AD 2 AERODROMES

RJSA AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJSA -AOMORI

RJSA AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	*404400N/1404119E* 052° / 1.5km from RWY 06 THR
2	Direction and distance from (city)	11.2Km(6NM) SSW from Aomori Railway station
3	Elevation/ Reference temperature	650ft / 26°C (2000-2005)
4	Geoid undulation at AD ELEV PSN	Nil
5	MAG VAR/ Annual change	9° W(2005) / -
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	Aomori Airport Administration Office 1-5, Kotani, Ootani, Aomori City, Aomori, 030-0155, Japan Tel: 017-739-2121, Fax: 017-739-2780 E-mail: airport@pref.aomori.lg.jp
7	Types of traffic permitted(IFR/VFR)	IFR/VFR
8	Remarks	Aomori Airport Branch (Civil Aviation Bureau) 1-303, Kotani, Ootani, Aomori-City, Aomori, 030-0155, Japan Tel: 017-739-2240, Fax: 017-739-2273

RJSA AD 2.3 OPERATIONAL HOURS

1	AD Administration	2230-1300
2	Customs and immigration	INTL SKED FLT hours only
3	Health and sanitation	INTL SKED FLT hours only
4	AIS Briefing Office	Nil
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24 (SENDAI)
7	ATS	2230-1300
8	Fuelling	Airline : 2200-1230 (Tel: 017-739-6280) General Aviation: 2300-SS and On request(Tel : 017-739-3741)
9	Handling	Nil
10	Security	2230-1300
11	De-icing	Nil
12	Remarks	Nil

RJSA AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	Nil
2	Fuel/ oil types	Airline : JET A1 General Aviation : JET A1, AVGAS 100/ Aviation oil
3	Fuelling facilities/ capacity	Airline : Fuel truck refueling/ JET A1 200kl × 2tank The prior permission of Oil company is required for refueling. (Except schedule Flight) General Aviation : Fuel truck refueling / JET A1 28kl, AVGAS 5.6kl
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

RJSA AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotels in Aomori city
2	Restaurants	At Airport
3	Transportation	Buses and Taxi
4	Medical facilities	First aid treatment, Hospital in Aomori city 10km
5	Bank and Post Office	Bank and Post Office in Aomori city
6	Tourist Office	Tourist Office in Aomori city
7	Remarks	Nil

RJSA AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 9
2	Rescue equipment	Chemical fire fighting truck × 3 Emergency medical equipment conveyance truck
3	Capability for removal of disabled aircraft	Nil
4	Remarks	Nil

RJSA AD 2.7 SEASONAL AVAILABILITY-CLEARING

1	Types of clearing equipment	Snow remove equipments: Snow sweeper × 5 Snow plow × 11 Rotary plow × 5 Anti-freezing sprayer × 3 Continuous friction measuring equipment × 2 Dump trucks, dozers, supervisory vehicles, etc.
2	Clearance priorities	RWY06/24, all TWY, and Apron
3	Remarks	Snow removal will be commenced, if the RWY are covered with a depth of 3cm snow or more.

RJSA AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	Spot NR 1 - 6 Surface : cement-concrete, Strength: PCN 62/R/B/X/T N-Apron Surface : asphalt-concrete, Strength: AUW 5700kg(12565lbs)
2	Taxiway width, surface and strength	TWY T0 - T5, P1 - P4 Width : 30m, Surface: asphalt-concrete, Strength: PCN 86/F/C/X/T TWY N Surface : asphalt-concrete, Strength: AUW 5700kg(12565lbs)
3	ACL and elevation	Not available
4	VOR checkpoints	Not available
5	INS checkpoints	Spot Nr 1 *404413.95N1404117.99E* 2 *404414.96N1404120.20E* 3 *404416.50N1404122.54E* 4 *404417.75N1404124.77E* 5 *404419.15N1404126.98E* 6 *404420.45N1404128.90E*
6	Remarks	Nil

RJSA 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 : RWY06/24 (Marking) : RWY designation, RWY CL, RWY THR, Aiming point, TDZ, RWY side stripe (LGT) : RCLL, REDL, RTHL, RENL, RTZL(RWY 24), WBAR(RWY 24), RWY DIST markar LGT TWY: TWY T0 THRU T5 (Marking) : TWY CL, TWY side stripe, RWY HLDG PSN (LGT) : TWY edge LGT, TWY CL LGT, RWY guard LGT, Taxiing guidance sign TWY: TWY P1 THRU P4 (Marking) : TWY CL, TWY side stripe (LGT) : TWY edge LGT, TWY CL LGT, Taxiing guidance sign TWY: TWY N (Marking) : TWY CL, TWY side stripe (LGT) : TWY edge LGT
3	Stop bars	Stop bar lights: TWY T0 THRU T5 Stop bar lights operations are as follows; 1) Stop bar lights installed at each taxi-holding position with RWY06/24 2) Stop bar lights will be operated when the visibility or the lowest RVR of RWY06/24 is at or less than 600m 3) Stop bar lights on TWY T0 and T5 are controlled individually by ATC 4) Stop bar lights on TWY T1 through T4 are not controlled individually by ATC 5) During the period stop bar lights are operated, TWY T1 through T4 are not available for the departing aircraft
4	Remarks	(Marking) : Overrun area, ACFT PRKG PSN, Apron TWY CL (LGT) : Apron flood LGT

