runway of departure, at last assigned alt or 9000, whichever is higher, and execute instrument approach or previously coordinated instruction.
① b. If com is lost on westerly hdg on downwind leg of radar apch to Rwy 10, do not exceed 10.7 mile fix of MISAWA VORTAC. CAUTION: Possible interference on freq 270.8 from Chitose. ② MP 2300-0300Z Fri. ③ Cir not auth S of Rwy 10-28. ④ When ALS inop, increase RVR to 24, vis to ½. ⑤ When ALS inop, increase RVR to 40, vis to 34. ⑥ When ALS inop, increase vis CAT ABC RVR to 50, vis to 1 mile, CAT DE RVR to 60, vis to 1½. ⑦ When ALS inop, increase CAT AB RVR to 50, vis to 1 mile, CAT C RVR to 60, vis to 1½.

RJSM AD 2.23 ADDITIONAL INFORMATION

1. 無操縦者航空機の飛行について

1.1 三沢飛行場周辺の空域において、無操縦者航空機の飛行が次のとおり実施される。

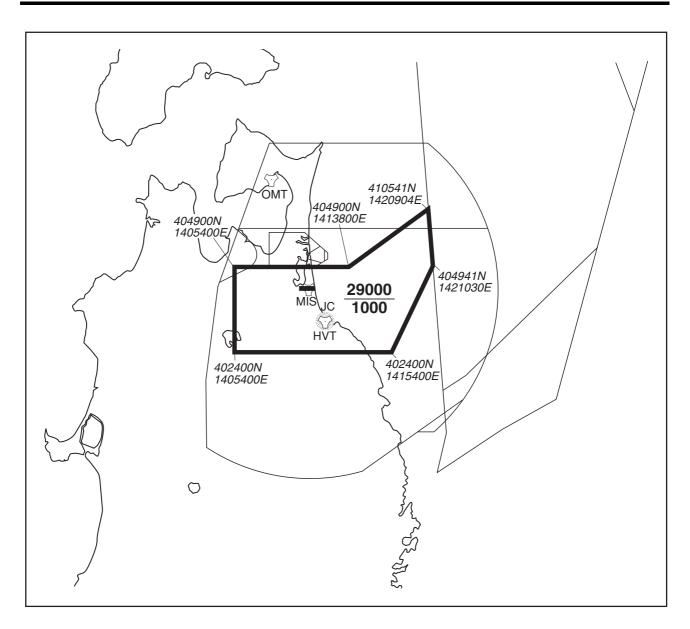
1.Unmanned aircraft operations

1.1 Unmanned aircraft operations will take place in the vicinity of Misawa aerodrome as follows

航空機	RQ-4(グローバル・ホーク) : unmanned aircraft の用語が使用される。	Aircraft	RQ-4(Global Hawk) : Term "unmanned aircraft" is used.
区域	添付図参照	AREA	See attached chart
飛行 方式	計器飛行方式	Flight Rules	IFR
高度	1,000ft から 29,000ft まで	Altitude	1,000ft to 29,000ft
期間	飛行予定時間はノータムにより通知される	Period	Expected date and time for the operations will be notified by NOTAM.

- 1.2 三沢飛行場周辺の空域において飛行する航空機は次の対応が求められる。
- (1) 有視界飛行方式により当該空域に入域する際は、事前に ATIS の聴取又は管制機関(20,000 フィート以下の場合は三沢進入管制所、20,000 フィートを超える場合は札幌管制部)との通信設定を行い、無操縦者航空機の運航の有無を確認すること。("unmanned aircraft operations are in progress"の用語が三沢 ATIS の備考に追加される。)
- (2)無操縦者航空機が運航される場合、有視界飛行方式により当該空域に入域する際は、ATCトランスポンダーのVFRコード(飛行高度10,000フィート未満は1200、10,000フィート以上は1400)を発信するとともに、管制機関(20,000フィート以下の場合は三沢進入管制所、20,000フィートを超える場合は札幌管制部)と無線電話により通信設定を行い、積極的に、自機の位置等運航情報を連絡し、また、管制機関によるレーダー業務(レーダー・サービス)の提供を求める等により、無操縦者航空機の動向についてモニターを実施すること。
- ※ 三沢 ATIS 運用時間外に無操縦者航空機が運用される場合、臨時に ATIS 放送が実施される。
- ※三沢進入管制所 (120.7MHz) ※ 札幌管制部 (124.5MHz)

