

AD 2. AERODROMES

RKSI AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RKSI - SEOUL / Incheon INTL

RKSI AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	372745N 1262621E 295° / 2 357 m from THR 33R
2	Direction and distance from city	264°, 48.7 km from Seoul City Hall 279°, 23.9 km from Incheon City Hall
3	Elevation/Reference temperature	7 m / 30.3 °C
4	Geoid undulation at AD ELEV PSN	21 m
5	Magnetic VAR/Annual change	9° W (2020) / 0.093° increasing
6	Aerodrome Operator, Address, Telephone, FAX, AFS	Incheon International Airport Corporation 47, Gonghang-ro 424beon-gil, Jung-gu, Incheon 22382, Republic of Korea TEL : +82-32-741-2601~2 FAX : +82-32-741-2610 AFS : (Terminal 1) RKSI ZPZX (Terminal 2) RKSI ZPZB
7	Types of traffic permitted(IFR/VFR)	IFR/VFR
8	Remarks	NIL

RKSI AD 2.3 OPERATIONAL HOURS

1	Aerodrome Operator	H24
2	Customs and Immigration	H24
3	Health and Sanitation	H24
4	AIS Briefing Office	H24
5	ATS Reporting Office	H24
6	MET Briefing Office	H24
7	ATS	H24
8	Fuelling	H24
9	Handling	H24
10	Security	H24
11	De-icing	H24
12	Remarks	NIL

Change : Information of aerodrome operator, telephone, FAX and AFS.

RKSI AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo handling facilities	All modern facilities handling weights up to 7 000 kg
2	Fuel/oil types	Fuel : Jet A-1 Oil : Turbo Oil 2 380, Jet Oil 254, Castrol 5 000
3	Fuelling facilities/capacity	a. Jet A1 available by hydrant refueling on passenger, remote, cargo apron, at rate of 1 000 gpm. 27 aircraft can be fueled simultaneously, total amount of storage is 187 353 600 L. b. Hydrant refueling is unserviceable on every 4th Monday (1630-1800 UTC) of the month due to scheduled inspection. Tank lorries are available H24.
4	De-icing facilities	Provide 25 de-icing pads (Refer to Aircraft Parking / Docking Chart)
5	Hangar space for visiting aircraft	Not available
6	Repair facilities for visiting aircraft	Minor repairs without hangar
7	Remarks	NIL

RKSI AD 2.5 PASSENGER FACILITIES

1	Hotels	In Incheon & Seoul city (Transit hotel at passenger terminal)
2	Restaurants	At AD and in the city
3	Transportation	Rail, buses, taxis, rental cars and ferries from the AD
4	Medical facilities	a. First aid emergency medical center in airport b. Ambulance service available c. Hospitals in Incheon city, 20 km away
5	Bank and Post Office	Available at AD
6	Tourist Office	Available at AD
7	Remarks	http://airport.kr

RKSI AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD Category for fire fighting	AD Category for fire fighting : Category 10											
2	Rescue equipment	<div>a. 3 ARFF* vehicles (8 × 8) :</div> <table><tr><td>Capacity of water (L)</td><td>17 000 (2) 12 000 (1)</td></tr><tr><td>Capacity of foam (L)</td><td>2 400 (2) 1 500 (1)</td></tr><tr><td>Foam discharge rate (L/min)</td><td>8 000 (2) 7 500 (1)</td></tr><tr><td>Capacity of dry chemical powder (kg)</td><td>250 (1) 225 (2)</td></tr><tr><td>Dry chemical powder discharge rate (kg/s)</td><td>2.5 (1) 2.3 (2)</td></tr></table>	Capacity of water (L)	17 000 (2) 12 000 (1)	Capacity of foam (L)	2 400 (2) 1 500 (1)	Foam discharge rate (L/min)	8 000 (2) 7 500 (1)	Capacity of dry chemical powder (kg)	250 (1) 225 (2)	Dry chemical powder discharge rate (kg/s)	2.5 (1) 2.3 (2)	
Capacity of water (L)	17 000 (2) 12 000 (1)												
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Foam discharge rate (L/min)	8 000 (2) 7 500 (1)												
Capacity of dry chemical powder (kg)	250 (1) 225 (2)												
Dry chemical powder discharge rate (kg/s)	2.5 (1) 2.3 (2)												
		<div>b. 4 ARFF* vehicles (6 × 6) :</div> <table><tr><td>Capacity of water (L)</td><td>11 000 (each)</td></tr><tr><td>Capacity of foam (L)</td><td>1 590 (2), 1 000 (2)</td></tr><tr><td>Foam discharge rate (L/min)</td><td>7 900 (2), 7 500 (2)</td></tr><tr><td>Capacity of dry chemical powder (kg)</td><td>200 (2), 225 (2)</td></tr><tr><td>Dry chemical powder discharge rate (kg/s)</td><td>2.3 (2), 2.5 (2)</td></tr></table>	Capacity of water (L)	11 000 (each)	Capacity of foam (L)	1 590 (2), 1 000 (2)	Foam discharge rate (L/min)	7 900 (2), 7 500 (2)	Capacity of dry chemical powder (kg)	200 (2), 225 (2)	Dry chemical powder discharge rate (kg/s)	2.3 (2), 2.5 (2)	
Capacity of water (L)	11 000 (each)												
Capacity of foam (L)	1 590 (2), 1 000 (2)												
Foam discharge rate (L/min)	7 900 (2), 7 500 (2)												
Capacity of dry chemical powder (kg)	200 (2), 225 (2)												
Dry chemical powder discharge rate (kg/s)	2.3 (2), 2.5 (2)												
		<div>c. 1 ARFF* vehicles (4 × 4) :</div> <table><tr><td>Capacity of water (L)</td><td>6 200</td></tr><tr><td>Capacity of foam (L)</td><td>750</td></tr><tr><td>Foam discharge rate (L/min)</td><td>6 500</td></tr><tr><td>Capacity of dry chemical powder (kg)</td><td>250</td></tr><tr><td>Dry chemical powder discharge rate (kg/s)</td><td>2.5</td></tr></table>	Capacity of water (L)	6 200	Capacity of foam (L)	750	Foam discharge rate (L/min)	6 500	Capacity of dry chemical powder (kg)	250	Dry chemical powder discharge rate (kg/s)	2.5	
Capacity of water (L)	6 200												
Capacity of foam (L)	750												
Foam discharge rate (L/min)	6 500												
Capacity of dry chemical powder (kg)	250												
Dry chemical powder discharge rate (kg/s)	2.5												
		<div>d. 3 Pump vehicles :</div> <table><tr><td>Capacity of water (L)</td><td>4 000 (2) 300 (1)</td></tr><tr><td>Capacity of foam (L)</td><td>400 (2) 20 (1)</td></tr><tr><td>Foam discharge rate (L/min)</td><td>4 000 (2), 40 (1)</td></tr><tr><td>Capacity of dry chemical powder (kg)</td><td>140 (2)</td></tr></table>	Capacity of water (L)	4 000 (2) 300 (1)	Capacity of foam (L)	400 (2) 20 (1)	Foam discharge rate (L/min)	4 000 (2), 40 (1)	Capacity of dry chemical powder (kg)	140 (2)			
Capacity of water (L)	4 000 (2) 300 (1)												
Capacity of foam (L)	400 (2) 20 (1)												
Foam discharge rate (L/min)	4 000 (2), 40 (1)												
Capacity of dry chemical powder (kg)	140 (2)												

2		e. 2 Supplementary water tank trucks : 12 000 L(2) f. 3 Ambulances g. 1 Rescue truck h. 1 Commanding vehicle i. 1 Aircraft rescue fire-fighting stair vehicle j. 1 Emergency relief
3	Capability for removal of disabled aircraft	a. Specialized aircraft recovery equipment(six 30 ton, two 40 ton Pneumatic lifting bags and inflation equipment), Four 100 ton hydraulic recovery jacks, one set of tethering equipment and other accessory equipment available for up to B747 size aircraft can be provided by IIAC, airlines and agencies. b. Coordinator : Emergency Management Center (+82-32-741-2961)
4	Remarks	* ARFF (Aircraft Rescue and Fire-fighting)

RKSI AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Type of clearing equipment	a. 21 Towed runway jet sweeper(working width : up to 8.61 m) b. 28 Compact runway jet sweeper(working width : up to 5.5 m) c. 7 Snow blower(working width : up to 2.5 m) d. 6 Liquid material sprayers(working width : up to 24 m) e. 4 Solid material spreader(working width : up to 5 m) f. 6 Snow plow(working width : up to 3.2 m)
2	Clearance priorities	a. First 1) RWY 15L/33R, 16L/34R 2) TWY A, C, D, N 3) Rapid exit taxiways(C1, C2, C4, C5, D1, D6, N2, N3, N4, N5) and right angle taxiways(S, W, G, J, K, L, A7, A8, A19, N6, N7, M7, M8, M9, M10, M15, M16, M17) 4) Apron taxiways b. Second 1) RWY 15R/33L, 16R/34L 2) TWY B, M, P 3) Rapid exit taxiways and right angle taxiways connecting RWY 15R/33L, 16R/34L or TWY B, M, P 4) Aircraft stand taxilanes 5) Apron taxiways c. Third Other areas except the first and second
3	Remarks	NIL

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

1	Designation, Apron(Ramp) surface and strength	a. Apron1 : Concrete PCN 86/R/B/X/T b. Apron2 : Concrete PCN 86/R/B/X/T c. Apron3 : Concrete PCN 85/R/B/X/T d. Apron4 : Concrete PCN 85/R/B/X/T e. Cargo Apron1 : Concrete PCN 86/R/B/X/T f. Cargo Apron2 : Concrete PCN 85/R/B/X/T g. Maintenance Apron : Concrete PCN 86/R/B/X/T
2	Designation, Taxiway width, surface and strength	Taxiway width, surface and strength : a. Width : 30 m - Shoulder of TWY A/B/C/D : 15 m (Paved 12 m, Turfed 3 m) - Shoulder of TWY M/N/P : 15 m (Paved) b. Surface : Asphalt, Concrete c. Strength TWY A, D : Concrete PCN 86/R/B/X/T TWY B, C : Asphalt PCN 88/F/B/X/T TWY M : Concrete PCN 85/R/B/X/T TWY N : Asphalt PCN 75/F/B/X/T TWY P : Asphalt PCN 75/F/B/X/T
3	Altimeter check location and elevation	Every specified stands (Refer to Aircraft Parking / Docking Chart)
4	VOR check point	See AD Chart
5	INS check points	INS Checkpoints : Every specified stand (Refer to Aircraft Parking / Docking Chart)
6	Remarks	NIL



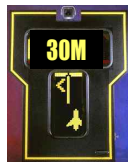
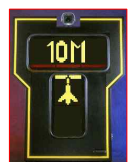

Change : Information of clearance priorities.

RKSI AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of Mode S transponder on the ground	
1.1	General	This system using Mode S transponder improves the accuracy and the reliability of the ground movement monitoring system.
1.2	ACFT equipped with Mode S transponder	ACFT operators shall ensure that Mode S transponders are able to operate when ACFT is on the ground.
1.2.1	Departing ACFT	<p>Prior to push-back or taxiing from a parking stand whichever comes first :</p> <ul style="list-style-type: none"> - Enter, using either FMS mode or transponder control unit, the flight identification as specified in item 7 of the ICAO flight plan(ex.: KAL123, AAR 456) or enter in the absence of flight identification, the ACFT registration. - Select XPNDR or its equivalent in relation to specifications on the installed model. - If function is available, select AUTO mode. - Do not select Off or SDBY functions. - Set Mode A code assigned by ATC. <p>Lining up</p> <ul style="list-style-type: none"> - Select TA/RA.
	Arriving ACFT	<p>After landing and until the ACFT is stationary at parking stand :</p> <ul style="list-style-type: none"> - Maintain XPNDR or its equivalent in relation of specification of the installed model. - Do not select OFF and SDBY functions. - Maintain Mode A code assigned by ATC. <p>When ACFT is stationary at the parking stand, select OFF or SDBY.</p>
	Other cases of taxiing ACFT	<ul style="list-style-type: none"> - Select XPNDR or its equivalent in relation to specifications of the installed model. - If function is available, select AUTO mode. - Do not select the OFF and SDBY function. - Set Mode A code to 2000.
1.3	ACFT not equipped with Mode S transponder or with an unserviceable Mode S transponder	<p>Departing ACFT :</p> <ul style="list-style-type: none"> - Maintain Mode A+C transponder in the ON position until lining up. <p>Arriving ACFT :</p> <ul style="list-style-type: none"> - Maintain Mode A+C transponder in the ON position and Mode A code assigned by ATC until parking stand. <p>Other cases of taxiing ACFT :</p> <ul style="list-style-type: none"> - Select A+C transponder in the ON position or its equivalent in relation to specifications of the installed model. - Do not select the OFF and SDBY function. - Set Mode A code to 2000. <p>Fully parked on stand :</p> <ul style="list-style-type: none"> - Select OFF or SDBY position.
2	RWY and TWY marking and LGT	<p>a. Runway</p> <ol style="list-style-type: none"> 1) Lights <ul style="list-style-type: none"> - Edge lights are installed at 60 m intervals on all runways. - Centerline lights are installed at 15 m intervals on all runways. 2) Markings <ul style="list-style-type: none"> - Runway edges, Touchdown zones, Aiming points and Center line. <p>b. Taxiway</p> <ol style="list-style-type: none"> 1) Lights <ul style="list-style-type: none"> - Edge lights are installed at 15 m intervals on all TWY curved areas and 60 m intervals of markers are in the rest of areas. - Centerline Lights are installed at 3.75~7.5 m intervals on all TWY curved areas and 15 m intervals in the rest of areas. - Aircraft stand maneuvering guidance lights (SMGL) are installed to facilitate the positioning of the aircraft at the stand (Passenger Apron and Concourse). The lights to delineate the lead-in are spaced with not more than 7.5 m intervals in the curves and 15 m intervals on the straight sections. 2) Markings <ul style="list-style-type: none"> - TWY & taxiway centerline markings are marked with a yellow solid line on the black base on all specified taxiways designated as the SMGCS (Surface Movement Guidance & Control System) taxiway routes. - Holding position markings are installed on TWY D, G, L, N1, N6, N7 and S for ILS sensitive area in the form of trapezoid as recommended by ICAO (Annex 14). - Geographic position markings are located on the TWYs and Apron Areas and are used to identify the location of taxiing aircraft or vehicles during low visibility conditions. In conjunction with use of ASDE, they provide geographic position of A/C and vehicles if ASDE is unserviceable. 3) Signs <ul style="list-style-type: none"> - ILS Taxi-holding position signs are marked as "CAT II/III". - Runway holding position lines and Signs are installed on taxiways G, B1, B7, L, S, P1, P12 and P13 substitute for the ILS sensitive area taxi-holding position.

Change : Amended phrase(taxing → taxiing)

3	Stop Bars and RWY Guard Lights	<p>a. Stop Bar Lights across the taxiway are installed at the runway holding positions, ILS sensitive area holding positions. Stop Bar Lights on Taxiway A, B, C, D are inserted on the intersection taxiway and straight taxiway at intervals of 200 m.</p> <p>b. Stop Bar Lights on Taxiway M, N, P are inserted on the intersection taxiway.</p> <p>c. Stop Bar Lights consist of in-pavement and elevated red unidirectional fixtures and are installed at 3 m intervals.</p> <p>d. Stop Bars are controlled by ATC and include a system of in-pavement green taxiway centerline lights, lead-on/off lights at the locations where aircraft enter or cross a runway.</p> <p>e. RWY Guard Lights are provided with a pair of yellow flashing lights on either side of the stop bar installed at the runway holding positions and ILS sensitive area holding positions.</p>
4	Intermediate Holding Position Lights	<p>a. Intermediate Holding Position Lights consist of in-pavement yellow fixtures installed at the intermediate holding position in the Apron 2, 3, 4 and Cargo Apron 2 areas.</p> <p>b. Intermediate Holding Position Lights are not installed where Stop Bar Lights are installed.</p>
5	A-SMGCS & ASDE	<p>a. A-SMGCS (Advanced Surface Movement Guidance & Control System) A-SMGCS provides Surveillance, Routing, Guidance and Control Functions to ATC. Its operations apply automated routing and lighting systems during night time and daylight time under IFR conditions. When a taxiing route is selected, the corresponding segments of taxiway centerline lights are switched on automatically ahead of the aircraft and are then extinguished immediately after the aircraft passes. All the movement of aircraft including vehicles are strictly required to obey instructions issued by ATC with this system during LVP(Low Visibility Procedures) in operation.</p> <p>b. ASDE (Airport Surface Detection Equipment) ASDE comply with CAT III capabilities of identification, monitoring and alerting information to ATC following : <ul style="list-style-type: none"> - 360° Radius coverage and ground movement data displaying. - Runway incursion & collisions warnings. - Interfacing capability with ARTS(Automated Terminal Radar System) or A-SMGCS. </p>
6	Remarks	NIL

General explanation of PDU(Pilot Display Unit) _ Concourse	
	<ol style="list-style-type: none"> 1. It is the camera to detect the approaching aircraft. 2. During the docking procedure, it visually represents the guidance information such as aircraft type and remaining distance. 3. It represents the stand centre line. When the camera detects the approaching aircraft, this vertical bar is displayed to let the pilot know the correct course. 4. It provides the azimuth guidance information to the pilot. When the aircraft deviates from the stand centre line, this symbol is shown to correct the direction which the arrow symbol points to. 5. It is the symbol of the aircraft.
The VDGS(Visual Docking Guidance System) Docking Procedure _ Concourse	
	<ol style="list-style-type: none"> 1. The docking preparation After initializing the docking stand designation, the expected aircraft type and the stand number will be alternatively displayed on the upper LCD of the PDU. At the same time, the lead-in lights installed along the stand centre line will be switched on. 2. The azimuth guidance information When the aircraft is detected by the camera, azimuth guidance information will be provided on the lower LCD of the PDU. In case the aircraft deviates from the stand centre line, the arrow symbol will be displayed.
	<ol style="list-style-type: none"> 3. The remaining distance information
	<ol style="list-style-type: none"> a. The remaining distance information will be shown numerically on the upper LCD of the PDU with the graphical presentation starting from 30 m before the stop point. At the same time, the aircraft symbol will be shown along the stand centre line displaying on the lower LCD of the PDU. b. The remaining distance information will be displayed 30 m to 20 m by 5 m step (30, 25, and 20 m), 20 m to 10 m by 2 m step (20, 18, 16, 14, 12, and 10 m), 10 m to 1 m by 1 m step (10, 9, 8, 7, 6, 5, 4, 3, 2, and 1 m), and the remaining last 1 m will be shown by 0.2 m step (1, 0.8, 0.6, 0.4, 0.2, and STOP). Some remaining distance information may not be displayed on the PDU according to the aircraft docking speed.
	

Change : Amended writing rules.

The VDGS(Visual Docking Guidance System) Docking Procedure _ Concourse	
	<p>4. The STOP information</p> <ul style="list-style-type: none">a. It represents that the pilot should stop his aircraft.b. If the aircraft overruns more than 2 m, STOP TOO FAR message will be shown on the upper LCD of the PDU.
	<p>5. The ESTOP information</p> <ul style="list-style-type: none">a. The ESTOP (Emergency stop) will be displayed when the aircraft deviates too far from the stand centre line or the field operator presses the E-STOP button.b. In case ESTOP message is shown on the PDU, the aircraft should be stopped immediately.
	<p>6. The docking completion information</p> <p>When the aircraft has reached the stop point within the tolerance, the OK message will be shown on the upper LCD of the PDU.</p>
	<p>7. The ON BLOCK Information</p> <ul style="list-style-type: none">a. The ONBLK (On block) message and time will be displayed on the PDU right after changing from STOP to OK message.b. The On block time will be transmitted to the IIS(Integrated Information System).
	