RJSA AD 2.10 AERODROME OBSTACLES

See RJSA/AOMORI LDG CHART

In approach/TKOF areas

RWY/Area affected	Obstacle type	Coordinates	Elevation	Markings/LGT	Remarks
RWY06	MT	*404256.9N/1403948.5E*	730ft	- / LIL	
RWY24	BLDG	*404440.2N/1404219.8E*	678ft	- / LIL	
RWY24	Snow fence	*404433.5N/1404224.7E*	677ft	- / LIL	
RWY24	Snow fence	*404432.3N/1404227.0E*	679ft	- / LIL	

In circling area and at AD

Obstacle type	Coordinates	Elevation	Markings/LGT	Remarks
Hill	*404326.4N/1404039.7E*	691ft	- / LIL	
Hill	*404356.8N/1404130.7E*	692ft	- / LIL	
MT	*404340.3N/1404145.9E*	860ft	- / LIM	above the horizontal surface
MT	*404345.0N/1404225.9E*	896ft	- / LIM	above the horizontal surface
MT	*404240.5N/1404214.6E*	1170ft	- / LIM	above the horizontal surface
MT	*404239.0N/1404001.1E*	795ft	- / LIM	
Tower	*404435.7N/1404132.2E*	717ft	- / LIL	

RJSA AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	SENDAI
2	Hours of service MET Office outside hours	H24 (SENDAI)
3	Office responsible for TAF preparation Periods of validity	SENDAI 30 Hours
4	Trend forecast Interval of issuance	Nil.
5	Briefing/ consultation provided	Briefing is available upon inquiry at SENDAI
6	Flight documentation Language(s) used	C En
7	Charts and other information available for briefing or consultation	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}, P_{SWM}, P_{SW}, (domestic), E, C, W_E, W_F, W_G, W_I, W, N
8	Supplementary equipment available for providing information	Nil
9	ATS units provided with information	TWR
10	Additional information(limitation of service, etc.)	Nil

RJSA AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength(PCN) and surface of RWY	THR coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
06	051.91°	3000 × 60	PCN 86/F/C/X/T Asphalt Concrete	*404329.77N* *1404028.61E* 122.6ft	THR ELEV : 647ft
24	231.91°	3000 × 60	PCN 86/F/C/X/T Asphalt Concrete	*404429.79N* *1404209.27E* 122.6ft	THR ELEV : 664ft TDZ ELEV : 661ft

Slope of RWY	Strip dimensions(M)	RESA (Overrun) Dimensions(M)	Remarks
7	10	11	14
See below figure	3120× 300 3120× 300	40 × 300 190 × (MNM:160 MAX:300)* *For detail, ask airport administrator	RWY grooving : 3000m×60m

RJSA AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
06	3000	3000	3000	3000	Nil
24	3000	3000	3000	3000	Nil

RJSA AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designa-tor	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
06	SALS 420m LIH	Green -	PAPI 3.0°/Left 423m 74ft	-	3000m 15m Coded color (White/Red) LIH	3000m 60m Coded color (White/Yellow) LIH	Red	Nil (*1)
24	PALS (CATIII) 900m LIH	Green Green	PAPI 3.0°/Left 440m 66ft	900m	3000m 15m Coded color (White/Red) LIH	3000m 60m Coded color (White/Yellow) LIH	Red	Nil (*1)
Remarks								
10								
Overrun area edge LGT(LEN : 60m, color : Red) (*1) CGL for RWY 06								

RJSA AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN : *404420N/1404111E*, White/Green EV4.3sec, HO
2	LDI location and LGT Anemometer location and LGT	LDI : Nil RWY06, RWY24, LGTD
3	TWY edge and center line lighting	TWY edge LGT : Blue TWY CL LGT : ALTN Green/Yellow fm RWY leaving report point,other Green
4	Secondary power supply/ switch-over time	Within 1sec : PALS, SALS, REDL, RTHL, WBAR, RENL, RCLL, RTZL, Overrun area edge LGT, Stop bar LGT, RWY guard LGT and TWY CL LGT at TWY T0, T5, P1-P4 Within 15sec : Other lights
5	Remarks	WDI LGT

RJSA AD 2.16 HELICOPTER LANDING AREA

To Be Developed

RJSA 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
AOMORI CTR	Area within a radius of 5NM of Aomori ARP(*4044N/14041E*)	------ 4000	D	Aomori TWR En	

RJSA AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
TWR	Aomori Tower	118.3MHz(1) 126.2MHz 243.0MHz(E)	2230-1300	(1)Primary

RJSA AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid (VOR declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR (9°W/2015)	MRE	114.1MHz	H24	*404419.65N 1404219.20E*		VOR unusable: 090°-105° beyond 30nm BLW 6000ft. 105°-120° beyond 20nm BLW 6000ft. 120°-140° beyond 15nm BLW 8000ft. 140°-160° beyond 20nm BLW 8000ft. 160°-190° beyond 30nm BLW 8000ft. 190°-200° beyond 35nm BLW 8000ft. 260°-270° beyond 35nm BLW 8000ft.
DME	MRE	1175MHz (CH-88X)	H24	*404420.20N 1404217.77E*	756ft	DME unusable: 115°-130° beyond 15nm BLW 8000ft. 130°-160° beyond 20nm BLW 8000ft. 160°-180° beyond 30nm BLW 8000ft. 180°-200° beyond 35nm BLW 8000ft.
ILS-LOC 24	IMR	111.9MHz	2230-1300	*404325.19N 1404020.96E*		LOC : 230m(755ft) away FM RWY 06 THR, BRG(MAG) 240.93°
ILS-GP 24	-	331.1MHz	2230-1300	*404419.64N 1404201.60E*		GP : 334m(1096ft) inside FM RWY24 THR, 135m(443ft) S of RCL. HGT of ILS REF datum 16.5m(54ft). GP angle 3.0°
ILS-DME 24	IMR	1017MHz (CH-56X)	2230-1300	*404419.38N 1404201.87E*	672ft	DME : 334m(1096ft) inside FM RWY 24 THR, 145m(476ft) S of RCL
IM 24	-	75MHz	2230-1300	*404435.33N 1404218.46E*		IM : 276m(0.15nm) away FM RWY 24 THR
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based.