- 1.2 The aircraft flying in the vicinity of Misawa aerodrome will be required following action.
- (1)A VFR aircraft should monitor Misawa ATIS or contact Misawa APP/ASR at or below 20,000 feet or SAPPORO-ACC above 20,000 feet before entering the area and check the unmanned aircraft operations. (Misawa ATIS will broadcast "unmanned aircraft operations are in progress" in the remark section.)
- (2)During the unmanned aircraft operations, an aircraft mentioned above should squawk SSR code 1200 below 10,000 feet or 1400 at or above 10,000 feet, contact Misawa APP/ASR at or below 20,000 feet or SAPPORO-ACC above 20,000 feet, make position report proactively, and request radar services or take other suitable measures to monitor the movement of the unmanned aircraft.
- *Misawa ATIS temporarily opens and broadcasts the above information when the unmanned aircraft operations take place beyond Misawa ATIS service hours.
- *Frequency for Misawa APP/ASR is 120.7MHz
- *Frequency for SAPPORO-ACC is 124.5MHz



RJSM AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart

Aircraft Parking/Docking Chart (for civil)

Standard Departure Chart - Instrument

Instrument Approach Chart (HI-ILS Y or LOC Y RWY28)

Instrument Approach Chart (ILS Z or LOC Z RWY28)

Instrument Approach Chart (HI-VOR Y or TACAN Y RWY28)

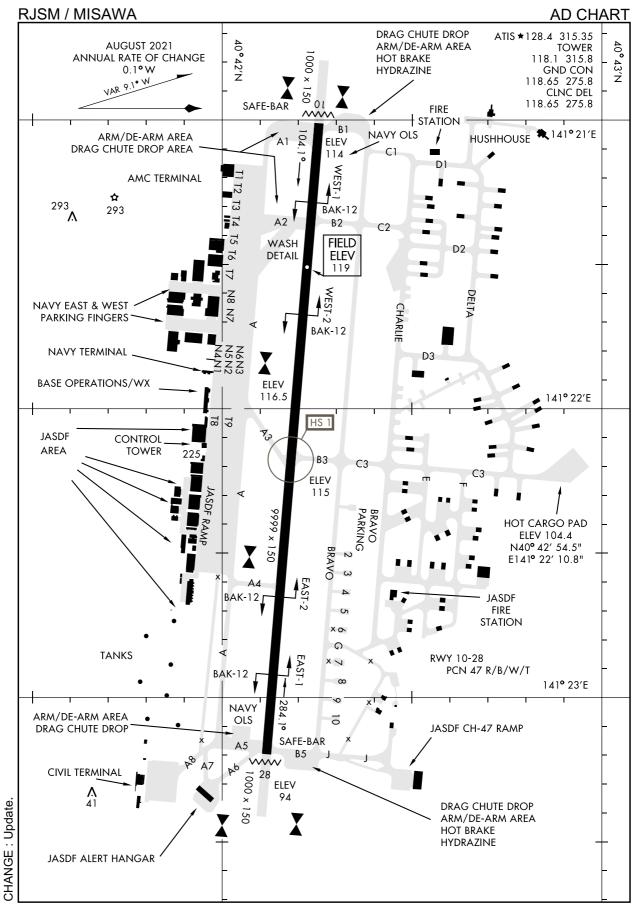
Instrument Approach Chart (VOR Z or TACAN Z RWY28)

Instrument Approach Chart (HI-ILS Z or LOC Z RWY10)

Instrument Approach Chart (HI-VOR Y or TACAN Y RWY10)

Other Chart (MVA CHART)