A-CDM Information on VDGS _ Concourse	
	<p>TOBT or TSAT information is provided on VDGS for push-back waiting aircraft. (Refer to AD 2.20)</p>
	

Notice for the use of VDGS

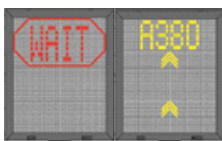
1. VDGS service is provided to Concourse stands (total 30). Marshalling service should be provided for any of the following cases;
 - a. When VDGS or ASDE is inoperative in case of work in progress, heavy snow, etc.
 - b. When a Low Visibility Procedure is in operation.
 - c. When Aircraft types are IL62, IL76, IL96, TU204, B789, B748, A359, B781, 7M8, A339, A32N and A32Q.
2. In case the aircraft type and the stand number displaying on the PDU are different from the actual approaching aircraft type and the actual stand number, the pilot should stop his aircraft immediately and notify the Incheon Apron, and then follow the marshaller's instruction.
3. If the stand number and aircraft type are still displayed alternately on the PDU until the aircraft approaches to 10 m prior to the stop point, the pilot should stop his aircraft immediately and notify the Incheon Apron, and then follow the marshaller's instruction.
4. If the ESTOP message is displayed on the PDU, the pilot should stop his aircraft immediately and notify the Incheon Apron, and then follow the marshaller's instruction. For any of the following cases, the field operator should press the emergency stop button.
 - a. When the aircraft overruns or is expected to go more than 1 m from the stop point.
 - b. In case the pilot does not stop the aircraft immediately, although the aircraft type and the gate number displayed on the PDU differ from the actual aircraft type and gate number.
 - c. In case there is any obstacle interrupting the normal docking procedure around the docking area.
5. In case that the VDGS docking information and the marshaller's instruction are different, the pilot should follow the marshaller's instruction first.
6. When the aircraft reaches about 10 m prior to the stop point, the pilot should decrease the speed as much as the aircraft could be stopped immediately until the STOP or ESTOP message is displayed on the PDU.
7. If the aircraft approaches to the stand in excess of the speed limit in Concourse, the SLOW message should be displayed on the PDU. The pilot should reduce the speed.

General explanation of PDU(Pilot Display Unit) _ Passenger Terminal #1 and #2

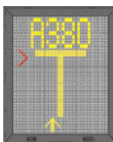


1. It is the laser unit to detect the approaching aircraft.
2. During the docking procedure, it visually represents the guidance information such as aircraft type and remaining distance.
3. It represents the stand centre line. When the laser unit detects the approaching aircraft, this vertical bar is displayed to let the pilot know the correct course.
4. It provides the azimuth guidance information to the pilot. When the aircraft deviates from the stand centre line, this symbol is shown to correct the direction which the arrow symbol points to.
5. It is the symbol of the aircraft.

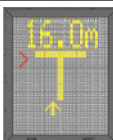
The VDGS(Visual Docking Guidance System) Docking Procedure _ Passenger Terminal #1 and #2



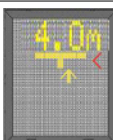
1. The docking preparation
 - a. After initializing the docking stand designation, WAIT message will be displayed and then the expected aircraft type displayed continuously on the upper LED of the PDU. At the same time, the lead-in lights installed along the stand centre line will be switched on.
 - b. When the aircraft is detected by the laser unit, floating arrow symbol will be displayed on the lower LED of the PDU.



2. The azimuth guidance information
 - a. In case the aircraft deviates from the stand centre line, the red arrow symbol will be displayed.

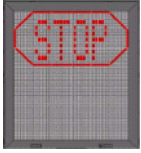






3. The remaining distance information
 - a. The remaining distance information will be shown numerically on the upper LED of the PDU with the graphical presentation starting from 30 m before the stop point. At the same time, the aircraft symbol will be shown along the stand centre line displaying on the lower LED of the PDU.



- b. The remaining distance information will be displayed 30 m to 3 m by 1 m step (30, 29,..., and 3 m) and the remaining last 3.0 m will be shown by 0.1 m step (3.0, 2.9,...,0.1, and STOP). Some remaining distance information may not be displayed on the PDU according to the aircraft docking speed.

Change : Information of notice for the use of VDGS.

	<p>4. The STOP information</p> <ul style="list-style-type: none"> a. It represents that the pilot should stop his aircraft. b. If the aircraft overruns more than 1 m, STOP TOO FAR message will be shown on the upper LED of the PDU. c. The STOP will be displayed when the aircraft deviates too far from the stand centre line or the field operator presses the E-STOP button.
	<p>5. The STOP_SBU/IDFAIL information</p> <ul style="list-style-type: none"> a. The STOP_SBU/IDFAIL(Emergency stop) will be displayed when system error or approaching aircraft is different actual aircraft type. b. In case STOP_SBU/IDFAIL message is shown on the PDU, the aircraft should be stopped immediately.
	<p>6. The docking completion information</p> <p>When the aircraft has reached the stop point within the tolerance, the OK message will be shown on the upper LED of the PDU.</p>
	<p>7. The BTIME(On block time) Information</p> <ul style="list-style-type: none"> a. The BTIME message and time will be displayed on the PDU right after changing from STOP to OK message. b. The BTIME(On block time) will be transmitted to the IIS(Integrated Information System).
<p>A-CDM Information on VDGS _ Passenger Terminal #1 and #2</p>	
	<p>TOBT and TSAT information is provided on VDGS for push-back waiting aircraft. (Refer to AD 2.20)</p>
<p>Notice for the use of VDGS</p> <ol style="list-style-type: none"> 1. VDGS service is provided to Passenger Terminal stands NR. 1(total 44) and NR. 2(total 51). Marshalling service should be provided for any of the following cases; <ul style="list-style-type: none"> a. When VDGS or ASDE is inoperative in case of work in progress, heavy snow, etc. b. When a Low Visibility Procedure is in operation. 2. In case the aircraft type displaying on the PDU is different from the actual approaching aircraft type, the pilot should stop his aircraft immediately and notify the Incheon Apron, and then follow the marshaller's instruction. 3. If ID FAIL is displayed on the PDU between the stop point and 15 m prior to the stop point, the pilot should stop his aircraft immediately and notify the Incheon Apron, and then follow the marshaller's instruction. 4. If the ESTOP message is displayed on the PDU, the pilot should stop his aircraft immediately and notify the Incheon Apron, and then follow the marshaller's instruction. For any of the following cases, the field operator should press the emergency stop button. <ul style="list-style-type: none"> a. When the aircraft overruns or is expected to go more than 1 m from the stop point. b. In case the pilot does not stop the aircraft immediately, although the aircraft type and the gate number displayed on the PDU differ from the actual aircraft type and gate number. c. In case there is any obstacle interrupting the normal docking procedure around the docking area. 5. In case that the VDGS docking information and the marshaller's instruction are different, the pilot should follow the marshaller's instruction first. 6. When the aircraft reaches about 10 m prior to the stop point, the pilot should decrease the speed as much as the aircraft could be stopped immediately until the STOP message is displayed on the PDU. 7. If the aircraft approaches to the stand in excess of the speed limit, the SLOW message should be displayed on the PDU. The pilot should reduce the speed. 	

Change : Information of notice for the use of VDGS.

RCSI AD 2.10 AERODROME OBSTACLES

In Area 2					
OBST ID/ Designation	OBST type	OBST position	ELEV/HGT	Markings/ Type, colour	Remarks
a	b	c	d	e	f
RKSIOB001	Power Transmission Tower #1	373203.9N 1262255.8E	428 ft/	Marked/LGTD	In 33L/R, 15L/R, 16L/R, 34L/R APCH/TKOF
RKSIOB002	Power Transmission Tower #2	373201.7N 1262345.5E	389 ft/	Marked/LGTD	In 33L/R, 15L/R APCH/TKOF
RKSIOB003	Power Transmission Tower #3	373200.3N 1262417.0E	358 ft/	Marked/LGTD	
RKSIOB004	Power Transmission Tower #4	373200.1N 1262422.7E	367 ft/	LGTD	
RKSIOB005	Brg. Incheon #1	372456.3N 1263345.7E	788 ft/	LGTD	
RKSIOB006	Brg. Incheon #2	372442.7N 1263413.5E	788 ft/	LGTD	
RKSIOB007	Mt. Guksabong	373203.3N 1262056.5E	512 ft/	NIL	In 16L/R, 34L/R APCH/TKOF
RKSIOB008	Power Transmission Tower #6	373212.4N 1262447.3E	311 ft/	NIL	In 33L/R, 15L/R, 16L/R, 34L/R circling area and at AD
RKSIOB009	Mt. Sido	373143.3N 1262526.5E	387 ft/	NIL	
RKSIOB010	Mt. Gubong	373129.2N 1262644.6E	621 ft/	NIL	
RKSIOB011	Shinbul Antenna #1	372720.8N 1262850.9E	254 ft/	Marked/LGTD	
RKSIOB012	Shinbul Antenna #2	372716.6N 1262855.0E	251 ft/	LGTD	
RKSIOB013	Mt. Muuido	372427.5N 1262434.6E	444 ft/	NIL	
RKSIOB014	Power Transmission Tower (Jamjindo)	372503.6N 1262454.7E	263 ft/	Marked/LGTD	
RKSIOB015	Mt. Oseong #2	372556.7N 1262524.7E	245 ft/	NIL	
RKSIOB016	Mt. Oseong #8	372712.2N 1262406.6E	274 ft/	NIL	
RKSIOB017	Mt. Oseong #6	372703.2N 1262443.8E	267 ft/	NIL	
RKSIOB018	Mt. Wang (Antenna)	372800.2N 1262142.2E	598 ft/	LGTD	
RKSIOB019	Transportation Center	372649.9N 1262709.8E	170 ft/	NIL	
RKSIOB020	Mt. Baekun	372937.0N 1263058.8E	853 ft/	NIL	
RKSIOB021	Mt. Horyeonggok	372240.9N 1262518.7E	818 ft/	NIL	
In Area 3					
OBST ID/ Designation	OBST type	OBST position	ELEV/ HGT	Markings/ Type, colour	Remarks
a	b	c	d	e	f
RKSIOB022	Control TWR	372739.3N 1262625.9E	345.9 ft/	LGTD	In 33L/R, 15L/R, 16L/R, 34L/R APCH/TKOF
RKSIOB023	Apron TWR #1	372722.9N 1262640.4E	229.6 ft/	LGTD	
RKSIOB024	Apron TWR #2	372759.9N 1262607.5E	336.5 ft/	LGTD	

Change : Information of aerodrome OBST position, ELEV/HGT and remarks.

RKSI AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

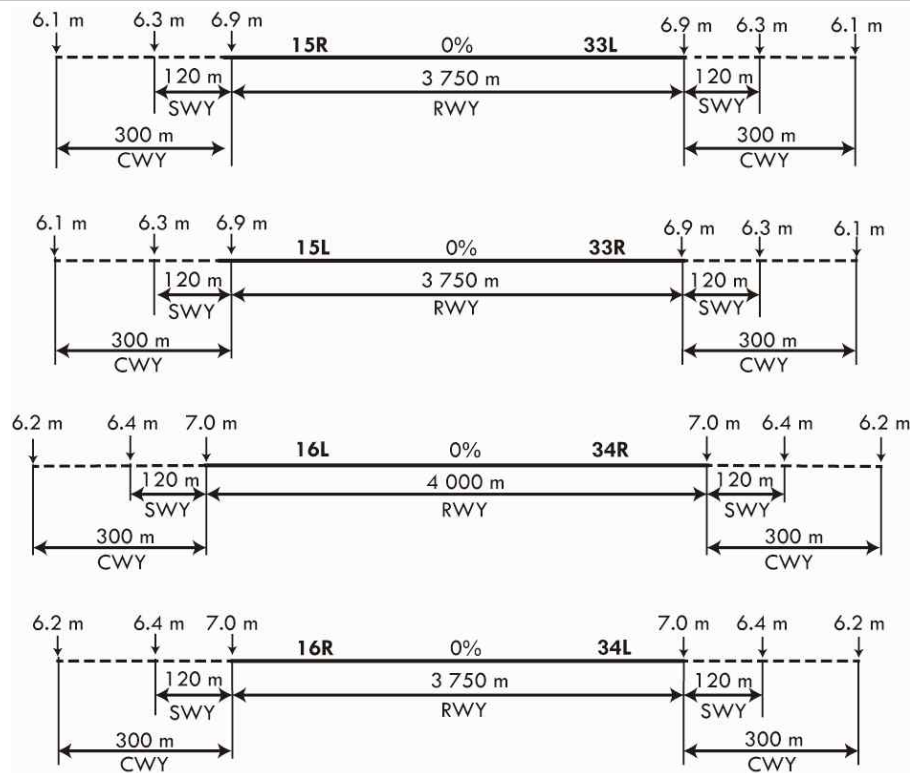
1	Associated MET Office	Aviation Meteorological Office · TEL : +82-32-222-3030 · FAX : +82-32-740-2817
2	Hours of service MET Office outside hours	24 hours —
3	Office responsible for TAF preparation Periods of validity	Aviation Meteorological Office 30 hours at 0000, 0600, 1200, 1800 UTC
4	Trend forecast Interval of issuance	Trend Type forecast 30 minutes (METAR)
5	Briefing/consultation provided	Available at the Office for 24 hours, if required.
6	Flight documentation language(s) used	Aerodrome forecasts (TAF code form), SIGWX charts, WINTEN charts, SIGMET information in English
7	Charts and other information available for briefing or consultation	Analysis charts (surface and upper air), Prognostic charts, Graphic displays and other model outputs.
8	Supplementary equipment available for providing information	Satellite and Terminal Doppler Weather radar imageries, Low Level Windshear Alert System
9	ATS units provided with information	FIC, TWR, APP and ACC
10	Additional information (limitation of service, etc.)	All observation data, model outputs and forecasts produced by KMA and WAFS are available at the office through Internet link.

RKSI AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimension 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
15L	144.66°	3 750 × 60	· 88/F/B/X/T Asphalt · SWY and 300 m RWY ends are 86/R/B/X/T Concrete	372902.20N 1262624.56E GUND 21.5 m	THR 6.9 m / 22.6 ft TDZ 6.9 m / 22.6 ft
33R	324.67°	3 750 × 60	· 88/F/B/X/T Asphalt · SWY and 300 m RWY ends are 86/R/B/X/T Concrete	372722.97N 1262752.82E GUND 21.5 m	THR 6.9 m / 22.6 ft TDZ 6.9 m / 22.6 ft
15R	144.66°	3 750 × 60	· 88/F/B/X/T Asphalt · SWY and 300 m RWY ends are 86/R/B/X/T Concrete	372854.44N 1262610.82E GUND 21.4 m	THR 6.9 m / 22.6 ft TDZ 6.9 m / 22.6 ft
33L	324.67°	3 750 × 60	· 88/F/B/X/T Asphalt · SWY and 300 m RWY ends are 86/R/B/X/T Concrete	372715.21N 1262739.08E GUND 21.5 m	THR 6.9 m / 22.6 ft TDZ 6.9 m / 22.6 ft
16L	144.66°	4 000 × 60	· 75/F/B/X/T Asphalt · SWY and 700 m RWY ends are 85/R/B/X/T Concrete	372822.11N 1262456.06E GUND 21.3 m	THR 7.0 m / 22.9 ft TDZ 7.0 m / 22.9 ft
34R	324.67°	4 000 × 60	· 75/F/B/X/T Asphalt · SWY and 700 m RWY ends are 85/R/B/X/T Concrete	372636.29N 1262630.22E GUND 21.5 m	THR 7.0 m / 22.9 ft TDZ 7.0 m / 22.9 ft
16R	144.66°	3 750 × 60	· 75/F/B/X/T Asphalt · SWY and 842 m RWY ends are 85/R/B/X/T Concrete	372807.71N 1262448.18E GUND 21.8 m	THR 7.0 m / 22.9 ft TDZ 7.0 m / 22.9 ft
34L	324.67°	3 750 × 60	· 75/F/B/X/T Asphalt · SWY and 842 m RWY ends are 85/R/B/X/T Concrete	372628.50N 1262616.45E GUND 21.9 m	THR 7.0 m / 22.9 ft TDZ 7.0 m / 22.9 ft
Remarks					
Geoid undulations of 16R and 34L are surveyed on the basis of national geoid model, KNGeoid18.					

Change : Information of RWY designations and Establishment of new RWY(16R/34L), remarks.

7. Slope of RWY-SWY



SWY dimensions(m)	CWY dimensions(m)	Strip dimensions(m)	RESA dimensions(m)	Location & description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
120 × 60 120 × 60	300 × 150 300 × 150	4 110 × 300	240 × 150 240 × 150	NIL	Conforms to the standards specified in Annex 14, Chapter 4	The surface of RWY 15R/33L, 15L/33R, 16L /34R, 16R/34L and Rapid exit taxiways are grooved.
120 × 60 120 × 60	300 × 150 300 × 150	4 110 × 300	240 × 150 240 × 150	NIL		
120 × 60 120 × 60	300 × 150 300 × 150	4 360 × 300	240 × 150 240 × 150	NIL		
120 × 60 120 × 60	300 × 150 300 × 150	4 110 × 300	240 × 150 240 × 150	NIL		

※ Scheduled Preventive Maintenance Time

- 16R/34L : Every 3 days from the 1st day of the month(1500-1900 UTC) (for example May 1, 4, 7, 10... etc.)
- 15R/33L and 15L/33R : Every 3 days from the 2nd day of the month(1500-1900 UTC)
(for example May 2, 5, 8, 11... etc.)
- 16L/34R : Every 3 days from the 3rd day of the month(1500-1900 UTC)
(for example May 3, 6, 9, 12... etc.)
- During the Scheduled Preventive Maintenance Time Take-offs and landings are prohibited. But, ground maneuvering is allowed under ATC instructions.
- A 30 minutes prior request is required to use the closed runway for take-offs and landings.

Change : Information of scheduled preventive maintenance time.

RKSI AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
15R	3 750	4 050	3 870	3 750	NIL
15R	3 560	3 860	3 680	-	Take-off from intersection at TWY B7*
15R	3 000	3 300	3 120	-	Take-off from intersection at TWY K*
15R	2 550	2 850	2 670	-	Take-off from intersection at TWY B6
15R	2 250	2 550	2 370	-	Take-off from intersection at TWY B5
33L	3 750	4 050	3 870	3 750	NIL
33L	3 560	3 860	3 680	-	Take-off from intersection at TWY B1*
33L	3 000	3 300	3 120	-	Take-off from intersection at TWY J*
33L	2 550	2 850	2 670	-	Take-off from intersection at TWY B2
33L	2 250	2 550	2 370	-	Take-off from intersection at TWY B3
15L	3 750	4 050	3 870	3 750	NIL
15L	3 000	3 300	3 120	-	Take-off from intersection at TWY K*
15L	2 550	2 850	2 670	-	Take-off from intersection at TWY D6**
33R	3 750	4 050	3 870	3 750	NIL
33R	3 000	3 300	3 120	-	Take-off from intersection at TWY J*
33R	2 550	2 850	2 670	-	Take-off from intersection at TWY D1

Change : Withdrawal of entry point for intersection departure(**).