REMARKS : 1.LOC Beam BRG(MAG) 240.93°
2.HGT of ILS REF datum 54ft
3.GP Angle 3.0°
4.ELEV of ILS-DME 204.6m(672ft)

RJSA AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

定期便または緊急事態以外の航空機の取扱い 青森空港の使用について、航空機の運航者はあらかじめ空港管理事務所の許可を得ること。	**Aircraft operations other than scheduled flights or in an emergency** On use of AOMORI airport, aircraft operator is required to obtain the permission of the airport authority.

2. Taxiing to and from stands

Nil

3. Parking area for small aircraft(General aviation)

Nil

4. Parking area for helicopters

Nil

5. Apron - taxiing during winter conditions

Nil

6. Taxiing - limitations

Wing tip clearance at the TWY intersection (REF AD1.1.6.8)
Wing tip clearance at the TWY intersection between the aircraft holding at the stop marking on the TWY and the other aircraft taxiing behind it are as follows.

(1)When A306 holding at the stop marking on TWY T2, T3 or T4

Wing Span (WS) of aircraft taxiing on TWY P1-P4	WS =< 22.2m	22.2m < WS =< 39.2m	WS > 39.2m
Wing tip clearance	*A	*B	*E

(2)When A306 holding at the stop marking on TWY T1

Wing Span (WS) of aircraft taxiing on TWY T0-P1	WS =< 5.4m	5.4m < WS =< 14.4m	WS > 14.4m
Wing tip clearance	*A	*C	*D

Legend:
*A : wing tip clearance >= 15m
*B : 6.5m =< wing tip clearance < 15m
*C : 10.5m =< wing tip clearance < 15m
*D : wing tip clearance < 10.5m
*E : wing tip clearance < 6.5m

7. School and training flights - technical test flights - use of runways

Nil

8. Helicopter traffic - limitation

Nil

9. Removal of disabled aircraft from runways

Nil

RJSA AD 2.21 NOISE ABATEMENT PROCEDURES

Nil

RJSA AD 2.22 FLIGHT PROCEDURES

1.TAKE OFF MINIMA

	RWY	ACFT CAT	REDL & RCLL		REDL or RCLL or RCL Marking		NIL (DAYTIME ONLY)	
			RVR	VIS	RVR	VIS	RVR	VIS
Multi-Engine ACFT with TKOF ALTN AP FILED	06 24	A,B,C	400m *200m **150m	400m *200m	400m *250m	400m *250m	-	500m
		D	400m *250m **200m	400m *250m	400m *300m	400m *300m	-	500m
OTHER	06 24	A,B,C,D	AVBL LDG MINIMA					

*APPLICABLE WHEN SSP IN FORCE.
**APPLICABLE WHEN SSP IN FORCE and MULTIPLE RVRs AVAILABLE.

2. Category II / III A / III B Operations at Aomori Airport

2.1. Facilities

The following Categories are available:

Runway 24
• ILS Runway 24-CAT III • Lighting system Runway 24-CAT III • RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway)

2.2. Conditions

A. The following systems must be operative:

For ILS RWY 24 approach (CAT II)	For ILS RWY 24 approach (CAT III A / III B)
(1) ILS comprising; • ILS-LOC 24 with standby transmitter • ILS-GP 24 with standby transmitter (When any standby transmitters unserviceable, down-grade ILS-CAT I.) • IM24 (When IM unserviceable, RA could be used as an alternate method) • ILS-DME 24	(1) ILS comprising; • ILS-LOC 24 with standby transmitter(including far field monitor) • ILS-GP 24 with standby transmitter (When any standby transmitters or far field monitor unserviceable, downgrade ILS-CAT I.) • ILS-DME 24
(2) Lighting systems comprising; • PALS 24 (including side row barrettes) • High INTST REDL • High INTST RTHL • RCLL and RTZL	(2) Lighting system comprising; • PALS 24 (including side row barrettes) • High INTST REDL • High INTST RTHL • RCLL and RTZL
(3) Secondary power supply	(3) Secondary power supply
(4) RVR by forward-scatter meters at the touchdown zone and either (the mid-point or stop-end of the runway).	(4) RVR by forward-scatter meters at the touchdown zone,mid-point and stop-end of the runway.

B. The following information must be currently available:
1) Surface wind speed and direction
2) RVR

C. ITEM A and/or B are not met,the relevant information will be notified to the pilots as soon as practicable.

2.3. Precision Approach Terrain Chart

See RJSA AD2.24

2.4. Operating Minimum

Approach minima stated in AD2.24 are observed.

2.5. Special Safeguards and Procedures (SSP)

CAT II / III A / III B Operations are available when SSP are applied. SSP will be applied when the following conditions are met:

a)Ceiling is at or less than 200ft and/or RVR is at or less than 600m.
b)Facilities listed 1.above are operational.
c)ILS Critical Area is protected.