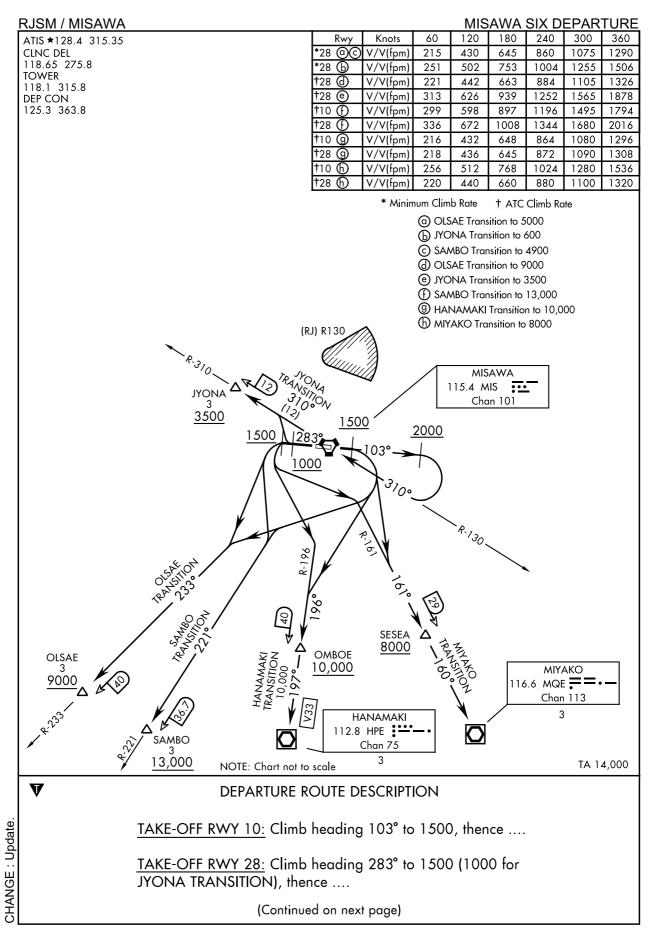


NOTE: REPRINTING DOD FLIP



ENKAI TWO DEPARTURE RJSM / MISAWA 180 Rwy Knots 60 120 240 300 360 ATIS ★ 128.4 315.35 CLNC DEL 10 V/V(fpm) 350 700 1050 1400 1750 2100 118.65 275.8 TOWER ATC Climb Rate to 3500 118.1 315.8 DEP CON 125.3 363.8 ENKAI 3 3500 -105°-- R-105 — 10) MISAWA 115.4 MIS ... Chan 101 •3802 TA 14,000 V DEPARTURE ROUTE DESCRIPTION TAKE-OFF RWY 10: Climb on MIS VORTAC R-105 to ENKAI. Cross ENKAI at or above 3500. CHANGE: Update.

RJSM / MISAWA KOSUI TWO DEPARTURE Knots 60 180 240 300 360 ATIS ★128.4 315.35 1218 2030 CLNC DEL 28 V/V(fpm) 406 812 1624 2436 118.65 275.8 TOWER ATC Climb Rate to 3600 118.1 315.8 DEP CON 125.3 363.8 KOSUI 3 3600 **←** R-282 **←** ▲ -282°**--▼**10 MISAWA 115.4 MIS ... Chan 101 • 3802 TA 14,000 V DEPARTURE ROUTE DESCRIPTION TAKE-OFF RWY 28: Climb on MIS VORTAC R-282 to KOSUI. Cross KOSUI at or above 3600.



RJSM / MISAWA

MISAWA SIX DEPARTURE



DEPARTURE ROUTE DESCRIPTION (Continued)

HANAMAKI TRANSITION:

TAKE-OFF RWY 10: ...turn right to intercept MIS TACAN R-196 (HPE VOR/DME R-017) to HANAMAKI VOR/DME. Cross OMBOE at or above 10,000. Maintain ATC assigned altitude. TAKE-OFF RWY 28: ...turn left to intercept MIS R-196 (HPE R-017) to HANAMAKI VOR/DME. Cross OMBOE at or above 10,000. Maintain ATC assigned altitude.

JYONA TRANSITION:

TAKE-OFF RWY 10: ...continue climb to 2000, then turn right and climb via MIS VORTAC to intercept MIS R-310 direct to JYONA. Cross JYONA at or above 3500. Maintain ATC assigned altitude.

TAKE-OFF RWY 28: ...then turn right to intercept MIS R-310 to JYONA. Cross JYONA at or above 3500. Maintain ATC assigned altitude.

MIYAKO TRANSITION:

TAKE-OFF RWY 10: ...turn right to intercept MIS R-161 (MQE VOR/DME R-340) to MIYAKO VOR/DME. Cross the SESEA at or above 8000. Maintain ATC assigned altitude.

TAKE-OFF RWY 28: ...turn left to intercept MIS R-161 (MQE R-340) to MIYAKO VOR/DME. Cross the SESEA at or above 8000. Maintain ATC assigned altitude.

OLSAE TRANSITION:

TAKE-OFF RWY 10: ...turn right to intercept MIS R-233 to OLSAE (MIS R-233/40 DME). Cross OLSAE at or above 9000.

Maintain ATC assigned altitude.

TAKE-OFF RWY 28: ...turn left to intercept MIS R-233 to OLSAE (MIS R-233/40 DME). Cross OLSAE at or above 9000.

Maintain ATC assigned altitude.

SAMBO TRANSITION:

TAKE-OFF RWY 10: ...turn right to intercept MIS R-221 to SAMBO (MIS R-221/36.7 DME). Cross SAMBO at or above 13,000. Maintain ATC assigned altitude.

TAKE-OFF RWY 28: ...turn left to intercept MIS R-221 to SAMBO (MIS R-221/36.7 DME). Cross SAMBO at or above 13,000. Maintain ATC assigned altitude.

CHANGE: Update.