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
16L	4 000	4 300	4 120	4 000	NIL
16L	3 810	4 110	3 930	-	Take-off from intersection at TWY N6*
16L	3 314	3 614	3 434	-	Take-off from intersection at TWY V*
16L	3 009	3 309	3 129	-	Take-off from intersection at TWY U*
16L	2 550	2 850	2 670	-	Take-off from intersection at TWY N5
16L	2 404	2 704	2 524	-	Take-off from intersection at TWY P9
16L	2 050	2 350	2 170	-	Take-off from intersection at TWY N4
16L	1 799	2 099	1 919	-	Take-off from intersection at TWY W
34R	4 000	4 300	4 120	4 000	NIL
34R	3 810	4 110	3 930	-	Take-off from intersection at TWY N1*
34R	3 259	3 559	3 379	-	Take-off from intersection at TWY T*
34R	2 786	3 086	2 906	-	Take-off from intersection at TWY P3
34R	2 550	2 850	2 670	-	Take-off from intersection at TWY N2
34R	2 049	2 349	2 169	-	Take-off from intersection at TWY N3
34R	2 049	2 349	2 169	-	Take-off from intersection at TWY W

Change : Withdrawal of entry point for intersection departure(**) and Establishment of intersection departure for TWY P3, P9.

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
16R	3 750	4 050	3 870	3 750	NIL
16R	3 555	3 855	3 675	-	Take-off from intersection at TWY P12*
16R	3 314	3 614	3 434	-	Take-off from intersection at TWY V*
16R	3 009	3 309	3 129	-	Take-off from intersection at TWY U*
16R	2 500	2 800	2 620	-	Take-off from intersection at TWY P11
16R	2 200	2 500	2 320	-	Take-off from intersection at TWY P10
16R	1 900	2 200	2 020	-	Take-off from intersection at TWY P8
16R	1 600	1 900	1 720	-	Take-off from intersection at TWY P7
16R	1 875	2 175	1 995	-	Take-off from intersection at TWY W
34L	3 750	4 050	3 870	3 750	NIL
34L	3 555	3 855	3 675	-	Take-off from intersection at TWY P1*
34L	3 009	3 309	3 129	-	Take-off from intersection at TWY T*
34L	2 500	2 800	2 620	-	Take-off from intersection at TWY P2
34L	2 200	2 500	2 320	-	Take-off from intersection at TWY P4
34L	1 900	2 200	2 020	-	Take-off from intersection at TWY P5
34L	1 600	1 900	1 720	-	Take-off from intersection at TWY P6
34L	1 875	2 175	1 995	-	Take-off from intersection at TWY W

* Entry Point for Intersection departure.

Note:

Intersection departure may be initiated by pilot or ATC and approved by ATC considering traffic and en-route separation. ATC may change departure sequence for the purposes of traffic flow management.

Change : Withdrawal of entry point for intersection departure(**).

RKSI 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 Center Line LGT LEN, Spacing Colour, INTST	RWY edge LGT LEN, Spacing Colour, INTST	RWY End LGT Colour WBAR	SWY LGT LEN(m) Colour
1	2	3	4	5	6	7	8	9
15R	ALSF-II 900 m LIH	Green Green	PAPI Left / 3° (64.64 ft)	900 m	3 750 m 15 m white/Red LIH	3 750 m 60 m white/Yellow LIH	Red —	120 m Red
33L	ALSF-II 900 m LIH	Green Green	PAPI Left / 3° (64.64 ft)	900 m	3 750 m 15 m white/Red LIH	3 750 m 60 m white/Yellow LIH	Red —	120 m Red
15L	ALSF-II 900 m LIH	Green Green	PAPI Left / 3° (64.64 ft)	900 m	3 750 m 15 m white/Red LIH	3 750 m 60 m white/Yellow LIH	Red —	120 m Red
33R	ALSF-II 900 m LIH	Green Green	PAPI Left / 3° (64.64 ft)	900 m	3 750 m 15 m white/Red LIH	3 750 m 60 m white/Yellow LIH	Red —	120 m Red
16L	ALSF-II 900 m LIH	Green Green	PAPI Left / 3° (67.14 ft)	900 m	4 000 m 15 m white/Red LIH	4 000 m 60 m white/Yellow LIH	Red —	120 m Red
34R	ALSF-II 900 m LIH	Green Green	PAPI Left / 3° (67.14 ft)	900 m	4 000 m 15 m white/Red LIH	4 000 m 60 m white/Yellow LIH	Red —	120 m Red
16R	ALSF-II 900 m LIH	Green Green	PAPI Left / 3° (67.14 ft)	900 m	3 750 m 15 m white/Red LIH	3 750 m 60 m white/Yellow LIH	Red —	120 m Red
34L	ALSF-II 900 m LIH	Green Green	PAPI Left / 3° (67.14 ft)	900 m	3 750 m 15 m white/Red LIH	3 750 m 60 m white/Yellow LIH	Red —	120 m Red
10. Remarks : Road holding position lights are installed at all road entrances to the RWY 15L/33R, 15R/33L, 16R/34L. Lights of Golf course are installed at 1.6 km (750 m width × 500 m length) away from end of RWY 15R.								

RKSI AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: At the top of main electrical substation, FLG W/G EV 2 SEC/IBN: NIL H24
2	LDI location and lighting Anemometer location and lighting	NIL Anemometer : 300 m from THR 15L/33R, 15R/33L, 16L/34R, 16R/34L and Lighted.
3	TWY edge and center line lighting	Edge : All TWY Curve area Centre line : All TWY
4	Secondary power supply/switch-over time	Secondary power supply to all lighting at AD. Switch-over time: 1 SEC or 15 SEC.
5	Remarks	Medium intensity obstacle light(white) at TWR is being operated by day.

Change : Information of remarks for APCH and RWY lighting.

RKSI AD 2.16 HELICOPTER LANDING AREA

1	Coordinates TLOF or THR of FATO Geoid undulation	H : 372744.42N 1262854.15E
2	TLOF and/or FATO elevation m/ft	H : 5.407 m (17.74 ft)
3	TLOF and FATO area dimensions, surface, strength and marking	H : Rectangle 25.1 x 25.1 m, Concrete PCN 16/R/B/X/T, white edges and white letter H.
4	True BRG of FATO	H : 145/325° GEO, 152/332° MAG Direction of TLOF zones : 145° GEO, 152° MAG 325° GEO, 332° MAG
5	Declared distance available	NIL
6	APP and FATO lighting	NIL
7	Remarks	1 day PPR from Incheon Airport AIS Daytime only (VFR and special VFR condition)

RKSI AD 2.17 ATS AIRSPACE

1	Designation and lateral limit	Incheon CTR A circle, radius 5 NM centered at ARP.
2	Vertical limits	SFC to 3 000 ft AGL
3	Airspace classification	B
4	ATS unit call sign Languages	Incheon Tower English / Korean
5	Transition altitude	14 000 ft AMSL
6	Operation hours	H24
7	Remarks	NIL

RKSI AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency		Hours of operation	Remarks
1	2	3		4	5
TWR	Incheon Tower	118.2 MHz(E) 118.8 MHz(W) 118.275 MHz(BK-FREQ) 231.8 MHz		H24	EAST(E): RWY 15L/R, 33L/R operation WEST(W): RWY 16L/R, 34L/R operation
GND	Incheon Ground	121.75 MHz(E) 121.7 MHz(W) 121.875 MHz(BK-FREQ) 121.925 MHz(BK-FREQ) 226.9 MHz		H24	EAST(E): RWY 15L/R, 33L/R operation WEST(W): RWY 16L/R, 34L/R operation
Apron	Incheon Apron	121.65 MHz 121.8 MHz 122.175 MHz 122.225 MHz	122.325 MHz 123.325 MHz 123.575 MHz 123.675 MHz	H24	When de-icing, refer to RKSI AD 2-23 (De-icing operational procedures)
DLVRY	Incheon Delivery	121.6 MHz(PRIMARY) 121.875 MHz(BK-FREQ) 269.2 MHz		H24	Digital PDC service available
ATIS	Incheon INTL Airport	ARR : 128.4 MHz 230.25 MHz DEP : 128.65 MHz 344.2 MHz BK-FREQ : 128.2 MHz		H24	1. Digital ATIS service available 2. 128.2 MHz used when 128.4 MHz, 128.65 MHz are not available 3. ATIS telephone service available. (Refer to RKSI AD 2-42 for detail)

Service designation	Call sign	Frequency		Hours of operation	Remarks
1	2	3		4	5
APP	Seoul Approach	119.75 MHz 124.7 MHz 121.35 MHz 124.2 MHz	119.1 MHz 120.8 MHz 119.05 MHz 293.3 MHz	H24	
DEP	Seoul Departure	121.4 MHz 124.8 MHz 125.15 MHz 353.2 MHz		H24	
VFR		123.8 MHz 123.25 MHz 363.8 MHz	305.7 MHz	H24	
EMERG		121.5 MHz 243.0 MHz		H24	

RKSI AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR, Type of supported OPS	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR/DME (9° W/2020)	NCN	113.80 MHz (CH 85X)	H24	372941.7N 1262549.2E	30 m	<p>Coverage 25 NM from NCN VOR with the following restrictions :</p> <p>VOR/DME unusable :</p> <ul style="list-style-type: none"> · RDL 041 clockwise RDL 080 beyond 15 NM due to RK P518 · RDL 081 clockwise RDL 100 beyond 18 NM due to RK P518 & RK P73 · RDL 290 clockwise RDL 300 beyond 19 NM due to RK P518 · RDL 301 clockwise RDL 310 beyond 17 NM due to RK P518 · RDL 311 clockwise RDL 320 beyond 15 NM due to RK P518 · RDL 321 clockwise RDL 340 beyond 13 NM due to RK P518 · RDL 341 clockwise RDL 040 beyond 12 NM due to RK P518 <p>DME unusable :</p> <ul style="list-style-type: none"> · RDL 246 clockwise RDL 253 beyond 13 NM below 2 500 ft AMSL <p>Scheduled Inspection time : Every 4th, 14th day (1500-1900 UTC) of the month</p>

Change : Information of scheduled inspection time for NCN VOR/DME.

Type of aid, MAG VAR, Type of supported OPS	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR/DME (9° W/2020)	WNG	112.90 MHz (CH 76X)	H24	372558.6N 1262700.0E	0 m	Coverage 25 NM from WNG VOR with the following restrictions : VOR/DME unusable : · RDL 036 clockwise RDL 090 beyond 17 NM due to RK P518 & RK P73 · RDL 295 clockwise RDL 305 beyond 21 NM due to RK P518 · RDL 306 clockwise RDL 310 beyond 19 NM due to RK P518 · RDL 311 clockwise RDL 330 beyond 17 NM due to RK P518 · RDL 331 clockwise RDL 035 beyond 13 NM due to RK P518 DME unusable : · RDL 201 clockwise RDL 229 beyond 8 NM below 3 000 ft AMSL Scheduled Inspection time : Every 6th, 15th day (1500-1900 UTC) of the month
LOC 15R (9° W/2020) ILS CAT III (9° W or 351°)	ISRR	109.10 MHz	H24	372707.4N 1262746.0E		LOC unusable : LOC unusable beyond 15 NM from LOC due to RK P518
DME 15R	ISRR	989 MHz (CH 28X)	H24	372848.7N 1262621.9E	0 m	GP : 3°
GP 15R	-	331.4 MHz	H24	372848.7N 1262622.0E		
IM 15R	-	75 MHz	H24	372902.7N 1262603.5E		
MM 15R	-	75 MHz	H24	372922.2N 1262546.1E		
LOC 33L (9° W/2020) ILS CAT III (9° W or 351°)	INLL	109.30 MHz	H24	372902.2N 1262603.9E		GP : 3°
DME 33L	INLL	991 MHz (CH 30X)	H24	372725.4N 1262735.9E	0 m	
GP 33L	-	332.0 MHz	H24	372725.5N 1262736.0E		
IM 33L	-	75 MHz	H24	372706.9N 1262746.4E		
MM 33L	-	75 MHz	H24	372647.4N 1262803.8E		
LOC 15L (9° W/2020) ILS CAT III (9° W or 351°)	ISLL	111.90 MHz	H24	372715.1N 1262759.7E		LOC unusable : LOC unusable beyond 15 NM from LOC due to RK P518
DME 15L	ISLL	1017 MHz (CH 56X)	H24	372856.4N 1262635.6E	0 m	GP : 3°
GP 15L	-	331.1 MHz	H24	372856.5N 1262635.7E		
IM 15L	-	75 MHz	H24	372910.4N 1262617.2E		
MM 15L	-	75 MHz	H24	372930.0N 1262559.8E		

Change : Information of scheduled inspection time for WNG VOR/DME.

Type of aid, MAG VAR, Type of supported OPS	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
LOC 33R (9° W/2020) ILS CAT III (9° W or 351°)	INRR	108.90 MHz	H24	372910.0N 1262617.6E		GP : 3°
DME 33R	INRR	987 MHz (CH 26X)	H24	372733.2N 1262749.7E	0 m	
GP 33R	—	329.3 MHz	H24	372733.2N 1262749.7E		
IM 33R	—	75 MHz	H24	372714.7N 1262800.1E		
MM 33R	—	75 MHz	H24	372655.2N 1262817.5E		
LOC 16L (9° W/2020) ILS CAT III (9° W or 351°)	IRKS	110.35 MHz	H24	372628.5N 1262637.1E		LOC unusable : beyond 15 NM from LOC due to RK P518
DME 16L	IRKS	1127 MHz (CH 40Y)	H24	372811.4N 1262459.7E	0 m	GP : 3°
GP 16L	—	334.85 MHz	H24	372811.4N 1262459.5E		If unable to use "CH 40Y" FREQ., notify ATC as soon as possible.
IM 16L	—	75 MHz	H24	372830.4N 1262448.7E		
MM 16L	—	75 MHz	H24	372849.9N 1262431.3E		
LOC 34R (9° W/2020) ILS CAT III (9° W or 351°)	IRKN	108.10 MHz	H24	372829.9N 1262449.1E		GP : 3°
DME 34R	IRKN	979 MHz (CH 18X)	H24	372642.5N 1262618.8E	0 m	Caution advised when approaching Incheon AP ILS RWY 34R as follow : 1. False course captures may occur when approaching Incheon AP ILS RWY 34R, in the vicinity of 4 DEG clockwise 12 DEG AZM FM the published localizer course. 2. It is recommended for the pilot to : - Be aware of when the raw data indicates that the aircraft is approaching and establishing on the correct course ; and - Be aware that, should a false capture occur, it may be necessary to deselect and Re-Arm the approach mode in order to achieve a successful coupled approach on the correct localizer course.
GP 34R	—	334.7 MHz	H24	372642.5N 1262618.6E		
IM 34R	—	75 MHz	H24	372628.0N 1262637.5E		
MM 34R	—	75 MHz	H24	372608.5N 1262654.9E		

Type of aid, MAG VAR, Type of supported OPS	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
LOC 16R (9° W/2020) ILS CAT III (9° W or 351°)	IRFS	108.55 MHz	H24	372620.6N 1262623.4E		LOC unusable : beyond 15 NM from LOC due to RK P518 GP : 3°
DME 16R	IRFS	1109 MHz (CH 22Y)	H24	372757.0N 1262451.7E	0 m	
GP 16R	—	329.75 MHz	H24	372756.9N 1262451.6E		
IM 16R	—	75 MHz	H24	372816.0N 1262440.7E		
MM 16R	—	75 MHz	H24	372835.4N 1262423.4E		
LOC 34L (9° W/2020) ILS CAT III (9° W or 351°)	IRFN	109.95 MHz	H24	372815.5N 1262441.1E		GP : 3°
DME 34L	IRFN	1123 MHz (CH 36Y)	H24	372634.7N 1262604.9E	0 m	
GP 34L	—	333.65 MHz	H24	372634.6N 1262604.8E		
IM 34L	—	75 MHz	H24	372620.1N 1262623.8E		
MM 34L	—	75 MHz	H24	372600.7N 1262641.1E		
Scheduled Inspection time : <ul style="list-style-type: none">○ ILS<ul style="list-style-type: none">- 16R/34L : Every 3 days from the 1st day of the month(1500-1900 UTC) (for example May 1, 4, 7, 10... etc.)- 15R/33L and 15L/33R : Every 3 days from the 2nd day of the month(1500-1900 UTC) (for example May 2, 5, 8, 11... etc.)- 16L/34R : Every 3 days from the 3rd day of the month(1500-1900 UTC) (for example May 3, 6, 9, 12... etc.)※ ILS is unserviceable during the scheduled inspection time.※ A 30 minutes prior request is required to use ILS.○ RADAR(PSR, SSR, ARTS) : Every 1st, 2nd and 3rd THU (1500-1800 UTC) of the month○ ASDE : Every 1st and 3rd TUE (0100-0800 UTC) of the month※ The information of VORTAC SEL and SOT see ENR 4.1 for details.						

Change : Information of scheduled inspection time for ILS.

RKSI AD 2.20 LOCAL AERODROME REGULATIONS

1. Airport regulations
 - 1.1 Pilots are strongly required to monitor VHF 121.5 MHz when flying within SEOUL TMA.
 - 1.2 Pilots shall exercise extreme caution to avoid penetrating Prohibited Area (P518, P73A/B, etc) or Special Use Airspace (ACMI, R17, etc), especially when flying north of R 270 and R 080 NCN around Incheon INTL Airport. (Refer to RKSI AD 2.19 Radio Navigation and landing Aids.)
 - 1.3 Pilots should always make sure that microphones are not stuck in the transmitting position before transmission in order to prevent frequency blockage (stuck mike) from impairing ATC.
 - 1.4 High Intensity Runway Operation(HIRO)

HIRO will be in force when runway surface condition is dry and adverse weather condition is not present. When HIRO are in force, ATC will inform via ATIS(Phrase : High Intensity Runway Operation in force. Minimum Runway Occupancy Time required) or RTF.

 - 1.4.1 Landing Procedures
 - a. During HIRO in force, pilots are strongly requested to use the following preferred rapid exit taxiways or vacate the landing runway within 60 SEC of timeframe. Aircraft unable to comply with these procedures should notify ATC as early as possible.
 - b. Pilots are encouraged to apply proper deceleration technique take into account the following distance information of rapid exit taxiway to avoid decelerating to taxi speed on midpoint of landing runway and minimize runway occupancy time.

RWY	Rapid Exit Taxiway	Distance from Threshold
15L	<u>C2</u>	7 381 ft / 2 250 m
	C1, <u>D1</u> (to cargo apron 1, 2)	8 418 ft / 2 566 m
15R	<u>B3</u>	7 381 ft / 2 250 m
	B2	8 418 ft / 2 566 m
33L	<u>B5</u>	7 381 ft / 2 250 m
	B6	8 418 ft / 2 566 m
33R	<u>C4</u>	7 381 ft / 2 250 m
	C5, <u>D6</u> (to cargo apron 1, 2)	8 418 ft / 2 566 m
16L	<u>N3</u>	6 725 ft / 2 050 m
	N2	8 366 ft / 2 550 m
34R	<u>N4</u>	6 725 ft / 2 050 m
	N5	8 366 ft / 2 550 m
16R	<u>P6</u>	5 249 ft / 1 600 m
	P5	6 233 ft / 1 900 m
	P4	7 218 ft / 2 200 m
	P2	8 202 ft / 2 500 m
34L	<u>P7</u>	5 249 ft / 1 600 m
	P8	6 233 ft / 1 900 m
	P10	7 218 ft / 2 200 m
	P11	8 202 ft / 2 500 m

Note 1 : Preferred rapid exit taxiways are in bold and underlined.