In order to protect ILS Critical Area for the succeeding arrival aircraft, an arrival aircraft may be given following instruction by ATC.

"*REPORT OUT OF ILS CRITICAL AREA*"

The exit taxiway centerline lights are fixed alternate green and yellow inside the ILS Critical Area. If an aircraft is given the above instruction, she is expected to advise the ATC when the taxiway centerline lights change from alternate green and yellow to steady green.

2.6. Approval for CAT II / III A / III B Operations

Operators must obtain operational approval from the State of Registry or the State of Operator, as appropriate, to conduct CAT II / III A / III B Operations. (See GEN1.5)

2.7. Taxiway available for CAT II / III A / III B operations

Taxiway available for CAT II / III A / III B operations are T0 , T5 and the parallel taxiway.

RJSA AD 2.23 ADDITIONAL INFORMATION

Nil

RJSA AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart
Precision Approach Terrain Chart
Standard Departure Chart - Instrument (IWAKI, AOMORI REVERSAL, TIKYU)
Standard Departure Chart - Instrument (OHMAR-RNAV)
Standard Departure Chart - Instrument (SHIRAKAMI-RNAV)
Standard Arrival Chart - Instrument (MELOS)
Instrument Approach Chart (ILS Z or LOC Z RWY24 (CAT II and III))
Instrument Approach Chart (ILS Y or LOC Y RWY24 (CAT II and III))
Instrument Approach Chart (VOR RWY24)
Instrument Approach Chart (VOR Z RWY06)
Instrument Approach Chart (VOR Y RWY06)
Instrument Approach Chart (RNAV(RNP) Z RWY24)
Instrument Approach Chart (RNAV(RNP) Y RWY24)
Instrument Approach Chart (RNAV(RNP) Z RWY06)
Instrument Approach Chart (RNAV(RNP) Y RWY06)
Other Chart (Visual REP)
Other Chart (LDG CHART)
Other Chart (MVA CHART)

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RJSA / AOMORI

AD CHART

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PRECISION APPROACH TERRAIN CHART

STANDARD DEPARTURE CHART-INSTRUMENT

RJSA / AOMORI SID and TRANSITION

IWAKI SIX DEPARTURE

RWY06 : Climb RWY HDG to 1100FT, turn left HDG 291˚ to intercept and proceed via MRE R330 to 12.0DME, turn left, via HWE R208 to GONOU.
Cross MRE R330/8.0DME at or above 3600FT, cross HWE R208/63.0DME at or above 7000FT, cross GONOU at or above 9000FT.

RWY24 : Climb RWY HDG to 1200FT, via MRE R238 to GONOU.
Cross GONOU at or above 9000FT.

Note RWY24 : No turn before DER.
5.0% climb gradient required up to 1200FT.
OBST ALT 782FT located at 0.8NM 223˚ FM end of RWY24.

YUWA TRANSITION

From over GONOU, via UWE R010 to UWE VOR/DME.

NYUDO TRANSITION

From over GONOU, via MRE R238 to NYUDO.
Cross NYUDO at or above FL210.

STANDARD DEPARTURE CHART-INSTRUMENT

RJSA / AOMORI SID

AOMORI REVERSAL TWO DEPARTURE

RWY06 : Climb RWY HDG to 1100FT, turn left HDG 285˚...

RWY24 : Climb RWY HDG to 1200FT, turn right HDG 015˚...

...to intercept and proceed via MRE R330 to 10.0DME, turn left, direct to MRE VOR/DME.

Cross MRE R330/8.0DME at or above 3600FT, cross MRE VOR/DME at or above 6500FT.

Note RWY24 : 5.0% climb gradient required up to 1200FT.
OBST ALT 782FT located at 0.8NM 223˚ FM end of RWY24.

STANDARD DEPARTURE CHART-INSTRUMENT

RJSA / AOMORI SID

TIKYU THREE DEPARTURE

RWY06 : Climb RWY HDG to 1100FT, turn left,...

RWY24 : Climb RWY HDG to 1300FT, turn right HDG 074˚ to intercept and proceed...
...via MRE R029 to TIKYU via TSUKI.
Cross TSUKI at or above 6000FT.

Note RWY24 : 5.0% climb gradient required up to 1300FT.
OBST ALT 782FT located at 0.8NM 223˚ FM end of RWY24.

STANDARD DEPARTURE CHART-INSTRUMENT

RJSA / AOMORI RNAV SID

OHMAR ONE DEPARTURE	Basic RNP1

Note GNSS required.

OHMAR ONE DEPARTURE

RWY06 : Climb on HDG061˚ at or above 1100FT, turn left direct to SMELT, to TSUKI at or above 6000FT, to OHMAR.

RWY24 : Climb on HDG241˚ at or above 1300FT, turn right direct to SMELT, to TSUKI at or above 6000FT, to OHMAR.

NOTE RWY24 : 5.0% climb gradient required up to 1300FT.
OBST ALT 782FT located at 0.8NM 223˚ FM end of RWY24.

STANDARD DEPARTURE CHART-INSTRUMENT

RJSA / AOMORI RNAV SID

OHMAR ONE DEPARTURE

RWY06

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course ˚M(˚T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	–	–	061 (051.8)	-8.9	–	–	+1100	–	–	Basic RNP1
002	DF	SMELT	–	–	-8.9	–	L	–	–	–	Basic RNP1
003	TF	TSUKI	–	029 (020.5)	-8.9	10.0	–	+6000	–	–	Basic RNP1
004	TF	OHMAR	–	029 (020.5)	-8.9	16.5	–	–	–	–	Basic RNP1

RWY24

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course ˚M(˚T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	–	–	241 (231.8)	-8.9	–	–	+1300	–	–	Basic RNP1
002	DF	SMELT	–	–	-8.9	–	R	–	–	–	Basic RNP1
003	TF	TSUKI	–	029 (020.5)	-8.9	10.0	–	+6000	–	–	Basic RNP1
004	TF	OHMAR	–	029 (020.5)	-8.9	16.5	–	–	–	–	Basic RNP1

STANDARD DEPARTURE CHART-INSTRUMENT

RJSA / AOMORI RNAV SID

SHIRAKAMI ONE DEPARTURE	Basic RNP1

Note GNSS required.

SHIRAKAMI ONE DEPARTURE

RWY06 : Climb on HDG061˚ at or above 1100FT, turn left direct to SA611, to SA612, to UWE.

RWY24 : Climb on HDG241˚ at or above 1200FT, direct to SA411, to UWE.

NOTE RWY24 : 5.0% climb gradient required up to 1200FT.
OBST ALT 782FT located at 0.8NM 223˚ FM end of RWY24.

STANDARD DEPARTURE CHART-INSTRUMENT

RJSA / AOMORI RNAV SID

SHIRAKAMI ONE DEPARTURE

RWY06

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course ˚M(˚T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	–	–	061 (051.8)	-8.9	–	–	+1100	–	–	Basic RNP1
002	DF	SA611	–	–	-8.9	–	L	–	–	–	Basic RNP1
003	TF	SA612	–	241 (231.7)	-8.9	5.0	–	–	–	–	Basic RNP1
004	TF	UWE	–	201 (192.4)	-8.9	70.0	–	–	–	–	Basic RNP1

RWY24

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course ˚M(˚T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	–	–	241 (231.8)	-8.9	–	–	+1200	–	–	Basic RNP1
002	DF	SA411	–	–	-8.9	–	–	–	–	–	Basic RNP1
003	TF	UWE	–	201 (192.3)	-8.9	60.4	–	–	–	–	Basic RNP1

STANDARD ARRIVAL CHART-INSTRUMENT

RJSA / AOMORI STAR

MELOS NORTH ARRIVAL

From over BYOBU, proceed via MRE 12.0DME counterclockwise ARC to MELOS.
Cross MELOS at or above 3300FT.

MELOS SOUTH ARRIVAL

From over YACHI, proceed via MRE 12.0DME clockwise ARC to MELOS.
Cross MRE R216 at or above 4200FT.
Cross MELOS at or above 3300FT.

CHANGE : HLDG pattern for BYOBU

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INSTRUMENT APPROACH CHART

RJSA / AOMORI — ILS Z or LOC Z RWY24 (CAT Ⅱ&Ⅲ)

SAPPORO CONTROL	ILS-LOC	AOMORI TOWER	NO RADAR
127.575 – 315.3 120.575 – 277.1	111.9 IMR ILS–GP 331.1 ILS–DME CH–56X	118.3 – 126.2	

NM to IMR	MAPt	2	3	4	5	6	7	8	FAF
ALT (3.0˚ APCH Path)	–	1293	1612	1930	2249	2567	2886	3204	3434

MISSED APPROACH
Climb on HDG241˚ to 1200FT, via MRE R240 to MRE 7.0DME, turn right, direct to MRE VOR/DME and hold at 6000FT.
Contact AOMORI TOWER.

Timing not authorized for defining the MAPt.

DME to IMR	0.2	0.3	0.7			6.4	8.7		14.2
NM to THR	0	0.1	0.5			6.2	8.5		14.0

Missed APCH climb gradient MNM 4.0%

MINIMA THR elev. 664 AD elev. 650

CAT	CAT ⅢB	CAT ⅢA	CAT Ⅱ			CAT Ⅰ		LOC		CIRCLING	
	RVR	RVR	DA(DH)	RA	RVR	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	100	200	764 (100)	92	300	864 (200)	550	990 (340)	900	1220 (570)	1600
B								1010 (360)	1000		
C								1030 (380)			2400
D								1050 (400)	1400		3200

CHANGE : VAR,RINGO

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling to NORTH side of RWY only.

INSTRUMENT APPROACH CHART

RJSA / AOMORI — ILS Y or LOC Y RWY24 (CAT Ⅱ&Ⅲ)

SAPPORO CONTROL	ILS-LOC	AOMORI TOWER	NO RADAR
127.575 – 315.3 120.575 – 277.1	111.9 IMR ILS–GP 331.1 ILS–DME CH–56X	118.3 – 126.2	

NM to IMR	MAPt	2	3	4	5	6	7	8	FAF
ALT (3.0˚ APCH Path)	–	1293	1612	1930	2249	2567	2886	3204	3434

MISSED APPROACH
Climb on HDG241˚ to 1200FT, via MRE R240 to MRE 7.0DME, turn right, direct to MRE VOR/DME and hold at 6000FT. Contact AOMORI TOWER.

Timing not authorized for defining the MAPt.