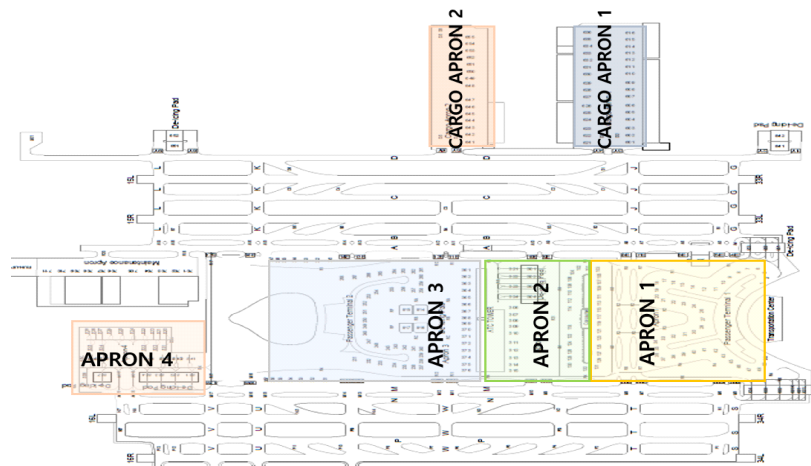
Note 2 : The design speed of all RET is 50 kt.

- c. After landing, aircraft are not to stop on rapid exit taxiway to awaiting instructions from ATC but should continue taxi via the following taxi procedures, unless otherwise instructed by ATC.

RWY	Preferred RET	Standard Taxi Procedures
15L	C2	During HIRO in force, any landing aircraft to Apron 1:2:3:4 should continue taxi to TWY J then hold short of RWY 15R on TWY J. Remain on the TWR FREQ. (refer SMGCS - Arrival Taxi Route Chart)
	D1	During HIRO in force, any landing aircraft to Cargo Apron 1:2 should continue taxi via TWY D to appropriate Transfer of Control Point(TCP) of parking gate/stand. (refer SMGCS - Arrival Taxi Route Chart)
15R	B3	During HIRO in force, any landing aircraft to Apron 1:2:3:4 should continue taxi via TWY B to appropriate Transfer of Control Point(TCP) of parking gate/stand. Remain on the TWR FREQ. (refer SMGCS - Arrival Taxi Route Chart)

RWY	Preferred RET	Standard Taxi Procedures
33L	B5	During HIRO in force, any landing aircraft to Apron 1·2·3·4 should continue taxi via TWY B to appropriate Transfer of Control Point(TCP) of parking gate/stand. (refer SMGCS - Arrival Taxi Route Chart)
33R	C4	During HIRO in force, any landing aircraft to Apron 1·2·3·4 should continue taxi to TWY K then hold short of RWY 33L on TWY K. Remain on the TWR FREQ. (refer SMGCS - Arrival Taxi Route Chart)
	D6	During HIRO in force, any landing aircraft to Cargo Apron 1·2 should continue taxi via TWY D to appropriate Transfer of Control Point(TCP) of parking gate/stand. (refer SMGCS - Arrival Taxi Route Chart)
16L	N3	During HIRO in force, all landing aircraft should continue taxi via TWY N to appropriate Transfer of Control Point(TCP) of parking gate/stand. (refer SMGCS - Arrival Taxi Route Chart)
34R	N4	During HIRO in force, all landing aircraft should continue taxi via TWY N to appropriate Transfer of Control Point(TCP) of parking gate/stand. (refer SMGCS - Arrival Taxi Route Chart)
16R	P6	During HIRO in force, all landing aircraft should continue taxi to TWY T then hold short of RWY 16L on TWY T. Remain on the TWR FREQ. (refer SMGCS - Arrival Taxi Route Chart)
34L	P7	During HIRO in force, all landing aircraft should continue taxi to TWY U then hold short of RWY 34R on TWY U. Remain on the TWR FREQ. (refer SMGCS - Arrival Taxi Route Chart)

d. Diagram of Apron 1·2·3·4 and Cargo Apron 1·2



1.4.2 Departure Procedures

- Pilots are strongly encouraged to check the availability of intersection departure before start-up. Declared distance for intersection departure are detailed in AD 2.13 DECLARED DISTANCES. For the purpose of performance calculations the standard intersection departure points are:
 - RWY 15R - B7 / K
 - RWY 33L - B1 / J
 - RWY 16L - N6 / V / U
 - RWY 34R - N1 / T
- Intersection departures may be initiated by ATC to expedite traffic flow. Pilots must advise ATC if they are not able to comply with this request to prevent additional delay or sequence change.
- ATC will consider all aircrafts at the RWY holding point as able to commence line-up and take-off roll immediately on receiving clearance from ATC, unless otherwise instructed. Pilots should note that ATC expects pre-departure cockpit checks to be completed prior to entering the runway and take-off checks that must be made on the runway are kept to the minimum required. Pilots not ready when reaching the RWY holding point shall advise ATC as early as possible before reaching to RWY holding point.
- When line-up or take-off clearance is issued, ATC will expect and has planned on seeing movement within 10 seconds.
- Normally ATC will apply ICAO wake vortex separation minima between successive departures. If more separation than prescribed minima is required, pilot shall notify ATC before entering the RWY.

Change : Information of standard intersection departure point for RWY 16L(N7 → N6).

1.4.3 Departure Sequence

- a. Departures will normally be cleared in the order in which they are ready for take-off(First Come, First Served), however deviations may be made from this principle to facilitate the maximum number of departures with the least average delay considering following factors:
 - (1) Types of aircraft and their relative performance;
 - (2) Routes to be followed after take-off
 - (3) Any specified minimum departure interval between take-off
 - (4) Need to apply wake turbulence separation minima;
 - (5) Aircraft which should be afforded priority; and
 - (6) Aircraft subject to ATFM requirements
- b. For aircraft subject to ATFM requirements, it is the responsibility of the pilot and the operator to ensure that the aircraft is ready to taxi in time to meet any required departure time, bearing in mind that once a departure sequence is established on the taxiway system, it can be difficult, and sometimes impossible, to change the order.

1.5 Preferential RWY System

The runway 33L/R or 34L/R is recommended to be in use to the extent of 8 kts tailwind. If unable to comply with this procedure, notify ATC of the reason 20 minutes prior to ETD or ETA. Delay may be possible depend on traffic situation.

1.6 Inbound Cargo Aircrafts(using Cargo Apron) to Incheon Airport are required to advise Seoul Approach for runway assignment that you are a "cargo".

1.7 Runway operation information

Time(UTC)	Departure	Arrival
0000~2359	15R/33L, 16L/34R	15L/33R, 16R/34L

※ The above times and runways in use may be changed if necessary due to ATC purposes, scheduled preventive maintenance time, weather, ground conditions and traffic volume.

1.8 Flight limitations

1. The use of this airport for training purpose is prohibited. The deliberate simulation of engine failure is not permitted whilst on approach to or departure from the airport.
2. The use of this airport by light sports aircraft, ultra-light vehicles and lighter than air is prohibited.

2. Apron control services

Incheon Apron issues Push-back or Taxi instructions, approval, and/or necessary information to aircraft, vehicles and personnel within Apron areas(Apron 1·2·3·4, cargo Apron 1·2 and maintenance Apron) and deicing pads.

2.1. Transponder

Pilots should always operate transponders with XPDR(and AUTO if available) except for fully parking aircraft on stand.

3. Ground Movement

3.1 Airport Collaborative Decision Making(A-CDM)

1. General

- a. A-CDM is a process that allows air traffic controllers, airport operators, aircraft operators(AO), ground handling agents(GHA), pilots and air traffic flow managers to exchange operational information and work together to efficiently manage operations at aerodrome.
- b. Definitions Commonly Used Terms in A-CDM.
 - (1) Target Off Block Time(TOBT) - The time that an AO or GHA estimates that an aircraft will be ready, all doors closed, boarding bridge removed, push-back vehicle available and ready to start up / push-back immediately upon reception of clearance from the ATC.
 - (2) Target Start up Approval Time(TSAT) - The time provided by ATC taking into account TOBT, Calculated Take-Off Time(CTOT) and/or the traffic situation that an aircraft can expect startup / push-back approval.
- c. The operation of A-CDM at Incheon Airport will be phased due to ATC environmental restrictions. TSAT will not be provided to all departure flights. The flights subject to Pre-Departure Sequencing are limited to ATFM regulated flights during first operational phase.
- d. TSAT will not be provided to the aircraft in de-icing operation.
- e. TOBT and TSAT will be displayed on VDGS in UTC for the improvement of A-CDM operation.

Change : Information of regulations for inbound cargo ACFT.

2. A-CDM Procedures

- a. Incheon Airport A-CDM Portal System will automatically calculate system TOBT for each departure flight taking into account the Estimated In-Block Time/Actual In-Block Time(EIBT/AIBT), Minimum Turnaround Time(MTTT) and Estimated Off Block Time(EOBT).
- b. AO or GHA can manually update the system generated TOBT from 90 minutes prior to EOBT.
- c. If the prediction of departure readiness (new TOBT) differs more than 5 minutes from the previous TOBT, AO or GHA shall update TOBT.
- d. TOBT shall not deviate from EOBT by more than 15 minutes. If TOBT deviates from EOBT by more than 15 minutes, AO has to initiate a delay message. When EOBT is modified, TOBT is automatically modified to the value of EOBT.
- e. TOBT shall be updated through the following channels:
 - (1) A-CDM portal and mobile web; or
 - (2) Flight Information Assistant(FIA) at PBB boarding rooms
- f. TOBT information is available through the following channels:
 - (1) A-CDM portal and mobile web; or
 - (2) Flight Information Assistant(FIA) at PBB boarding rooms; or
 - (3) Visual Docking Guidance System(VDGS); or
 - (4) Radio communication with AO or GHA
- g. TSAT will be calculated by taking into account factors such as TOBT, CTOT, Estimated Taxi-Out Time(EXOT) and ATC separation standards etc. Thus the accuracy of TOBT is vital to an optimal TSAT.
- h. AO or GHA are strongly encouraged to update TOBT as soon as any expected delay to the aircraft readiness for push-back is made available to avoid unnecessary hold-ups.
- i. TSAT information is available through the following channels:
 - (1) A-CDM portal and mobile web; or
 - (2) Flight Information Assistant(FIA) at PBB boarding rooms; or
 - (3) Visual Docking Guidance System(VDGS); or
 - (4) Radio communication with GHA or AO; or
 - (5) INCHEON APRON (in case VDGS is unserviceable)

3. Non A-CDM Procedures

- a. The non A-CDM procedure is applicable when TOBT and TSAT references used in A-CDM mode of operations become unavailable due to system issues or maintenance.
- b. If unable to refer TOBT through any channels, pilot shall contact INCHEON DELIVERY for ATC clearance via voice RTF or Data-link Departure Clearance Service(DCL) from EOBT -10 minutes.

3.2 Procedures for start-up and push back

1. Pilot shall ensure aircraft is ready for push-back at TOBT.
2. Pilot shall maintain communication with the AO / GHA as they are responsible for updating the TOBT. Pilot shall notify the AO / GHA to update the TOBT if it is expected to differ by 5 minutes or more.
3. ATC clearance can be requested via voice RTF or Data-link Departure Clearance Service(DCL) from TOBT -10 minutes to +5 minutes.
4. ATC will update TSAT changes if any, before push-back. Note that TSAT displayed on VDGS may not be final and can be revised due to en-route clearance restrictions, ground congestion or flow management.
5. Pilot with TSAT shall contact INCHEON APRON to request engine start-up and push-back within 5 minutes of TSAT after obtaining ATC clearance. Pilot without TSAT shall contact INCHEON APRON after obtaining ATC clearance when ready for start-up and push-back. The pilot provide the following:
 - (1) Call sign
 - (2) Gate/Stand number
 - (3) TSAT (If applicable)
6. INCHEON APRON may swap push-back sequencing based on TSAT and real-time readiness of aircraft to maximise apron and runway capacity and to reduce the overall delay to traffic as and when required.
7. If a flight is unable to commence push-back by TSAT +5 minutes due to the aircraft being unready, ATC clearance and TSAT will be cancelled. Pilot must notify the AO / GHA to update the TOBT for a new TSAT before requesting for a new ATC clearance. This also applies to aircraft returning back to blocks after push-back.

8. In case of engine start-up with GPU at gates due to APU malfunction or failure, pilot needs to contact INCHEON APRON earlier than TSAT window(\pm 5 minutes) considering the time required for engine start-up and push-back.
9. All aircraft to be taxied within the Apron shall fix their engine thrusts on an Idle. In case of using breakaway thrust, it should be used to a minimum.
10. Push-back approval is valid for 1 MIN. Push-back is therefore to begin promptly after approval. The push-back procedures of the aircraft within the Apron are as follows. As with most, these procedures shall be kept. However, if any modification of the procedures is required as the case may be, Incheon Apron may give the pilot specific instructions suited for the safety of aircraft movement.
11. The smaller aircraft(business jets) ingress and egress procedures at designated deicing pads shall follow the instructions of Incheon Apron. Deicing pads are self-maneuvering stands (i.e. taxi out with no push-back). In case of M North zone assigned not for deicing, aircraft shall be pushed back for departure.
12. There are several blue lines in Apron 1 and 3
Locations : Right behind Gates 9, 15, 21, 22, 32, 33, 39, 45, 49 in Apron 1, and 237, 238, 239, 240, 258, 259, 260, 261 in Apron 3.
The aircraft of those gates shall be pushed back along blue line until their nose-wheels are on the specific taxilane.
13. To avoid delay to other aircraft using 'Apron 1 and 3' area, aircraft should be ready to taxi as soon as the push-back manoeuvre and engine start procedure are completed. The push-back for gate 17, 18, 19, 20, 21, 33, 34, 35, 36 is onto taxilane R7, and for gate 236R, 237, 238, 239, 240, 241, 257, 258, 259, 260, 261, 261R is onto taxilane R12, therefore to avoid delays to other traffic it is essential that the aircraft should be ready to taxi as soon as the push-back manoeuvre is completed. If aircraft are unable to comply with these procedures, pilots shall immediately inform Incheon Apron in order that alternative taxi instructions may be issued to other aircraft.
14. When an aircraft have any problem which can't make it taxi right after push back, the pilot should report to Apron control. And then the pilot will be instructed to return gate or to move other place to avoid blocking taxilanes.
15. Delays may be expected due to other aircraft to pushback or to taxi as distances between aircraft gates/stands vary. If push-back is delayed due to apron traffic conditions, TSAT will remain valid even if it exceeds TSAT + 5 minutes. TOBT needs not to be updated for such situations.
16. The following tables describe the procedures for pushback of aircraft from gates with airbridges and stands. Incheon Apron will issue specific instructions to the pilot if it is necessary to expedite traffic movement. Most gates and stands have several pushback procedures. Pushback instructions shall be issued including direction (only 4 directions are used) or specific position when necessary. Incheon Apron will issue a pushback instruction according to the use of runway or certain traffic condition.
17. When The aircraft push back onto taxilane R2 or R3 with facing south, the pilot shall be taxied with idle power for ground safety.

Change : Information of location of blue lines in apron 1.

Aircraft Stands	Pushback Procedures	Phraseology
Apron 1		
1 and 2	The aircraft shall be pushed back to face north along blue line until its nosewheel is at spot 1.	Pushback approved to point 1
3	The aircraft shall be pushed back onto taxilane R1 to face north.	Pushback approved to face north
	The aircraft shall be pushed back to face north along blue line until its nosewheel is at spot 1.	Pushback approved to point 1
6	The aircraft shall be pushed back onto taxilane R1 to face north.	Pushback approved to face north
	The aircraft shall be pushed back to face south along taxilane R1 until the specific gate position.	Pushback approved to face south abeam gate(number)
7	The aircraft shall be pushed back onto taxilane R1 to face north.	Pushback approved to face north
	The aircraft shall be pushed back to face south along taxilane R1 until the specific gate position.	Pushback approved to face south abeam gate(number)
	The aircraft shall be pushed back onto the stand 825 on taxilane R5 to face south.	Pushback approved to stand 825
8	The aircraft shall be pushed back onto taxilane R1 to face south.	Pushback approved to face south
	The aircraft shall be pushed back to face north along taxilane R1 until the specific gate position.	Pushback approved to face north abeam gate(number)
	The aircraft shall be pushed back onto the stand 825 on taxilane R5 to face south.	Pushback approved to stand 825
9	The aircraft shall be pushed back to face south along blue line until its nosewheel is at R1.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R1 to face north.	Pushback approved to face north
	The aircraft shall be pushed back onto the stand 825 on taxilane R5 to face south.	Pushback approved to stand 825
10, 11 and 12	The aircraft shall be pushed back onto taxilane R1 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R1 to face north.	Pushback approved to face north
14	The aircraft shall be pushed back onto taxilane R1 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R1 to face north until gate 10 to minimize jet blast effect.	Pushback approved to face north
	The aircraft shall be pushed back onto the spot 53R on A6 to face west.	Pushback approved to spot 53Romeo
15	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R1.	Pushback approved to face north
	The aircraft shall be pushed back onto taxilane R1 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto the spot 53R on A6 to face west.	Pushback approved to spot 53Romeo
16	The aircraft shall be pushed back onto taxilane R1 to face north.	Pushback approved to face north
	The aircraft shall be pushed back onto taxilane R1 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto the spot 53R on A6 to face west.	Pushback approved to spot 53Romeo

Change : Information of pushback procedures for apron 1.

Aircraft Stands	Pushback Procedures	Phraseology
Apron 1		
17	The aircraft shall be pushed back onto taxilane R1 to face north.	Pushback approved to face north
	The aircraft shall be pushed back onto taxilane R7 to face east.	Pushback approved to face east on R7
	The aircraft shall be pushed back onto the spot 53R on A6 to face west.	Pushback approved to spot 53 Romeo
18	The aircraft shall be pushed back onto taxilane R7 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R7 to face west.	Pushback approved to face west
	The aircraft shall be pushed back to face north along taxilane R1 until the specific gate position.	Pushback approved to face north on R1 abeam gate (number)
19	The aircraft shall be pushed back onto taxilane R7 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R7 to face west.	Pushback approved to face west
	The aircraft shall be pushed back to face north along taxilane R1 until the specific gate position.	Pushback approved to face north on R1 abeam gate (number)
	The aircraft shall be pushed back to face north along taxilane R2 until its nosewheel is at spot 2.	Pushback approved to point 2
20	The aircraft shall be pushed back onto taxilane R7 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R7 to face west.	Pushback approved to face west
	The aircraft shall be pushed back to face north along taxilane R2 until its nosewheel is at spot 2.	Pushback approved to point 2
21	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R2.	Pushback approved to blue
	The aircraft shall be pushed back to face north until its body is on taxilane R2.	Pushback approved to face north
	The aircraft shall be pushed back onto taxilane R7 to face east.	Pushback approved to face east on R7
	The aircraft shall be pushed back onto taxilane R7 to face west.	Pushback approved to face west on R7
22	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R2.	Pushback approved to blue
	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 2.	Pushback approved to point 2
23, 24 and 26	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 2.	Pushback approved to point 2
	The aircraft shall be pushed back to face south along blue line until its nosewheel is at spot 3.	Pushback approved to point 3
	The aircraft shall be pushed back to face south along taxilane R2 until the specific gate number.	Pushback approved to face south on R2 [abeam gate (number)]
27	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 2.	Pushback approved to point 2
	The aircraft shall be pushed back to face south along blue line until its nosewheel is at spot 3.	Pushback approved to point 3
	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 4.	Pushback approved to point 4
	The aircraft shall be pushed back to face south along taxilane R2 until the specific gate number.	Pushback approved to face south on R2 [abeam gate (number)]
	The aircraft shall be pushed back to face south along taxilane R3 until the specific gate number.	Pushback approved to face south on R3 [abeam gate (number)]
28, 30 and 31	The aircraft shall be pushed back to face south along blue line until its nosewheel is at spot 3.	Pushback approved to point 3
	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 4.	Pushback approved to point 4
	The aircraft shall be pushed back to face south along taxilane R3 until the specific gate number.	Pushback approved to face south on R3 [abeam gate (number)]

Change : Information of pushback procedures for apron 1.