DME to IMR	0.2	0.3	0.7	6.4	8.7
NM to THR	0	0.1	0.5	6.2	8.5

Missed APCH climb gradient MNM 4.0%

MINIMA THR elev. 664 AD elev. 650

CAT	CAT ⅢB	CAT ⅢA	CAT Ⅱ			CAT Ⅰ		LOC		CIRCLING	
	RVR	RVR	DA(DH)	RA	RVR	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	100	200	764 (100)	92	300	864 (200)	550	990 (340)	900	1220 (570)	1600
B								1010 (360)	1000		
C								1030 (380)			2400
D								1050 (400)	1400		3200

CHANGE : VAR

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling to NORTH side of RWY only.

INSTRUMENT APPROACH CHART

RJSA / AOMORI — VOR RWY24

SAPPORO CONTROL	AOMORI VOR/DME	AOMORI TOWER	NO RADAR
127.575 – 315.3 120.575 – 277.1	114.1 MRE CH – 88X 40˚44´20˚´N/140˚42´19˚´E	118.3 –126.2	

MARRY(FAF) : *404842.24N /1404733.47E*

NM to MRE	MAPt	1	2	3	4	5	FAF
ALT (3.0˚ APCH Path)	–	1025	1344	1662	1980	2299	2589

MISSED APPROACH

Climb to 6000FT via MRE R231 to MRE 5.0DME, turn right, direct to MRE VOR/DME and hold. Contact AOMORI TOWER.

VDP
D0.9 MRE(CAT A)
D1.1 MRE(CAT B)
D1.2 MRE(CAT C)
D1.3 MRE(CAT D)

Timing not authorized for defining the MAPt.

DME to MRE	0.2	0.9	5.9	9.2	14.0
NM to THR	0	0.9	5.9	9.2	14.0

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 664 AD elev. 650

CAT			CIRCLING	
	MDA(H)	RVR/CMV	MDA(H)	VIS
A	990 (340)	900	1220 (570)	1600
B	1030 (380)	1000		
C	1070 (420)			2400
D	1110 (460)	1600		3200

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling to NORTH side of RWY only.

CHANGE : HLDG pattern for BYOBU

INSTRUMENT APPROACH CHART

RJSA / AOMORI — VOR Z RWY06

SAPPORO CONTROL	AOMORI VOR/DME	AOMORI TOWER	NO RADAR
127.575 – 315.3 120.575 – 277.1	114.1 MRE CH – 88X *40˚44´20˝N/140˚42´19˝E*	118.3 – 126.2	

NM to MRE	FAF	6	5	4	MAPt
ALT (3.0˚ APCH Path)	2412	2090	1771	1457	–

NEBTA(FAF) : *404027.26N /1403437.70E*

MISSED APPROACH
Turn left, climb to 6000FT via MRE R014 to MRE 5.0DME, turn left, direct to MRE VOR/DME and hold. Contact AOMORI TOWER.

Timing not authorized for defining the MAPt.

MINIMA	THR elev. 647		AD elev. 650	
CAT			CIRCLING	
	MDA(H)	RVR/CMV	MDA(H)	VIS
A	1300 (650)	1500	1300 (650)	1600
B				
C		1800		2400
D		2000		3200

Circling to NORTH side of RWY only.

CHANGE : HLDG pattern for MRE VOR/DME

INSTRUMENT APPROACH CHART

RJSA / AOMORI — VOR Y RWY06

SAPPORO CONTROL	AOMORI VOR/DME	AOMORI TOWER	NO RADAR
127.575 – 315.3 120.575 – 277.1	114.1 MRE CH – 88X *40˚44´20˜N/140˚42´19˜E*	118.3 – 126.2	

NM to MRE	FAF	6	5	4	MAPt
ALT (3.0˚ APCH Path)	2412	2090	1771	1457	–

NEBTA(FAF) : *404027.26N /1403437.70E*

MISSED APPROACH
Turn left, climb to 6000FT via MRE R014 to MRE 5.0DME, turn left, direct to MRE VOR/DME and hold.
Contact AOMORI TOWER.

Timing not authorized for defining the MAPt.

MINIMA	THR elev. 647		AD elev. 650	
CAT			CIRCLING	
	MDA(H)	RVR/CMV	MDA(H)	VIS
A	1300 (650)	1500	1300 (650)	1600
B				
C		1800		2400
D		2000		3200

Circling to NORTH side of RWY only.

CHANGE : HLDG pattern for MRE VOR/DME

INSTRUMENT APPROACH CHART

RJSA / AOMORI — RNAV(RNP) Z RWY24

SAPPORO CONTROL 127.575 – 315.3 120.575 – 277.1	GNSS and RF required	AOMORI TOWER 118.3 –126.2	NO RADAR

For uncompensated Baro-VNAV systems, procedure not authorized below -20˚C / above 45˚C

MISSED APPROACH

Climb to 6000FT, to SA455,
to YACHI and hold.
Contact AOMORI TOWER.

Missed APCH climb gradient MNM 5.0%

MINIMA	THR elev. 664		AD elev. 650	
CAT	RNP 0.10		RNP 0.30	
	DA(H)	RVR/CMV	DA(H)	RVR/CMV
A	–	–	–	–
B				
C	984(320)	1000	1063(399)	1000
D	994(330)	1400	1073(409)	1400

MINIMA with Missed APCH climb gradient of 2.5% are not established.

RNP AR
Special Authorization Required

CHANGE : Editorial

INSTRUMENT APPROACH CHART

RJSA / AOMORI RNAV(RNP) Z RWY24

RNAV (RNP) Z RWY24

Coding Table

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course ˚M(˚T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (˚/FT)	RNP Value
001	IF	YACHI	–	–	-9.0	–	–	+6000	–	–	–
002	TF	SA451	–	033 (024.4)	-9.0	8.2	–	+4300	–	–	1.0
003	TF	NAMBU	–	033 (024.5)	-9.0	5.0	–	3700	–	–	1.0
004	TF	SA453	–	033 (024.5)	-9.0	1.9	–	3091	-165	-3.00	0.10 0.30
005	RF Center: SARF1 r=2.09NM	SA454	–	–	-9.0	5.6	L	1320	–	-3.00	0.10 0.30
006	TF	RW24	Y	241 (231.8)	-9.0	1.9	–	718	–	-3.00/54	0.10 0.30
007	TF	SA455	–	241 (231.8)	-9.0	7.0	–	–	–	–	1.0
008	TF	YACHI	–	169 (159.7)	-9.0	11.4	–	6000	–	–	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
YACHI	*402925.44N/1404004.97E*	SARF1	*404400.99N/1404548.34E*
SA451	*403651.24N/1404431.58E*		
NAMBU	*404124.39N/1404715.47E*		
SA453	*404308.85N/1404818.25E*		
SA454	*404539.74N/1404406.71E*		
RW24	*404429.79N/1404209.27E*		
SA455	*404008.45N/1403451.64E*		

CHANGE : VAR, PROC renamed

INSTRUMENT APPROACH CHART

RJSA / AOMORI

RNAV(RNP) Y RWY24

SAPPORO CONTROL 127.575 – 315.3 120.575 – 277.1	GNSS and RF required	AOMORI TOWER 118.3 –126.2	NO RADAR

For uncompensated Baro-VNAV systems, procedure not authorized below -20˚C / above 45˚C

MISSED APPROACH

To SA455 on track 241°,
turn right direct to BYOBU
and hold at 6000FT.
Contact AOMORI TOWER.

Missed APCH climb gradient MNM 5.0%

MINIMA	THR elev. 664		AD elev. 650	
CAT	RNP 0.10		RNP 0.30	
	DA(H)	RVR/CMV	DA(H)	RVR/CMV
A	–	–	–	–
B				
C	984(320)	1000	1063(399)	1000
D	994(330)	1400	1073(409)	1400

MINIMA with Missed APCH climb gradient of 2.5% are not established.

RNP AR

Special Authorization Required

CHANGE : New PROC

INSTRUMENT APPROACH CHART

RJSA / AOMORI RNAV(RNP) Y RWY24

RNAV (RNP) Y RWY24

Coding Table

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (°/FT)	RNP Value
001	IF	BYOBU	—	—	-9.0	—	—	+6000	—	—	—
002	TF	ASAMU	—	168 (159.3)	-9.0	4.0	—	+5100	—	—	1.0
003	TF	SA456	—	168 (159.3)	-9.0	5.8	—	+2400	-185	—	0.3
004	RF Center: SARF3 r=2.83NM	SERYU	—	—	-9.0	3.6	R	2400	-165	—	0.3
005	TF	RW24	Y	241 (231.9)	-9.0	5.3	—	718	—	-3.00/54	0.10 0.30
006	CF	SA455	Y	241 (231.8)	-9.0	7.0	—	—	—	—	1.0
007	DF	BYOBU	—	—	-9.0	—	R	6000	—	—	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
BYOBU	*410009.54N/1404414.25E*	SARF3	*404959.39N/1404519.70E*
ASAMU	*405624.95N/1404606.79E*		
SA456	*405059.78N/1404849.32E*		
SERYU	*404745.29N/1404737.78E*		
RW24	*404429.79N/1404209.27E*		
SA455	*404008.45N/1403451.64E*		

CHANGE : New PROC

INSTRUMENT APPROACH CHART

RJSA / AOMORI — RNAV(RNP) Z RWY06

SAPPORO CONTROL 127.575 – 315.3 120.575 – 277.1	GNSS and RF required	AOMORI TOWER 118.3 –126.2	NO RADAR

For uncompensated Baro-VNAV systems, procedure not authorized below -20˚C / above 45˚C

MISSED APPROACH

From RW06 on track 061˚ at or above 1200FT turn left, direct to SA675, to SA676, to SA677, to YACHI and hold at 6000FT.
Contact AOMORI TOWER.

Missed APCH climb gradient MNM 5.0%

MINIMA	THR elev. 647		AD elev. 650	
CAT	RNP 0.10		RNP 0.30	
	DA(H)	RVR/CMV	DA(H)	RVR/CMV
A	–	–	–	–
B				
C	1004(357)	1400	1039(392)	1400
D	1014(367)	1600	1049(402)	1600

MINIMA with Missed APCH climb gradient of 2.5% are not established.