Aircraft Stands	Pushback Procedures	Phraseology
Apron 1		
32	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R3.	Pushback approved to blue
	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 4.	Pushback approved to point 4
33	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R3.	Pushback approved to blue
	The aircraft shall be pushed back to face north until its body is on taxilane R3.	Pushback approved to face north
	The aircraft shall be pushed back onto taxilane R7 to face east.	Pushback approved to face east on R7
34	The aircraft shall be pushed back onto taxilane R7 to face west.	Pushback approved to face west on R7
	The aircraft shall be pushed back onto taxilane R7 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R7 to face west.	Pushback approved to face west
35	The aircraft shall be pushed back to face north along taxilane R3 until its nosewheel is at spot 4.	Pushback approved to point 4
	The aircraft shall be pushed back to face north along taxilane R4 until the specific gate position.	Pushback approved to face north on R4 abeam gate (number)
	The aircraft shall be pushed back onto taxilane R7 to face east.	Pushback approved to face east
36	The aircraft shall be pushed back onto taxilane R7 to face west.	Pushback approved to face west
	The aircraft shall be pushed back to face north along taxilane R4 until the specific gate position.	Pushback approved to face north on R4 abeam gate (number)
	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north
37	The aircraft shall be pushed back onto taxilane R7 to face west.	Pushback approved to face west on R7
	The aircraft shall be pushed back onto taxilane R6 to face north.	Pushback approved to face north on R6
38	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north
39	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R4.	Pushback approved to face north
40, 41, 42 and 43	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
	The aircraft of gate 40 shall be pushed back to face north until gate 43 to minimize jet blast effect.	Pushback approved to face north
45	The aircraft shall be pushed back to face south along blue line until its nosewheel is at R4.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north
	The aircraft shall be pushed back onto taxilane R6 to face south.	Pushback approved to face south on R6
46	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north
	The aircraft shall be pushed back onto taxilane R6 to face south.	Pushback approved to face south on R6
47 and 48	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north
	The aircraft shall be pushed back to face south along taxilane R4 until the specific gate position.	Pushback approved to face south abeam gate (number)
	The aircraft shall be pushed back to face south along taxilane R6.	Pushback approved to face south on R6
49	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R4.	Pushback approved to face north
	The aircraft shall be pushed back along yellow line until its nosewheel is at spot 5.	Pushback approved to point 5
50	The aircraft shall be pushed back along yellow line until its nosewheel is at spot 5.	Pushback approved to point 5

Change : Information of pushback procedures for apron 1.

Aircraft Stands	Pushback Procedures	Phraseology
Apron 1		
103	The aircraft shall be pushed back onto taxilane AS to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R1 to face south.	Pushback approved to face south on R1
105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127 and 129	The aircraft shall be pushed back onto taxilane AS to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane AS to face west.	Pushback approved to face west
131	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane AS to face west.	Pushback approved to face west
132	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
Apron 2		
101	The aircraft shall be pushed back onto taxilane R1 to face north.	Pushback approved to face north
102	The aircraft shall be pushed back onto taxilane R1 to face north.	Pushback approved to face north
	The aircraft shall be pushed back onto taxilane R9 to face east.	Pushback approved to face east.
104, 106, 108, 110, 112, 114, 118, 122, 124, 126 and 128	The aircraft shall be pushed back onto taxilane R9 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R9 to face west.	Pushback approved to face west
130	The aircraft shall be pushed back onto taxilane R9 to face west.	Pushback approved to face west
	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north on R4
302 to 304	The aircraft shall be pushed back onto taxilane R10 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R10 to face west.	Pushback approved to face west
306 to 314	The aircraft shall be pushed back onto taxilane R10 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R10 to face west.	Pushback approved to face west
301	The aircraft shall be pushed back onto taxilane R10 to face east.	Pushback approved to face east
315	Pilot shall request start engine then taxi on stand except following aircraft : A320 series, B737 series and A220 series.	-
	The aircraft shall be pushed back onto taxilane R10 to face west.	Pushback approved to face west
322 to 324	The aircraft shall be pushed back onto taxilane RG to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane RG to face west.	Pushback approved to face west
321	The aircraft shall be pushed back onto taxilane RG to face east.	Pushback approved to face east
341, 341R/L	The aircraft shall be pushed back onto taxilane RG to face east.	Pushback approved to face east
342 to 352 (342R/L, 343R/L, 345R, 347R, 352R/L)	The aircraft shall be pushed back onto taxilane RG to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane RG to face west.	Pushback approved to face west
353, 353R/L	The aircraft shall be pushed back onto taxilane RG to face west.	Pushback approved to face west
Apron 3		
231 to 236 (231R/L, 232R/L)	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north
236R	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R12 to face west.	Pushback approved to face west
237	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R12.	Pushback approved to blue
	The aircraft shall be pushed back onto taxilane R12 to face west.	Pushback approved to face west

Change : Information of pushback procedures for Apron 2.

238, 239	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R12.	Pushback approved to blue
	The aircraft shall be pushed back onto taxilane R12 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R12 to face west.	Pushback approved to face west
	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
	The aircraft shall be pushed back to face south until its nosewheel is at spot 31 (or 32).	Pushback approved to point 31(32)
239R	The aircraft shall be pushed back onto taxilane R12 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R12 to face west.	Pushback approved to face west
	The aircraft shall be pushed back to face south until its nosewheel is at spot 31 (or 32).	Pushback approved to point 31(32)
240	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R12.	Pushback approved to blue
	The aircraft shall be pushed back to face south until its nosewheel is at spot 31 (or 32).	Pushback approved to point 31(32)
	The aircraft shall be pushed back onto taxilane R12 to face east.	Pushback approved to face east
241	The aircraft shall be pushed back to face south until its nosewheel is at spot 32.	Pushback approved to point 32
	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 31.	Pushback approved to point 31
	The aircraft shall be pushed back to face south until its body is on taxilane RC.	Pushback approved to face south
	The aircraft shall be pushed back onto the stand 816 (or 817) to face west.	Pushback approved to stand 816(817)
	The aircraft shall be pushed back onto taxilane R12 to face east.	Pushback approved to face east on R12
	The aircraft shall be pushed back onto taxilane R12 to face west.	Pushback approved to face west on R12
242	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 31 (or 32).	Pushback approved to point 31(32)
	The aircraft shall be pushed back to face west until its nosewheel is at spot 33.	Pushback approved to point 33
	The aircraft shall be pushed back onto the stand 817 (or 816) to face west.	Pushback approved to stand 817(816)
	The aircraft shall be pushed back onto taxilane RC to face north.	Pushback approved to face north
243, 245	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 32 (or 31).	Pushback approved to point 32(31)
	The aircraft shall be pushed back to face west until its nosewheel is at spot 33 (or 34).	Pushback approved to point 33(34)
	The aircraft shall be pushed back onto taxilane RC to face north.	Pushback approved to face north
	The aircraft shall be pushed back onto the stand 817 to face west.	Pushback approved to stand 817
246	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 32 (or 31).	Pushback approved to point 32(31)
	The aircraft shall be pushed back to face west until its nosewheel is at spot 33 (or 34).	Pushback approved to point 33(34)
	The aircraft shall be pushed back onto taxilane RC to face north.	Pushback approved to face north
247	The aircraft shall be pushed back onto taxilane RC (or RF) to face west.	Pushback approved to face west (face west on RF)
	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 32 (or 31).	Pushback approved to point 32(31)
	The aircraft shall be pushed back to face west until its nosewheel is at spot 33 (or 34).	Pushback approved to point 33(34)
	The aircraft shall be pushed back onto taxilane RC (or RB) to face north.	Pushback approved to face north (face north on RB)
	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 39.	Pushback approved to point 39
248, 249	The aircraft shall be pushed back onto taxilane RC (or RF) to face west.	Pushback approved to face west (face west on RF)
	The aircraft shall be pushed back to face west until its nosewheel is at spot 33 (or 34).	Pushback approved to point 33(34)
	The aircraft shall be pushed back onto taxilane RC (or RB) to face north.	Pushback approved to face north (face north on RB)
	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 39.	Pushback approved to point 39

Change : Information of pushback procedures for Apron 3.

250	The aircraft shall be pushed back onto taxilane RC (or RF) to face east.	Pushback approved to face east (face east on RF)
	The aircraft shall be pushed back onto taxilane RA (or RF) to face west.	Pushback approved to face west (face west on RF)
	The aircraft shall be pushed back to face west and then towed forward until its nosewheel is at spot 34.	Pushback approved to point 34
	The aircraft shall be pushed back to face east and then towed forward until its nosewheel is at spot 35.	Pushback approved to point 35
	The aircraft shall be pushed back onto taxilane RB to face north.	Pushback approved to face north
	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 39.	Pushback approved to point 39
251, 252	The aircraft shall be pushed back onto taxilane RA (or RF) to face east.	Pushback approved to face east (face east on RF)
	The aircraft shall be pushed back to face east and then towed forward until its nosewheel is at spot 35 (or 36).	Pushback approved to point 35(36)
	The aircraft shall be pushed back onto taxilane RA (or RB) to face north.	Pushback approved to face north (face north on RB)
	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 39.	Pushback approved to point 39
253	The aircraft shall be pushed back onto taxilane RA (or RF) to face east.	Pushback approved to face east (face east on RF)
	The aircraft shall be pushed back to face east until its nosewheel is at spot 35 (or 36).	Pushback approved to point 35(36)
	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 37 (or 38).	Pushback approved to point 37(38)
	The aircraft shall be pushed back onto taxilane RA (or RB) to face north.	Pushback approved to face north (face north on RB)
	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 39.	Pushback approved to point 39
254	The aircraft shall be pushed back to face east until its nosewheel is at spot 35 (or 36).	Pushback approved to point 35(36)
	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 37(or 38).	Pushback approved to point 37(38)
	The aircraft shall be pushed back onto taxilane RA to face north.	Pushback approved to face north
255	The aircraft shall be pushed back to face east until its nosewheel is at spot 35 (or 36).	Pushback approved to point 35(36)
	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 37(or 38).	Pushback approved to point 37(38)
	The aircraft shall be pushed back onto taxilane RA to face north.	Pushback approved to face north
	The aircraft shall be pushed back onto the stand 815 to face east.	Pushback approved to stand 815
256	The aircraft shall be pushed back to face east until its nosewheel is at spot 36.	Pushback approved to point 36
	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 37 (or 38).	Pushback approved to point 37(38)
	The aircraft shall be pushed back onto the stand 815 (or 814) to face east.	Pushback approved to stand 815(814)
	The aircraft shall be pushed back onto taxilane RA to face north.	Pushback approved to face north
257	The aircraft shall be pushed back to face south until its nosewheel is at spot 37.	Pushback approved to point 37
	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 38.	Pushback approved to point 38
	The aircraft shall be pushed back to face south until its body is on taxilane RA.	Pushback approved to face south
	The aircraft shall be pushed back onto the stand 814 (or 815) to face east.	Pushback approved to stand 814(815)
	The aircraft shall be pushed back onto taxilane R12 to face east.	Pushback approved to face east on R12
	The aircraft shall be pushed back onto taxilane R12 to face west.	Pushback approved to face west on R12
258	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R12.	Pushback approved to blue
	The aircraft shall be pushed back to face south until its nosewheel is at spot 38 (or 37).	Pushback approved to point 38(37)
	The aircraft shall be pushed back onto taxilane R12 to face west.	Pushback approved to face west
258R	The aircraft shall be pushed back onto taxilane R12 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R12 to face west.	Pushback approved to face west
	The aircraft shall be pushed back to face south until its nosewheel is at spot 38 (or 37).	Pushback approved to point 38(37)

Change : Information of pushback procedures for Apron 3.

259, 260	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R12.	Pushback approved to blue
	The aircraft shall be pushed back onto taxilane R12 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R12 to face west.	Pushback approved to face west
	The aircraft shall be pushed back to face south until its nosewheel is at spot 38 (or 37).	Pushback approved to point 38(37)
	The aircraft shall be pushed back onto taxilane R1 to face south.	Pushback approved to face south
261	The aircraft shall be pushed back to face north along blue line until its nosewheel is at R12.	Pushback approved to blue
	The aircraft shall be pushed back onto taxilane R12 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R1 to face south.	Pushback approved to face south
261R	The aircraft shall be pushed back onto taxilane R1 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R12 to face east.	Pushback approved to face east
262 to 268 (266R/L ~ 268R/L)	The aircraft shall be pushed back onto taxilane R1 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R1 to face north.	Pushback approved to face north
362 to 375	The aircraft shall be pushed back onto taxilane R11 to face east.	Pushback approved to face east
	The aircraft shall be pushed back onto taxilane R11 to face west.	Pushback approved to face west
361	Pilot shall request start engine then taxi on stand except following aircraft : A320 series, B737 series and A220 series.	-
	The aircraft shall be pushed back onto taxilane R11 to face east.	Pushback approved to face east
376	Pilot shall request start engine then taxi on stand except following aircraft : A320 series, B737 series and A220 series.	-
	The aircraft shall be pushed back onto taxilane R11 to face west.	Pushback approved to face west
501 to 507	The aircraft shall be pushed back onto taxilane R1 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R1 to face north.	Pushback approved to face north
511 to 517	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north

Change : Information of pushback procedures for Apron 3.

Apron 4		
520	The aircraft shall be pushed back onto taxilane R26 to face south.	Pushback approved to face south
521 to 524	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 41.	Pushback approved to point 41
	The aircraft shall be pushed back onto taxilane R26 to face south.	Pushback approved to face south
522R	The aircraft shall be pushed back onto taxilane R26 to face south.	Pushback approved to face south
525	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 42.	Pushback approved to point 42
	The aircraft shall be pushed back onto taxilane R26 to face north.	Pushback approved to face north
526 to 528	The aircraft shall be pushed back to face south then towed forward until its nosewheel is at spot 42.	Pushback approved to point 42
	The aircraft shall be pushed back onto taxilane R26 to face north.	Pushback approved to face north
528R, 529	The aircraft shall be pushed back onto taxilane R26 to face north.	Pushback approved to face north
531 to 532	The aircraft shall be pushed back onto taxilane R26 to face south.	Pushback approved to face south
533	The aircraft shall be pushed back to face north and then towed forward until its nosewheel is at spot 41.	Pushback approved to point 41
	The aircraft shall be pushed back onto taxilane R26 to face south.	Pushback approved to face south
534	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 42.	Pushback approved to point 42
	The aircraft shall be pushed back onto taxilane R26 to face north.	Pushback approved to face north
535	The aircraft shall be pushed back onto taxilane R26 to face north.	Pushback approved to face north
541 to 544	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north
545, 547	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 43.	Pushback approved to point 43
	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north
546	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north
551 to 554	The aircraft shall be pushed back onto taxilane R4 to face south.	Pushback approved to face south
	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north
	Pilot shall taxi on stand when assigned for deicing.	-
557	The aircraft shall be pushed back to face south and then towed forward until its nosewheel is at spot 43.	Pushback approved to point 43
	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north
	Pilot shall taxi on stand when assigned for deicing.	-
558	The aircraft shall be pushed back onto taxilane R4 to face north.	Pushback approved to face north

Change : Information of pushback procedures for apron 4.

Cargo Apron 1		
601 to 614 621 to 634	The aircraft shall be pushed back onto taxilane D2 or D3 to face west.	Pushback approved
615 to 616	The aircraft shall be pushed back to face west and then towed forward until its nosewheel is at spot 12.	Pushback approved to point 12
635 to 636	The aircraft shall be pushed back to face west and then towed forward until its nosewheel is at spot 11.	Pushback approved to point 11
Cargo Apron 2		
641 to 652 (652R/L)	The aircraft shall be pushed back onto taxilane D4 to face west.	Pushback approved
653 to 655	The aircraft shall be pushed back to face west and then towed forward until its nosewheel is at spot 10.	Pushback approved to point 10

Change : Information of pushback procedures for cargo apron 1, 2 and Amended phrase(foward → forward).

3.3 Standard Taxi Procedure for Cargo flight

3.3.1 Standard Taxi Route(STR) for Departures

Name	Taxi Route Details	Remarks
CARGO TRANSITION 15R	CGO APRON → Turn Right on D → Turn Left onto K → Hold At Holding Point RWY 15L on TWY K → Turn Right on C → Turn Left on L → Hold At Holding Point RWY 15R	Route for RWY 15R Departure
CARGO TRANSITION 16L	CGO APRON → Turn Right on D → Turn Left onto K → Hold At Holding Point RWY 15L on TWY K → Turn Right onto A16 → Turn Right on A → Turn Left onto R17 → R17 → Turn Right on M → M19 → Hold At Holding Point RWY 16L	Route for RWY 16L Departure
CARGO TRANSITION 33L	CGO APRON → Turn Left on D → Turn Right onto J → Hold At Holding Point RWY 33R on TWY J → Turn Left on C → Turn Right on G → Hold At Holding Point RWY 33L	Route for RWY 33L Departure
CARGO TRANSITION 34R	CGO APRON → Turn Left on D → Turn Right onto J → Hold At Holding Point RWY 33R on TWY J → Turn Right onto A8 → R8 → Turn Left on M → M5 → Hold At Holding Point RWY 34R	Route for RWY 34R Departure

3.3.2 Standard Taxi Route for Arrivals

Name	Taxi Route Details	Remarks
CARGO TRANSITION NORTH	Exit onto P → Turn Left on T → Hold At Holding Point RWY 16L on T → Turn Left on N → Turn Right onto M11 → R11 → Turn Left on A → Turn Right onto A15 → K → Hold At Holding Point RWY 15R on TWY K → Turn Right on D → CGO APRON	Route for RWY 16R Arrival
CARGO TRANSITION SOUTH	Exit onto P → Turn Right on U → Hold At Holding Point RWY 34R on U → Turn Right on N → Turn Left onto M11 → R11 → Turn Right on A → Turn Left onto A8 → J → Hold at Holding Point RWY 33L on J → Turn Left on D → CGO APRON	Route for RWY 34L Arrival

3.3.3 Operational Procedures

- All cargo flight crews are strongly advised to plan their taxi route based on standard taxi route before taxi or landing.
- For cargo departure flight, 'Standard Taxi Route' will be issued in advance with ATC clearance.
- In order to prevent taxiway incursion caused by flight crew's confusion, 'Standard Taxi Route' and 'Follow The Greens' will be used as taxi instruction to cargo departure flights. And taxiway centerline lights will be operated based on standard taxi route.
- If for any reason, flight crew unable to comply or understand the standard taxi route instructions, timely request should be made for alternate taxi instruction.
- The following ATC phraseology will be used when issue standard taxi route instructions.
- (Call sign), TAXI VIA (STR NAME), FOLLOW THE GREENS, HOLD SHORT OF (RWY).

3.4

Departure routes and Transfer of control points(TCP)

1. Unless otherwise instructed, aircraft should use the following routes:

Apron	Apron FREQ	Route	TCP	Gate/Stand
Apron 1	121.65 MHz	R1 - A4 R1 - R7 R1 - R8	4E 7E 8W	1 to 17
		R7 R8	7E 8W	18 to 36
		R4 - M5 R4(R6) - R7 R4(R6) - R8	5W 7E 8W	37 to 50
		R7 R8	7E 8W	103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127, 129, 131, 132
Apron 2	121.8 MHz	R9 R10	9E 10W	101, 102, 104, 106, 108, 110, 112, 114, 118, 122, 124, 126, 128, 130
				301 to 315
		RG	30E 30W	321 to 324 341 to 353
Apron 3	122.175 MHz	R1 - R11 R1 - R12 R1 - A13(A16)	11E 12W 13E(16E)	262 to 268
		R1 - A13(A16) R1 - R12	13E(16E) 12W	501 to 507
		R4 - R11 R4 - R12 R4 - M13(M16)	11E 12W 13W(16W)	229 to 236
		R4 - R11 R4 - M13(M16)	11E 13W(16W)	511 to 517
		R11 R12	11E 12W	237 to 261 361 to 376
Apron 4	123.675 MHz	R4 - R17 M19	17E(17W) 19W	520 to 529 531 to 535 541 to 547 551 to 554 557 to 558
Cargo Apron 1	123.325 MHz	D2 D3	2Y 3Y	601 to 616 621 to 636
Cargo Apron 2		D4 D5	4Y 5Y	641 to 655
Remarks				
Departure routes in Apron areas will be issued in detail according to runway in use and traffic movement condition by Incheon Apron. Refer to RKSI AD 2-6, 2-8 (Aerodrome Ground Movement Charts).				

2. Aircraft shall not proceed beyond the TCP without clearance from Incheon Ground or Tower.

Change : Information of departure routes, TCP, ACFT stands NR for apron 2 and 3.

- 3.5 Follow the Greens(FtGs) procedures at Incheon INTL Airport
- 3.5.1 "Follow the Greens" procedures at Incheon INTL Airport is operated to provide pilots with individual visual guidance(green taxiway centerline lights and red Stop bar lights) while taxiing during day and night operations as well as during periods of low visibility.
- 3.5.2 Aircraft taxiing on maneuvering area(runway and main parallel taxiways) will be guided by dedicated individual green taxiway centerline lights in front of the aircraft.
- 3.5.3 ATC will use the phraseology "Follow the Greens....." when issuing a clearance to pilots to taxi along the directional guidance provided by the green taxiway centerline lights to clearance limit(runway holding point or transfer of control point/TCP or stop bar lights).
- 3.5.4 When instructed to follow the greens by ATC, pilots are reminded of the extreme importance of maintaining a careful lookout and are at all times responsible wing tip clearance.
- 3.5.5 When instructed to follow the greens by ATC, pilots shall not taxi ahead if there is no green lights or red Stop bar lights are ahead.
- 3.5.6 Pilots and drivers shall enter/cross the runway or taxiway only when both the following conditions are met.
The crew have
- a. received positive ATC clearance to enter/cross the runway or taxiway, and
 - b. observed that the red Stop bar lights are turned off.
- 3.5.7 When more than one aircraft taxi closely toward the common intersection, it is possible to see more than one directional guidance ahead because the end of proceeding green lights segment is still remaining.
- 3.5.8 When more than one directional guidance are provided ahead or hard to see the guidance due to reflection of sunlight, pilots shall stop and ask ATC for onward clearance before taxiing.
- 3.5.9 When more than one aircraft taxi toward the common intersection, ATC will continue turning on the green lights to give priority to first aircraft. Second aircraft will be instructed "GIVE WAY TO...../FOLLOW....." or provided turning on the red Stop bar lights.
- 3.5.10 When ATC wants to terminate the "Follow the Greens", ATC will revert to directional guidance by taxiway information or mandatory signs/markings. In this case, pilots shall navigate their taxi route with reference to signs/markings on taxiway.

4. Deicing operations

4.1 De/anti-icing phase notification

DE/ANTI-ICING PHASE	Application of phase
Phase 1 (BLUE)	It is estimated that the average time between aircraft EOBT and being airborne will be less than 60 minutes.
Phase 2 (YELLOW)	It is estimated that the average time between aircraft EOBT and being airborne will range from 60 minutes to 119 minutes.
Phase 3 (ORANGE)	It is estimated that the average time between aircraft EOBT and being airborne will range from 120 minutes to 239 minutes.
Phase 4 (RED)	It is estimated that the average time between aircraft EOBT and being airborne will be at or above 240 minutes.

4.2 De-icing zones and pads

De-icing pads assignment will be made as pad-group.

1. A South zone : 821, 822, 823, 825 pads
2. M South zone : 831, 832, 833, 834 pads
3. M North zone : 551, 552, 553, 554, 557 pads
4. T Center zone : 814, 815, 816, 817 pads
5. Central De-icing zone : 301, 302, 303, 304 pads
6. D South zone : 841, 842 pads
7. D North zone : 851, 852 pads

4.3 De-icing operational procedures

1. De-icing requests and cancellations must be made by the flight crew to Incheon De-icing.
2. ACFT types applicable for engine on de-icing

Airbus	A318, A319, A320, A321, A330, A350, A220, A380
Boeing	B737, B757, B767, B777, B787, B747

3. Technical de-icing (landing gear, brakes, inside LE- or TE-flaps, under wing, engine inlets, fan blades and sensors/ static ports/ pitot probes) should be performed by Engine off.
4. On the de-icing pads ACFT shall hold abeam the stop line which indicates the cockpit stop position or follow the advice of the marshaller.
5. Aircrew shall control the throttle carefully, avoiding the exhausted gas causing damage to support personnel and equipment, when aircraft exit the de-icing stands.
6. During the engine on de-icing, aircrew shall keep the engine idle and set the brake. ACFT hold position until Pad control give the taxi instruction.
7. The detailed de-icing procedures are given on the 'ICN DE-ICING ANTI-ICING PILOT BRIEF SHEET'. A copy of the sheet can be downloaded from www.airport.kr/co/en/index.do.

FREQ	Call Sign	Procedure
128.65 MHz, 344.2 MHz (ATIS)	Incheon INTL Airport	- Acknowledge "De/Anti-icing Phase" by ATIS.
↓		
123.575 MHz (Apron 1, Apron 2, Cargos) 122.225 MHz (Apron 3, 4)	Incheon De-icing	- Contact when ready for pushback. - Advise "Aircraft De-icing required and Engine On/Off De-icing". - De-icing zones assignment.
↓		
121.65 MHz (Apron 1) 121.8 MHz (Apron 2, Cargos) 122.175 MHz (Apron 3) 123.675 MHz (Apron 4)	Incheon Apron	- Set Mode A code to 2000. - Select XPNDR or AUTO. - Pushback & taxi to De-icing zones.
↓		
123.325 MHz (A South zone, M South zone, Central De-icing zone, D South/North zone) 122.175 MHz (T Center zone) 122.325 MHz (M North zone)	Pad Control	- De-icing pads assignment. - Taxi to De-icing pads.
↓		
130.750 MHz (A South zone) 130.850 MHz (M South zone) 130.250 MHz (T Center zone, Central De-icing zone) 129.725 MHz (M North zone)	Ice Man	- Enter the pad and report the brake set to Ice Man. Monitor Ice Man until De-icing is completed. - Do not shut down engines until instructed by Ice Man for ground safety.
↓		
121.6 MHz	Incheon Delivery	- (Engine Off) Once de-icing is completed, contact Incheon delivery to get ATC clearance. Report "Engine Off De-icing and De-icing completed" when initial contact with Incheon delivery by voice or DCL. Monitor Ice Man. - (Engine On) Once de-icing is started, contact Incheon delivery to get ATC clearance. Report "Engine On De-icing and De-icing started" when initial contact with Incheon delivery by voice or DCL. Monitor Ice Man. - Set Mode A assigned by ATC. - Select XPNDR or AUTO.
↓		
130.750 MHz (A South zone) 130.850 MHz (M South zone) 130.250 MHz (T Center zone, Central De-icing zone) 129.725 MHz (M North zone)	Ice Man	- Re-contact Ice Man and Report start engine and ready to taxi.
↓		
123.325 MHz (A South zone, M South zone, Central De-icing zone, D South/North zone) 122.175 MHz (T Center zone) 122.325 MHz (M North zone)	Pad Control	- Taxi out from De-icing pads.

NOTE 1 : The de-icing pad will be appropriately assigned by Incheon Apron or Pad Control when aircraft approaches to de-icing zone.

NOTE 2 : Flight crews shall monitor and maintain radio contact, otherwise re-sequenced as a result of no response to 3 successive calls.

NOTE 3 : This procedures can be changed by Incheon Apron according to the volume of de-icing traffic.

NOTE 4 : Flight crews need extra caution when entering and leaving the de-icing pad, since there are GSE roads in front of or behind the de-icing pad.

5. Arrival procedures

5.1 Arrival routes and Transfer of control points(TCP)

1. Unless otherwise instructed, aircraft should use the following routes;

Apron	Apron FREQ	Route	TCP	Gate/Stand
Apron 1	121.65 MHz	A5 - R1	5E	1 to 12
		A6 - R1	6E	14 to 17
		R7 - R1	7W	1 to 17
		R7 R8	7W 8E	18 to 36
		R7 - R4(R6)	7W	37 to 42
		M6 - R4	6W	43 to 50
		R8 - R4(R6)	8E	37 to 50
Apron 2	121.8 MHz	R7 R8	7W 8E	103,105,107,109,111,113,115,117, 119,121,123,125,127,129,131,132
		R9 R10	9W 10E	101,102,104,106,108,110,112,114, 118,122,124,126,128,130
		RG	30W 30E	301 to 315
Apron 3	122.175 MHz	R11 - R1 A14 - R1	11W 14E	321 to 324 341 to 353
		R12 - R4 M14 - R4	12E 14W	262 to 268 501 to 507
		R11 R12	11W 12E	229 to 236 511 to 517
Apron 4	123.675 MHz	R17 - R4 M18	17E 18W	237 to 261 361 to 376
Cargo Apron 1	123.325 MHz	D2 D3	2Y 3Y	520 to 529 531 to 535 541 to 547 551 to 554 557 to 558
Cargo Apron 2		D4 D5	4Y 5Y	601 to 616 621 to 636
Remarks Arrival routes in Apron areas will be issued in detail according to runway in use and traffic movement condition by Incheon Apron. Refer to RKSI AD CHART 2-7, 2-9 (Aerodrome Ground Movement Charts).				

2. Aircraft will normally be transferred to Incheon Apron prior to the TCP. Unless otherwise directed, aircraft may automatically contact Incheon Apron at the TCP.

3. Aircraft shall not proceed beyond the TCP without clearance from Incheon Apron.

5.2 Follow-me car service

1. Follow-me service is available to arriving aircraft. Pilots should make the request to Incheon Ground or Incheon Apron.

2. Aircraft shall monitor the appropriate Incheon Ground and/or Incheon Apron frequencies while taxiing.

6. Ground engine check procedures

Pilot or authorized engineer requiring engine ground runs shall contact Incheon Apron on the appropriate frequency (refer to 2.20.3.4.1) and provide the following :

1. Call sign or registration number
2. Gate / Stand number
3. Type of ground engine run, engine start or performance check Incheon Apron should be advised on its completion.

6.1 Engine starts

Engine starts are permitted in the Apron areas. However the power setting(s) shall not exceed idle thrust.

6.2 Engine performance check

1. Run-up Area : North of Maintenance Apron (Refer to RKSI AD CHART 2-3, 2-4)
2. Operation Hours : 24 Hours
3. Accommodation : 2 aircraft simultaneously (only towed)
4. In case of the Run-up area U/S, temporary run-up areas can be allocated as follows;

Temporary Run-up Areas	Remarks
14A (North part of TWY A)	122.175 MHz shall be monitored during engine performance check in temporary run-up areas.

7. Taxiing - Limitation

1. All aeroplane will taxi at speeds of more than 10 kt on Taxiways A, B, C, D, M, N or P to ensure smooth traffic flow unless there is exceptional direction concerning safety factors by ATC. And if it is impracticable, pilots shall notify to ATC.

2. There are obstacles, guardrails of underpass way, near by TWY A (between A8 & A9, A12 & A13) and TWY D (between D2 & D3, D5 & D6). The heights of obstacles are less than 1 m.

Change : Information of arrival routes, TCP, ACFT stands NR for apron 2 and 3.

8. CAT I Operations

8.1 Pilots are warned that during ILS CAT-I operations to RWY 15L and 33R aircraft may experience GP signals' fluctuation or interference caused by aircraft taxiing in the vicinity of the GP aerial. Pilots should therefore closely monitor their ILS approach profile and rate of descent.

8.2 CAT I taxi routes are the same as CAT II/III taxi routes, refer to low visibility procedure diagram pages.

9. CAT II / III Operations

9.1 General

Incheon International Airport RWY 15L, RWY 15R, RWY 16L, RWY 16R, RWY 33L, RWY 33R, RWY 34L and RWY 34R have ILS CAT III equipments. Low Visibility Procedures are established for operation in a visibility of less than RVR 550 m or a cloud ceiling of less than 60 m (200 ft) or less.

- a. Low visibility operations will be initiated by broadcasting "ATC LOW VISIBILITY PROCEDURES ARE IN OPERATION" via ATIS and/or appropriate radio frequencies.
- b. Low visibility operations will be terminated by deleting the above mentioned message from ATIS and/or broadcasting "ATC LOW VISIBILITY OPERATIONS ARE TERMINATED" via appropriate frequencies.

9.2 Aircraft operators must obtain approval from Administrator of Seoul Regional Aviation Administration prior to conducting any low visibility operations at Incheon International Airport.

1. Approval for CAT II/III Operations

- a. Aircraft operators and pilots who wish to conduct ILS CAT II/III operations at Incheon International Airport shall conform with certain requirements. Details of these requirements are published in Aviation Safety Act, Article 67 and its Enforcement Regulations Article 189, which are available from :

Flight Operations Division
Seoul Regional Aviation Administration
47, Gonghang-ro 424 beon-gil, Jung-gu, Incheon,
400-718, Republic of Korea

Tel : +82-32-740-2154, 5
Fax : +82-32-740-2159

- b. Foreign operators may obtain the approval from Administrator of Seoul Regional Aviation Administration by providing the following information to Administrator of Seoul Regional Aviation Administration.

- 1) Aircraft type and register number ;
- 2) The CAT II/III minima to which they intend to operate ; and
- 3) A copy of the category II/III certification issued by their own category authority.

9.3 Pilots shall be informed when:

1. Meteorological reports preclude ILS CAT I operations;
2. Low Visibility Procedures are in operation;
3. There is any unserviceable in a promulgated facility so that they may amend their minima.

9.4 The separation between successive landing aircraft on the same runway will not be less than 10 NM.

9.5 When informed of the failure of Surface Movement Radar (SMR), pilots should anticipate that considerable spacing between aircraft may be required.

9.6 Pilots who wish to carry out an ILS CAT II/III approach shall inform to Approach Control on initial contact.

9.7 Special Procedures and Safeguards

General Special procedures and ground safeguards

Special procedures and ground safeguards will be applied during CAT II/III operations to protect aircraft from operating in low visibility and to avoid interference with the ILS signals in accordance with the provisions of ICAO Doc. 9365 - Manual of All Weather Operations, and the provisions of the Enforcement Regulations of Aviation Act, Article 210-8.

1. During low visibility operations, taxiway centerline lights will be used in conjunction with the stop bar lights as follows :
 - a. If the stop bar lights are turned on, the centerline lights beyond the stop bar will be turned off.
 - b. If the stop bar lights are turned off, the centerline lights beyond the stop bar will be turned on.
2. Restrictions of application on CAT-II/III holding positions : TWY G or TWY L
 - a. When RWY 15L for landing and RWY 15R for departure are in use at the same time, CAT-II/III holding positions on TWY G and L are not applied.
 - b. When RWY 33L for departure and RWY 33R for landing are in use at the same time, CAT-II/III holding positions on TWY L and G are not applied.

3. Arriving Aircraft

- a. Aircraft shall vacate the runway via the designated exit taxiways as follows; Other exit taxiways will not be lit.

RWY 15L - C2, C1, D1 or G
RWY 15R - B3, B2 or G
RWY 33L - B5, B6 or L
RWY 33R - C4, C5, D6 or L
RWY 16L - N3, N2 or S
RWY 16R - P6, P5, P4, P2 or S
RWY 34R - N4, N5 or N7
RWY 34L - P7, P8, P10, P11 or P13

Refer to Low Visibility Procedure diagram Pages.

- b. All runway exits have taxiway center-line lead off lights that are color coded (green/yellow) to indicate that portion of the taxiway that is within the ILS sensitive area.
- c. Pilots are required to make a 'runway vacated' call giving due allowance for the size of the aircraft to ensure that the entire aircraft have vacated the ILS critical sensitive areas.

4. Departing Aircraft

Departing aircraft shall normally enter the runway via the designated taxiways as follows :

RWY 15L : A → L or D → L
RWY 15R : A → L, D → L, D → K → C → L
RWY 33L : A → G, D → G, D → J → C → G
RWY 33R : A → G, D → G,
RWY 16L : M → N7
RWY 16R : M → V → P → P13, M → N7 → P → P13
RWY 34R : M → S
RWY 34L : M → S, M → T → P → S

Refer to Low Visibility Procedure diagram Pages.

9.8 Practice Approaches

Pilots may carry out a practice ILS CAT II/III approach at any time with a prior approval of ATC, but the full safeguarding ground procedures will not be applied and pilots should anticipate the possibility of ILS signal interference.

10. Apron Safety Management

1. All GSE (Ground Service Equipment) vehicle roadways crossing taxiways or taxi lanes are marked in the form of zipper.
2. Pilots shall pay extra caution to the vehicles and other aircraft while taxiing in apron areas, especially ensuring enough wing-tip clearance.

11. Special notice to ICAO Code F aircraft (A380 & B747-8) operations
- 11.1 Runway
All runways are available for the ICAO Code F aircraft.
- 11.2 RWY-holding position markings
The markings for RWY 15R/33L, RWY 15L/33R, RWY 16R/34L, RWY 16L/34R are located at 107.5 m from runway centerline.
- 11.3 Taxiing routes on maneuvering area
1. ICAO Code F aircraft should taxi along the taxiing routes published on movement charts(refer to AIP RKSI Aerodrome ground movement chart) unless there are special instructions by ATC.
 2. ICAO Code F aircraft should taxi at speed of less than 30 kt on TWY A, B, M and N because there are open channels between TWY A and B (depth 3 m), TWY N and M (depth 3.5 m). (refer to AIP RKSI Aerodrome ground movement chart)
 3. ICAO Code F aircraft should taxi along the taxiing routes published on SMGCS taxi route (refer to AIP RKSI Low visibility procedure diagram) under Low Visibility Procedure(LVP) unless there are special instructions by ATC.
- 11.4 Taxiing routes on aprons
1. B747-8 aircraft are available on all taxiing routes.
 2. A380 aircraft should taxi along the taxiing routes published on movement charts(refer to AIP RKSI Aerodrome ground movement chart) unless there are special instructions by Incheon Apron(Apron Controller). Some Apron taxiing routes are restricted as below.

	A380 Unavailable Taxiing Routes
Apron 1	AS, R5
Apron 3	RF
	Parts of RA, RB, RC(Except the routes between R11 and R12)
Apron 4	R26
	M18, M19(R4 ~ R26 routes)
Cargo Apron 1	D2, D3
Etc	R1(AS ~ R9 routes)

- 11.5 Parking stands
For more information on ICAO Code F aircraft operation in Maintenance Apron, Deicing Apron, Isolated Security Parking Position, and Multiple use stands, refer to RKSI AD CHART 2-4 and 2-5.