RNP AR

Special Authorization Required

CHANGE : MINIMA, VAR, PROC renamed

INSTRUMENT APPROACH CHART

RJSA / AOMORI RNAV(RNP) Z RWY06

RNAV (RNP) Z RWY06

Coding Table

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course ˚M(˚T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (˚/FT)	RNP Value
001	IF	YACHI	–	–	-9.0	–	–	+6000	–	–	–
002	TF	SA671	–	359 (350.0)	-9.0	4.0	–	+4000	–	–	1.0
003	TF	GENOA	–	359 (350.0)	-9.0	4.9	–	2700	–	–	1.0
004	TF	SA673	–	359 (350.0)	-9.0	2.3	–	1983	-165	-3.00	0.10 0.30
005	RF Center: SARF2 r=1.95NM	SA674	–	–	-9.0	2.1	R	1312	–	-3.00	0.10 0.30
006	TF	RW06	Y	061 (051.8)	-9.0	1.9	–	697	–	-3.00/50	0.10 0.30
007	FA	–	–	061 (051.8)	-9.0	–	–	+1200	–	–	1.0
008	DF	SA675	–	–	-9.0	–	L	–	–	–	1.0
009	TF	SA676	–	241 (231.7)	-9.0	9.0	–	–	–	–	1.0
010	TF	SA677	–	151 (141.8)	-9.0	9.0	–	–	–	–	1.0
011	TF	YACHI	–	126 (117.1)	-9.0	6.6	–	6000	–	–	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
YACHI	*402925.44N/1404004.97E*	SARF2	*404045.88N/1404003.56E*
SA671	*403322.04N/1403910.22E*		
GENOA	*403812.40N/1403802.88E*		
SA673	*404025.48N/1403731.96E*		
SA674	*404218.09N/1403828.52E*		
RW06	*404329.77N/1404028.61E*		
SA675	*404504.89N/1403421.94E*		
SA676	*403930.44N/1402503.91E*		
SA677	*403225.82N/1403222.79E*		

CHANGE : VAR, PROC renamed

INSTRUMENT APPROACH CHART

RJSA / AOMORI — RNAV(RNP) Y RWY06

SAPPORO CONTROL 127.575 – 315.3 120.575 – 277.1	GNSS and RF required	AOMORI TOWER 118.3 –126.2	NO RADAR

For uncompensated Baro-VNAV systems, procedure not authorized below -20˚C / above 45˚C

MIOKA(FAF) : *404600.69N/1403506.18E*

MISSED APPROACH

Climb to 6000FT, to SA679, to BYOBU and hold.
Contact AOMORI TOWER.

Missed APCH climb gradient MNM 5.0%

MINIMA	THR elev. 647		AD elev. 650	
CAT	RNP 0.10		RNP 0.30	
	DA(H)	RVR/CMV	DA(H)	RVR/CMV
A	–	–	–	–
B				
C	1004(357)	1400	1039(392)	1400
D	1014(367)	1600	1049(402)	1600

MINIMA with Missed APCH climb gradient of 2.5% are not established.

RNP AR

Special Authorization Required

CHANGE : New PROC

INSTRUMENT APPROACH CHART

RJSA / AOMORI RNAV(RNP) Y RWY06

RNAV (RNP) Y RWY06

Coding Table

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (°/FT)	RNP Value
001	IF	BYOBU	—	—	-9.0	—	—	+6000	—	—	—
002	TF	ABURA	—	215 (206.1)	-9.0	6.5	—	+5100	—	—	1.0
003	TF	MIOKA	—	215 (206.0)	-9.0	9.3	—	3500	—	—	1.0
004	TF	SA678	—	215 (206.0)	-9.0	1.3	—	3085	-165	-3.00	0.10 0.30
005	RF Center: SARF4 r=2.07NM	SA674	—	—	-9.0	5.6	L	1312	—	-3.00	0.10 0.30
006	TF	RW06	Y	061 (051.8)	-9.0	1.9	—	697	—	-3.00/50	0.10 0.30
007	TF	SA679	—	061 (051.8)	-9.0	5.7	—	—	—	—	1.0
008	TF	BYOBU	—	002 (352.9)	-9.0	13.2	—	6000	—	—	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
BYOBU	*410009.54N/1404414.25E*	SARF4	*404355.81N/1403647.71E*
ABURA	*405419.99N/1404028.03E*		
MIOKA	*404600.69N/1403506.18E*		
SA678	*404450.39N/1403420.99E*		
SA674	*404218.09N/1403828.52E*		
RW06	*404329.77N/1404028.61E*		
SA679	*404701.68N/1404624.34E*		

CHANGE : New PROC

RJSA / AOMORI

Visual REP

Call sign	BRG / DIST from ARP	Remarks
アスパム Aspam	031°/ 6.3NM	アスパム，三角形のビル ASPAM, Triangular
雲　谷 Moya	096°/ 4.9NM	雲谷スキー場 Moya Slope
下　湯 Shimoyu	131°/ 5.0NM	下湯平成湖 Lake
黒石インター Kuroishi Inter	215°/ 7.4NM	東北自動車道黒石インター Intersection
釈　迦 Shaka	295°/ 4.8NM	JR大釈迦駅 JR Station

RJSA / AOMORI
LDG CHART
ELEV 650ft
40´
42´
140°44´
46´
44´
42´
40°42´
700
702
647
748
769
765
678
677
717
PALS
679
VOR/DME
AOMORI
114.1 MRE
CH-88X
40°44´20´N/140°42´19´E
AOMORI TWR
118.3–126.2
ABN
9840 X 200ft
Asph – Conc
PAPI ANGLE 3.0°
MEHT 22.5m(74ft)
423m fm THR
PAPI ANGLE 3.0°
MEHT 20.0m(66ft)
440m fm THR
692
896
860
691
SALS
734
660
772
661
730
721
723
1120
919
795
1170
862
708
866
1241
1265
979
990
1230
893
1320
1459
1289
868
1665
845
1491
1456
VAR 8°36´W
2005
SCALE
1000 0 1000 3000 ft
500 0 500 1000m
ELEVATION AND
HEIGHTS IN FEET
MEAN SEA LEVEL

RJSA / AOMORI

Minimum Vectoring Altitude CHART