	Stand NR.	Code F ACFT	
		A380	B747-8
Passenger Terminal 1	8	-	○
	10	○	○
	12	-	○
	15	-	○
	17	○	○
	43	○	○
	46	○	○
Passenger Terminal 2	231	○	○
	232	○	○
	233	-	○
	234	-	○
	264	-	○
	265	-	○
	266	○	○
	267	○	○
	268	○	○

Concourse	106	○	○
	110	○	○
	112	○	○
	122	○	○
	126	○	○
Cargo Apron 1	603	-	○
	604	-	○
	606	-	○
	607	-	○
	616	-	○
	623	-	○
	624	-	○
	626	-	○
	627	-	○
	629	-	○
	630	-	○
	636	-	○
Cargo Apron 2	641	○	○
	644	○	○
	647	-	○
	648	○	○
	652	○	○
	655	-	○
Remote Stands	306	○	○
	310	○	○
	312	○	○
	322	○	○
	323	○	○
	324	○	○
	341	○	○
	342	○	○
	352	○	○
	353	○	○
	501	○	○
	502	-	○
	511	○	○
	512	-	○
	541	○	○
	542	○	○
	543	○	○
	544	○	○

Deicing Apron	302	○	○
	303	○	○
	304	○	○
	551	○	○
	552	○	○
	557	○	○
	823	○	○
	825	-	○
	831	○	○
	841	-	○
	842	○	○
	851	-	○
	852	○	○
Maintenance Apron	701	○	○
	704	○	○
	705	○	○
	709	○	○
	710	○	○

12. Transfer of control between aprons

12.1 Transfer of control point in apron 1, 2 and 3

Aircraft taxiing from apron 1 to apron 2(or from apron 2 to apron 1), or from apron 2 to apron 3(or from apron 3 to apron 2) will change the frequency when approaching the transfer of control point below.

Apron	Position	TCP (Transfer of Control Point)
Apron 1↔Apron 2	Gate 103	1T
	Gate 130	2T
Apron 2↔Apron 3	between ACFT stands NR. 321 & 361	3T
	between ACFT stands NR. 315 & 376	4T

Refer to RKSI AD CHART 2-1, 2-3, 2-6, 2-7, 2-8, 2-9 for the position in detail.

Change : Amended information for ACFT stand NR. 825.

13. Reduced Runway Separation Minima(RRSM)

Reduced Runway Separation Minima(RRSM) will be applied between a departing aircraft and a succeeding landing aircraft or between two successive landing aircraft.

a. RRSM will be applied when the following conditions exist :

- (1) Visibility of at least 5 km and ceiling not lower than 1 000 ft;
- (2) During the hours of daylight from 30 minutes after local sunrise to 30 minutes before local sunset;
- (3) No unfavorable surface wind conditions (including significant tailwind/turbulence or wind shear, etc.);
- (4) The braking action shall not be adversely affected by runway contaminants;
- (5) The second aircraft will be able to see the first aircraft clearly and continuously until it is clear of runway.

b. Landing clearance may be issued to an arriving aircraft while the runway is still occupied provided that there is reasonable assurance that the following separation distance will exist when the arriving aircraft crosses the runway threshold :

(1) Landing following Landing

Preceding aircraft has landed and has passed at least 2 400 m from the threshold of the landing runway, is in motion and will vacate the runway without backtracking;

(2) Landing following Departure

Preceding aircraft is/will be airborne and has passed at least 2 400 m from the threshold of the landing runway.

c. ATC will provide traffic information when issuing the landing clearance. The following ICAO standard phraseology examples will be used :

- "(Call sign), PRECEDING B747 VACATING RUNWAY/ABOUT TO VACATE/LANDING ROLL, CLEARED TO LAND."
- "(Call sign), DEPARTING A321 AHEAD ABOUT TO ROTATE, CLEARED TO LAND."

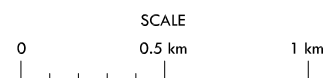
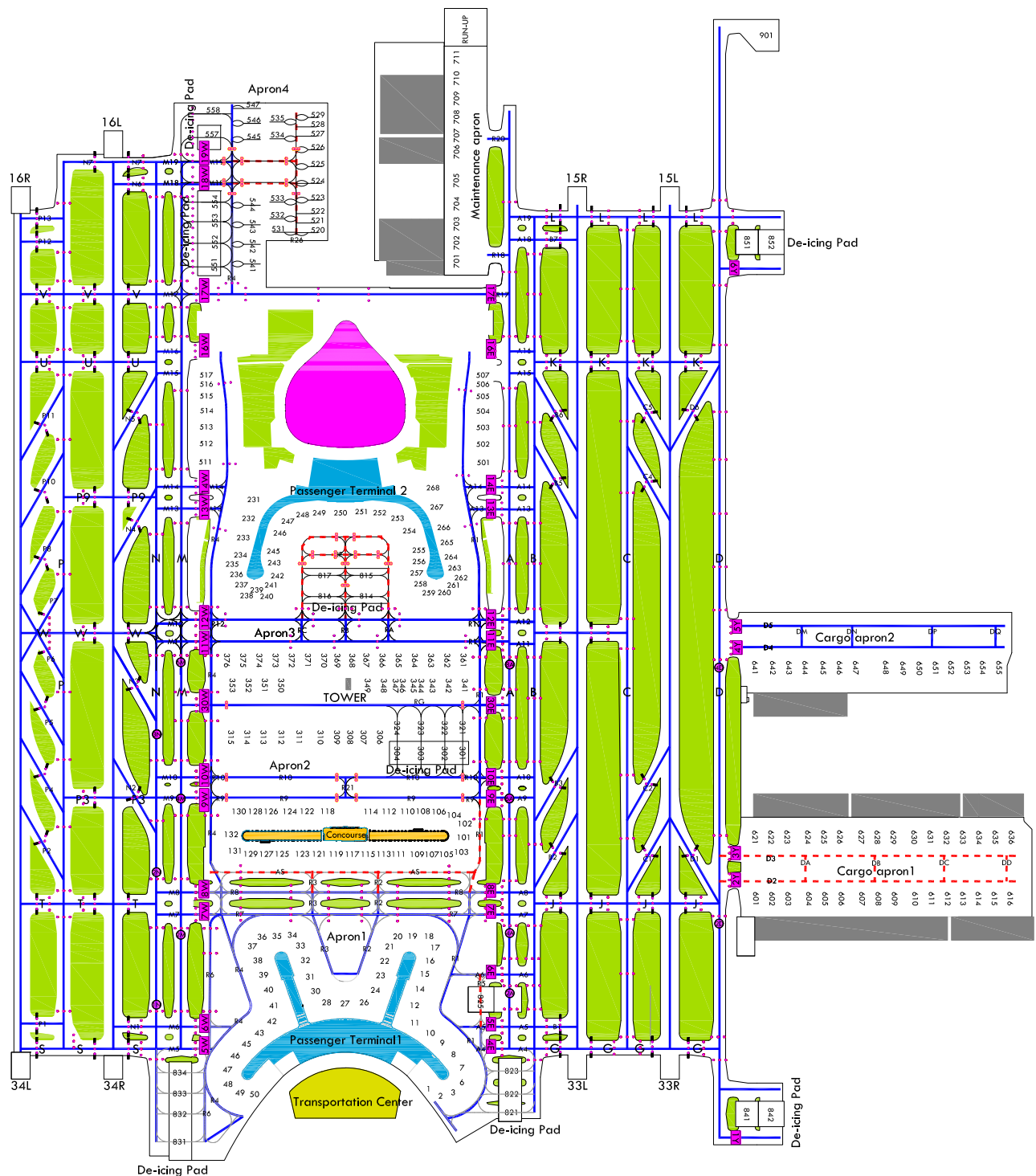
14. Restriction on the taxilane R17 over bridge

1. All aircraft shall taxi at speed of less than 15 kt on Taxilane bridge R17 (Taxilane R17 over bridge)—to ensure safe movement.
2. ICAO Code C and D aircraft could be restricted for taxiing on the bridge R17 during 60 ~ 70 kt of wind speed.
3. All aircraft could be restricted for taxiing on the bridge R17 during not less than 70 kt of wind speed.

ICAO Code F Aircraft Taxiing Route

LEGEND

- All Aircraft available except A380
- All Aircraft available



Change : Information of deicing pad.



INTENTIONALLY

LEFT

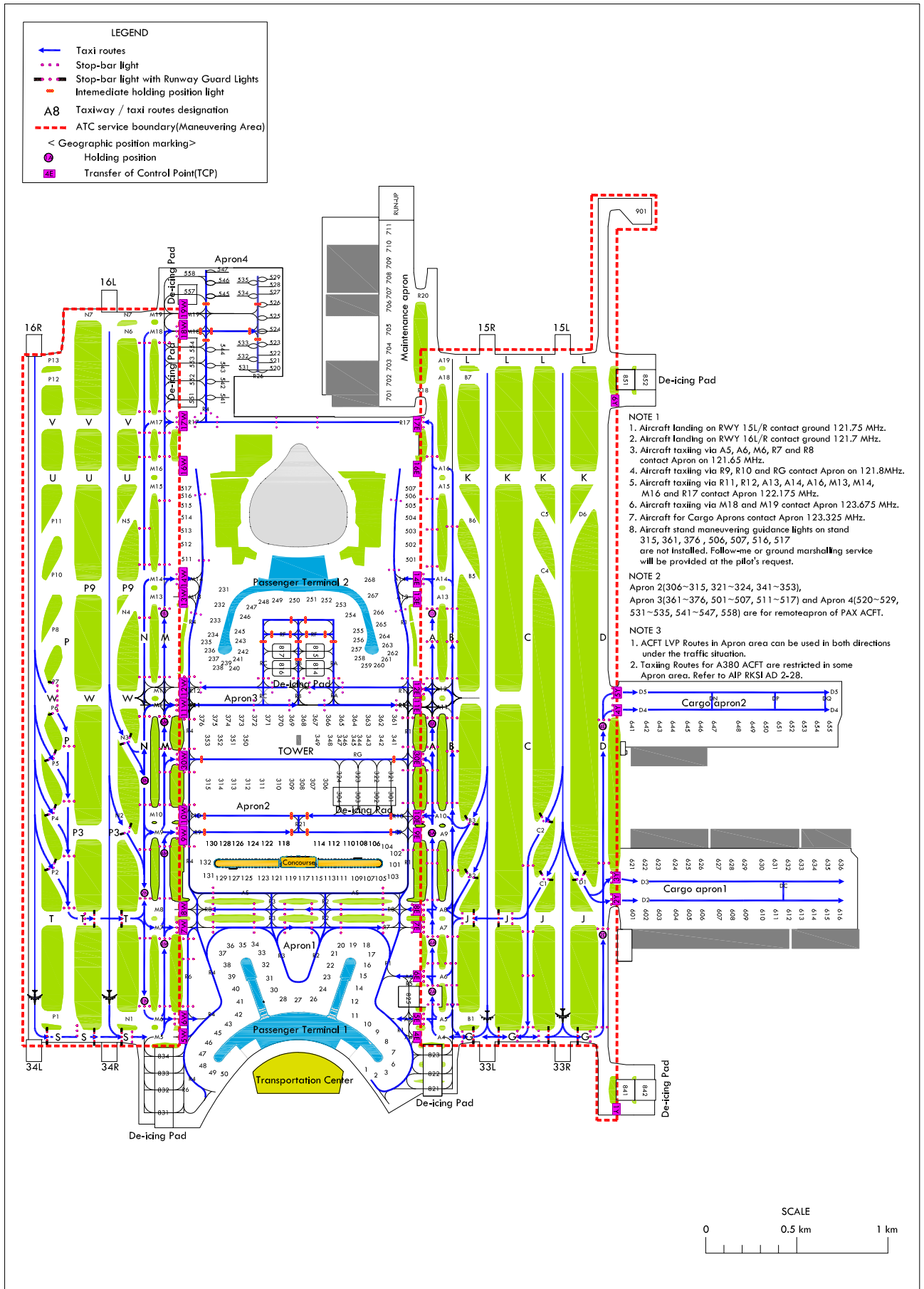
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LOW
VISIBILITY
PROCEDURE

AERODROME ELEV 7 m

GND CONTROL 121.75(E) 121.7(W)
APRON CONTROL 121.65 122.175 123.675
121.8 123.325

SEOUL/Incheon Intl(RKSI)
RWY 15L/R, 16L/R
SMGCS - Arrival Taxi Route

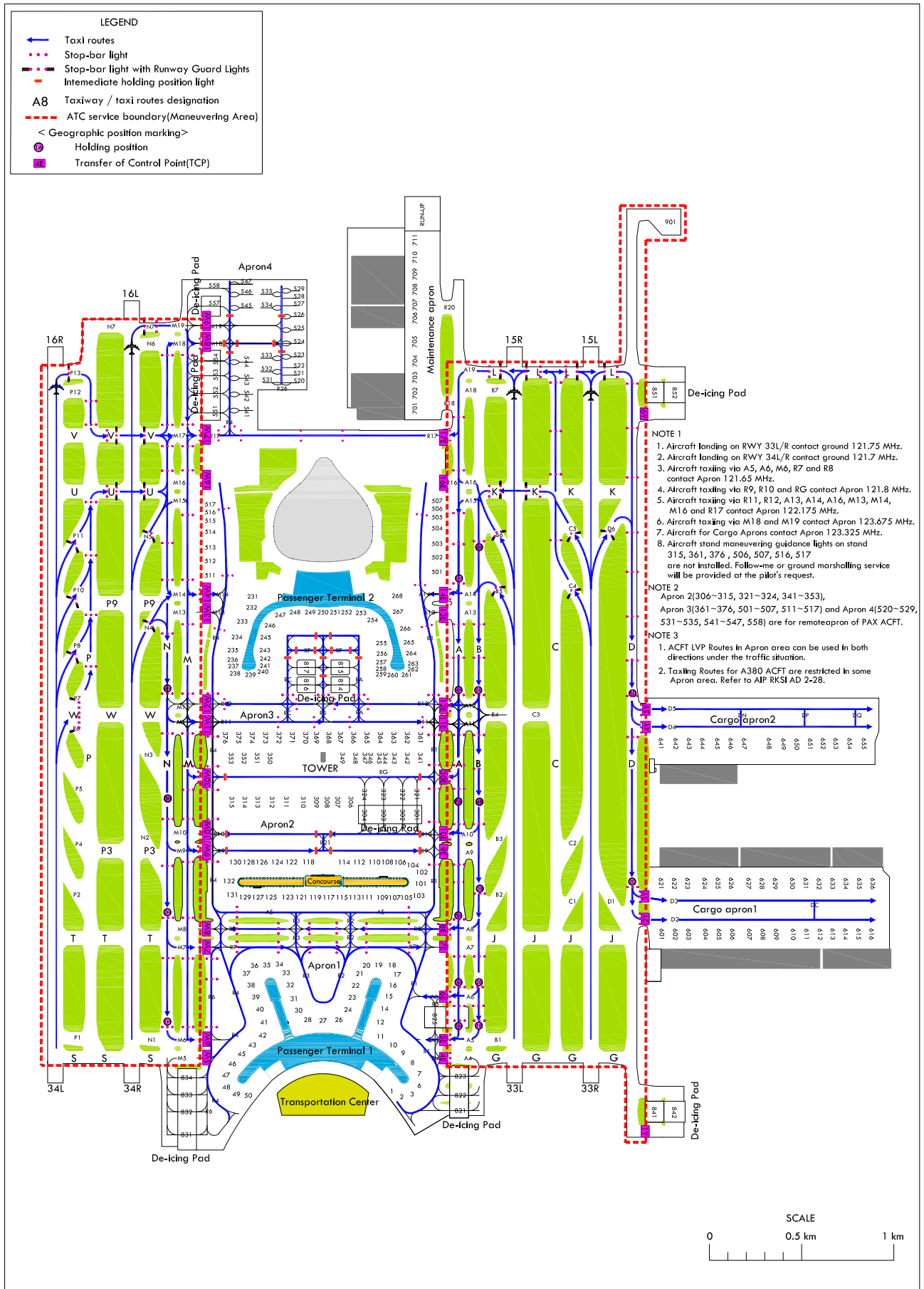


LOW
VISIBILITY
PROCEDURE

AERODROME ELEV 7 m

GND CONTROL 121.75(E) 121.7(W)
APRON CONTROL 121.65 122.175 123.675
121.8 123.325

SEOUL/Incheon Intl(RKSI)
RWY 33L/R, 34L/R
SMGCS - Arrival Taxi Route



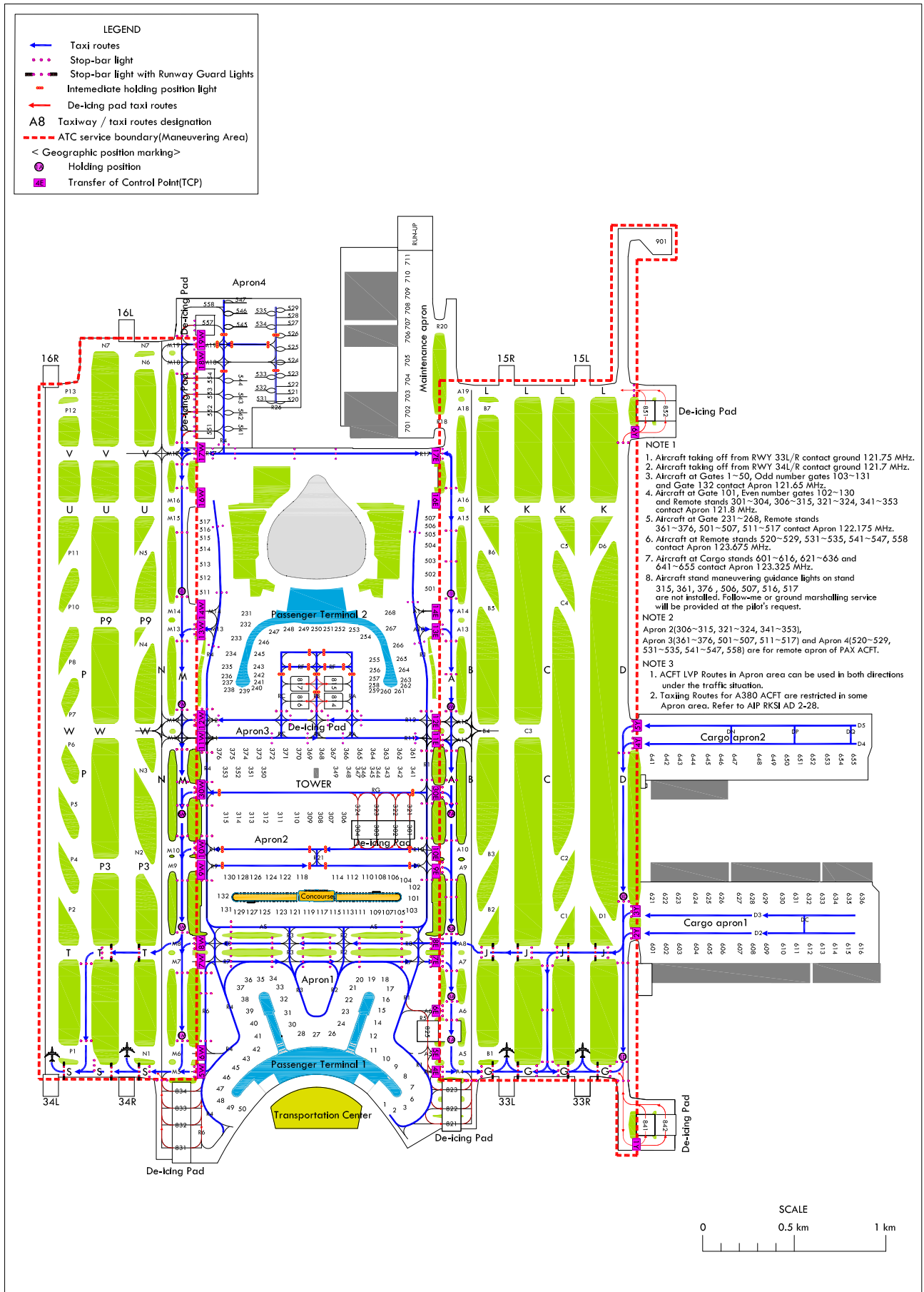
Change : Information of concourse.

LOW
VISIBILITY
PROCEDURE

AERODROME ELEV 7 m

GND CONTROL 121.75(E) 121.7(W)
APRON CONTROL 121.65 122.175 123.675
121.8 123.325

SEOUL/Incheon Intl(RKSI)
RWY 33L/R, 34L/R
SMGCS - Departure Taxi Route



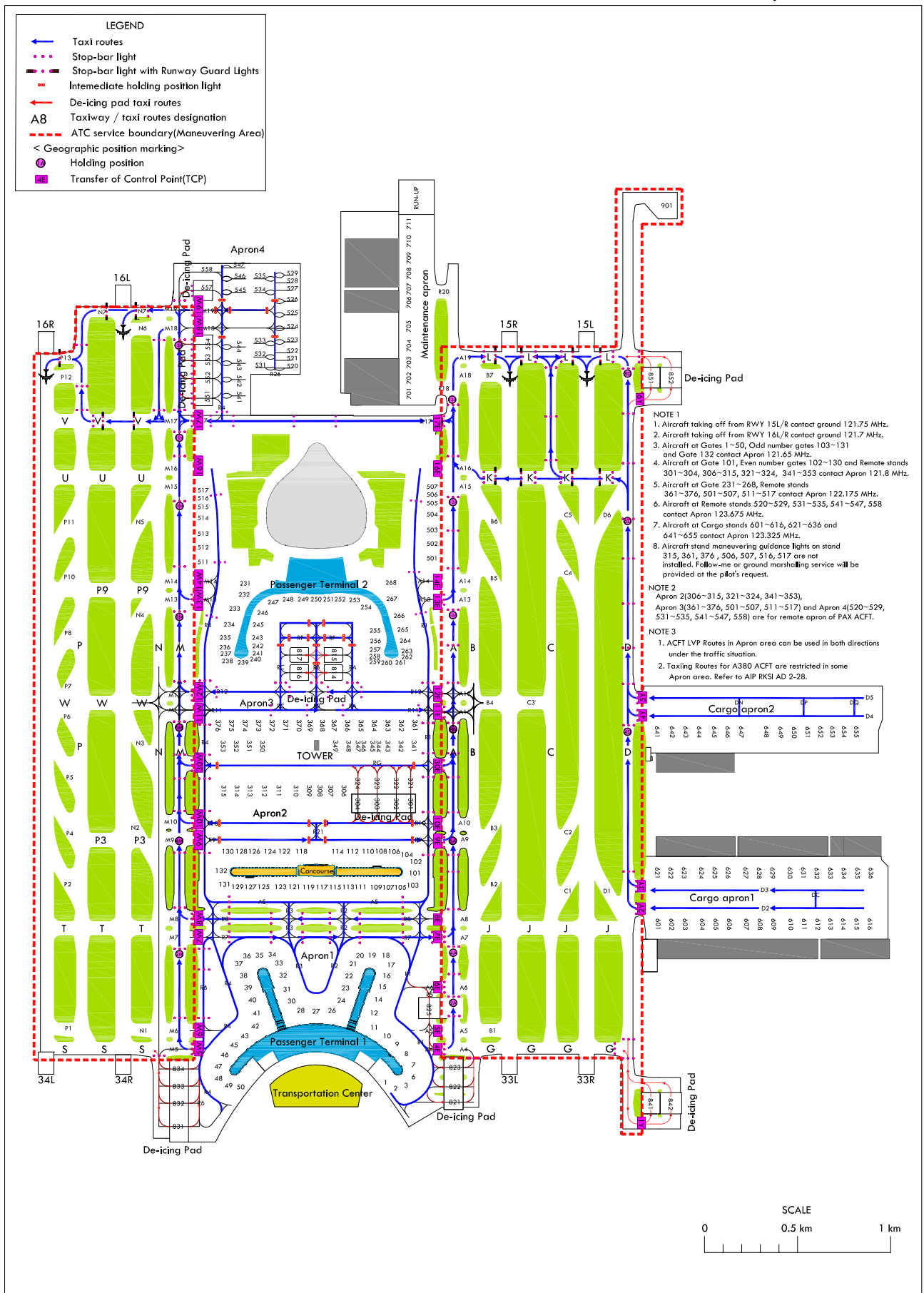
Change : Information of deicing pad taxi routes.

LOW
VISIBILITY
PROCEDURE

AERODROME ELEV 7 m

GND CONTROL 121.75(E) 121.7(W)
APRON CONTROL 121.65 122.175 123.675
121.8 123.325

SEOUL/Incheon Intl(RKSI)
RWY 15L/R, 16L/R
SMGCS - Departure Taxi Route



Change : Information of concourse and deicing pad taxi routes.

RKSI AD 2.21 NOISE ABATEMENT PROCEDURES

1. Aircraft Operating Procedures(except helicopters)

1.1 Take off

All departing aircraft should apply ICAO PANS-OPS (Doc 8168) Volume I Noise Abatement Take-off Climb Procedures as follows :

1. Runway 33L/R, 34R/L :

- Noise Abatement Departure Procedure ONE (NADP ONE)
 - a. Thrust reduction at 1 500 ft above aerodrome elevation recommended.

2. Runway 15L/R, 16L/R :

Noise Abatement Departure Procedure ONE or TWO (NADP ONE or NADP TWO)

- a. NADP ONE : Thrust reduction at 1 500 ft above aerodrome elevation recommended
- b. NADP TWO : Acceleration at 1 000 ft above aerodrome elevation recommended
- c. For noise abatement and CO₂ reduction using a NADP TWO is recommended. If for safety reasons (prevention of bird strike), compliance with the recommended procedure is not possible, NADP ONE may be used.

1.2 AUXILIARY POWER UNITS(APUs)

At Passenger docking stands, primarily the stationary airport pneumatic and electrical service units shall be used. Alternatively the airport owned mobile units shall be used.

At other stands, the airport owned mobile units shall be used.

Airborne APUs shall only be started;

- to start engine, the earliest 30 minutes before off-block time; however wide fuselage aircraft are permitted to use APU 60 minutes prior to scheduled departure time.
- if maintenance work on the aircraft makes it unavoidable; in that case the service period shall be kept as short as possible;
- if the Airport owned units are not available or unserviceable for specific aircraft types; in that case the airborne APUs shall be started at the earliest 60 minutes before off-block time and be kept in operation not more than 30 minutes after the on-block time.

In particular cases the Airport Corporation may permit longer service periods for APUs after the on-block time.

- Airport Corporation Telephone : 032-741-2458~9.
- INCHEON APRON CONTROL : 121.65 MHz, 122.175 MHz, 121.8 MHz, 123.325 MHz, 123.675 MHz

RKSI AD 2.22 FLIGHT PROCEDURES

1. IFR Procedure

1.1 IFR ATC Clearance

The following procedures are established for all turbo jet departures from Incheon International Airport :

1. IFR ATC clearance may be obtained by Voice RTF or datalink Departure clearance Service(DCL)(via ARINC (623)).
2. Pilot shall contact INCHEON DELIVERY via voice RTF or Data-link Departure Clearance Service(DCL) from TOBT -10 minutes(in case of NON A-CDM, EOBT -10 minutes) to +5 minutes and report the following information. If initial call takes to place too early, Clearance Delivery will ask the pilot to call again at TOBT - 10 minutes. In case of DCL, reject message will be received. (refer RKSI AD 2.20 3.1 A-CDM)
 - a. Aircraft identification
 - b. Destination
 - c. Gate or stand number
 - d. ATIS code
3. In cases where ATC clearance is received via DCL, Pilot should follow restrictions in the remarks of ATC Clearance and acknowledge them within 5 minutes.

Change : Information of IFR ATC clearance procedures.

4. If unable to commence push-back by TSAT +5 minutes(flight with TSAT) or within 10 minutes after receiving ATC clearance(flight without TSAT) due to the aircraft being unready, ATC clearance will be cancelled. Pilot shall contact again INCHEON DELIVERY for clearances. (refer RKSI AD 2.20 3.2)

1.2 Speed Restrictions

1. All aircraft shall not exceed 250 kt IAS below 10 000 ft in SEOUL TMA, unless otherwise authorized by ATC. If unable to comply with this speed restriction, state minimum speed acceptable to ATC.
2. ATC will use "NO ATC SPEED RESTRICTIONS" RTF phraseology to remove MAX 250 kt IAS below 10 000 ft.
3. speed control under radar vector :
 - a. When arriving traffic is being sequenced under radar direction, ATC typically will apply the following speed control :
 - Initial approach phase : 210 kt IAS
 - Base leg/HDG to final approach : 180 kt IAS
 - When established on final approach : 180 kt to 160 kt IAS
 - Thereafter to 5 DME : 160 kt IAS
 - b. These speed restrictions are essential for smooth and safe operations at high traffic loads. If an aircraft does not comply with these speed instructions, the aircraft may have to be excluded from the planned approach sequence.
 - c. When ATC use "RESUME NORMAL SPEED" RTF phraseology, it means that the previously issued speed restriction by ATC is cancelled and a pilot can resume an aircraft's preferred speed. Pilot shall note that it does not mean the removal of MAX 250 kt IAS within SEOUL TMA.

1.3 Fuel Dumping Area

Fuel Dumping Area is established within SEOUL TMA as follows :

1. AREA
 - BELTU(37°12'18"N 125°47'59"E) : Inbound HDG 097, Left turns, 1 MIN leg
(ATC instruction : Hold west of BELTU, on HDG 097, 1 MIN leg, left turns)
 - PY036(37°12'28"N 126°02'24"E) : Inbound HDG 097, Left turns, 1 MIN leg
(ATC instruction : Hold west of PY036, on HDG 097, 1 MIN leg, left turns)
 - PY044(37°15'06"N 125°52'55"E, NCN R 250/D31) : Inbound HDG 070, Left turns, 1 MIN leg
(ATC instruction : Hold southwest of PY044, on HDG 070, 1 MIN leg, left turns)
2. ALTITUDE : At or above 6 000 ft
3. SPEED : 230 kt IAS or less
4. Area/Altitude may be changed by pilot request, traffic condition or any other safety reason.

1.4 Visual approach and Independent Visual Approach(IVA)

1. Visual approach may be initiated by ATC or approved upon pilot request on traffic permitting basis when weather as follows;
 - a. Ceiling : At or above 2 500 ft
 - b. Visibility : Not less than 5 km
2. Independent Visual Approach(IVA) will be used at Incheon International Airport(IIA). This procedure requires accurate and consistent application of the pilot procedures and responsibilities.
 - a. Application
 - 1) IVA will be used during parallel runway operations when the visibility is not less than 5 km and the ceiling is at or above 2 500 ft.
 - 2) IVA will be initiated by ATC when the pilot reports visual runway and/or preceding aircraft while turning to the final or flying on the localizer course.
 - 3) Pilots will be notified by ATIS or RTF using the phrase. "EXPECT ILS APPROACH THEN INDEPENDENT VISUAL APPROACH WHEN VISUAL."

b. ATC Procedures

- 1) ATC will give IVA expectation and assigned RWY to the flight crew at initial contact. If no objection, ATC will consider that has been accepted.
- 2) ATC will provide standard surveillance separation until cleared for an independent visual approach or visual separation applied.
- 3) ATC will allow the aircraft to intercept the extended centerline of the landing runway at an angle of not greater than 30 degrees.
- 4) ATC will use "CLEARED INDEPENDENT VISUAL APPROACH" phraseology when issue approach clearance.
- 5) If preceding aircraft type is SUPER(e.g. A380), IVA clearance will not be issued to succeeding aircraft.
- 6) After IVA clearance is issued or visual separation is applied, ATC will not apply any other type of separation with aircraft on the adjacent final approach course.
- 7) If necessary, ATC will inform traffic information of other relevant aircraft on adjacent final approach course.

c. Pilot procedures

- 1) Fly accurate assigned heading to final and do not pass through assigned runway extended centerline, unless otherwise instructed by ATC.
- 2) Other aircraft will be operating on the adjacent approach.
- 3) Accurately track the extended runway centerline.
- 4) After received final radar heading at an angle of not greater than 30 degrees, pilots shall intercept the localizer of landing RWY unless previously instructed to cross extended centerline when radio contact is temporary impossible(e.g. radio failure, congestion or blocked).
- 5) Report preceding aircraft and/or RWY in sight as soon as possible.
- 6) If a pilot does not report visual preceding aircraft, RWY or adjacent aircraft, the controller may vector the aircraft away from the final approach for sequencing for a dependent parallel approach.
- 7) Comply with speed restriction(160 kt to 5 NM from THR). If unable to comply with speed restriction, inform ATC immediately.
- 8) Do not intentionally deviate from final approach course. Pilots are strongly recommended to track on normal instrument approach course until landing.
- 9) In the event of deviation from final approach course, maintain own separation from aircraft on adjacent final approach course.
- 10) When avoiding action is initiated, advise ATC immediately.
- 11) Pilots should commence an ILS missed approach procedure of the assigned RWY in case of a go-around.

1.5 Assignment of STAR or SID

This information will help pilots during preflight planning to select a STAR or SID. It may be changed if necessary due to ATC purposes, weather, ground conditions and traffic volume.

1. Assignment of Standard Terminal Arrival(STAR)

a. Passenger flight / Cargo Flight

TIME (UTC)	AIRWAY	RWY	STAR (PRIMARY/SECONDARY)
0000-2400	G597(KARBU)	15L/R, 16L/R	RNAV KARBU 2H / RNAV KARBU 2C
	G585(GUKDO)	15L/R, 16L/R	RNAV GUKDO 2H / RNAV GUKDO 2C
	Y644(REBIT)	15L/R, 16L/R	RNAV REBIT 2H
	Y722(OLMEN)	15L/R, 16L/R	RNAV OLMEN 2H / RNAV OLMEN 2C
	G597(KARBU)	33L/R, 34L/R	RNAV KARBU 2E / RNAV BIKSI 2M*
	G585(GUKDO)	33L/R, 34L/R	RNAV GUKDO 2E / RNAV CUN(Yecheon) 2M*
	Y644 (COWAY/GONAV)	33L/R, 34L/R	RNAV REBIT 2A / RNAV GONAV 3M*
	Y722(OLMEN)	33L/R, 34L/R	RNAV OLMEN 2E / RNAV MAKSA 2M*

* These procedures are operated only 1400-1900 UTC.(See 1.7 for the details)

** Cargo Flight will be preferentially assigned to RWY 15L/R & 33L/R.

Change : Information of procedure names(1H → 2H, 1C → 2C, 1E → 2E, 1A → 2A).

2. Assignment of Standard Instrument Departure(SID)

a. Passenger flight / Cargo flight

TIME (UTC)	AIRWAY	RWY	SID (PRIMARY/SECONDARY)
0000-2400	G597(KARBU)	15L/R	RNAV EGOBA 2C
	A582(OSPOT)	15L/R	RNAV OSPOT 2C
	G597(BINIL)	15L/R	RNAV BINIL 2C
	Y711(BOPTA)	15L/R	RNAV BOPTA 2C
	G597(KARBU)	16L/R	RNAV EGOBA 2H
	A582(OSPOT)	16L/R	RNAV OSPOT 2H
	G597(BINIL)	16L/R	RNAV BINIL 2H
	Y711(BOPTA)	16L/R	RNAV BOPTA 2H
	G597(KARBU)	33L/R	RNAV EGOBA 2E / RNAV EGOBA 2A
	A582(OSPOT)	33L/R	RNAV OSPOT 2E / RNAV OSPOT 2A
	G597(NOPIK)	33L/R	RNAV NOPIK 2A
	Y711(BOPTA)	33L/R	RNAV BOPTA 2A
	G597(KARBU)	34L/R	RNAV EGOBA 2Y
	A582(OSPOT)	34L/R	RNAV OSPOT 2Y
	G597(NOPIK)	34L/R	RNAV NOPIK 2Y
	Y711(BOPTA)	34L/R	RNAV BOPTA 2Y

Change : Information of procedure names(1C → 2C, 1H → 2H, 1E → 2E, 1A → 2A, 1Y → 2Y).

3. Use of SID / STAR

- a. Pilot shall note that adherence to SID / STAR level restrictions are critical for aircraft separation in SEOUL TMA. For ATC separation, pilots are strongly encouraged to check whether he or she can comply with level restrictions of SID(before airborne) / STAR(before passing subsequent waypoint) or not.
- b. If unable to comply with any restrictions depicted on SID or STAR, pilot shall notify ATC as early as possible.
- c. To eliminate safety risk due to a mismatch between ATC and pilot expectations, ATC will provide aircraft with explicit indications with regard to what is expected in terms of speed and level at all times using "CANCEL (LEVEL/SPEED) RESTRICTIONS" or "COMPLY WITH (LEVEL/SPEED) RESTRICTIONS" RTF phraseology.

1.6 Readback of ATC clearance

1. The pilot shall read back always to ATC safety-related parts of ATC clearances for at least the following items;
 - a. ATC route clearances
 - b. Clearances and instructions to enter, land on, take off from, hold short of, cross, taxi and backtrack on any runway
 - c. Runway-in-use, altimeter settings, SSR codes, level instructions, heading and speed instructions
2. Other clearances or instructions, including conditional clearances, shall be read back or acknowledged in a manner to clearly indicate that they have been understood and will be complied with.

1.7 CDO(Continuous Descent Operation) PROCEDURE FOR INCHEON AD

1. The CDO procedures are in place for all aircraft flying on Y644, Y722, G585(Y685) and G597(Y697) inbound to Incheon international airport to ensure efficient arrival and approach operation as far as possible during specified time.
 - a. Operation time : 1400-1900 UTC
 - b. Available RWY : 33L/R, 34L/R
 - c. Available procedures : BIKSI 2M, CUN 2M, MAKSA 2M, GONAV 3M
2. ATC instructions

Incheon or Daegu ACC will instruct the aircraft to perform CDO when it enter Incheon FIR, as follows :

 - Phraseology
controller : (Call sign), Cleared CUN(yecheon) 2M arrival. Descend via STAR to 7 000.
※ The above instruction(Phraseology) may be changed if necessary.
3. Pilots should report ATC when leaving the altitude of the Top of Descent(TOD).
 - Phraseology
pilot : Incheon control, (Call sign), Now leaving.
※ Reference point of descending : ENPIL(IAF) at 7 000 ft
4. Pilots may maintain the ECON(Economical) SPEED on the FMS, unless ATC advises otherwise.
5. If the CDO procedure is not possible due to an emergency, weather conditions and traffic an alternate instruction will be issued by ATC or pilot can request it.

1.8 Initial Radio Call Procedures with SEOUL APPROACH

1. When instructed to "CONTACT", pilot shall Squawk IDENT and report callsign, ACFT type(including series) and ATIS code.

e.g.) "Seoul Approach, ABC123, Boeing 738, information 'A'."
2. When instructed to "MONITOR or STAND BY FOR", pilot shall Squawk IDENT and keep silent until ATC initiate call.

1.9 Missed approach procedure when ground navigation aid is unserviceable

1. RWY 15L/R : Follow published procedure. If unable, climb to 3 000 ft, after passing 520 ft fly HDG 100 then radar vector.
2. RWY 16L/R : Follow published procedure. If unable, climb to 3 000 ft, after passing 500 ft fly HDG 190 then radar vector.
3. RWY 33L/R : Follow published procedure. If unable, climb to 3 000 ft, after passing 500 ft fly HDG 010 then radar vector.
4. RWY 34L/R : Follow published procedure. If unable, climb to 3 000 ft, after passing 500 ft fly HDG 280 then radar vector.
5. Report to ATC about missed approach route(published procedure or HDG/ALT) when going around.
6. If ATC issue another HDG/ALT, follow ATC's instruction when going around.

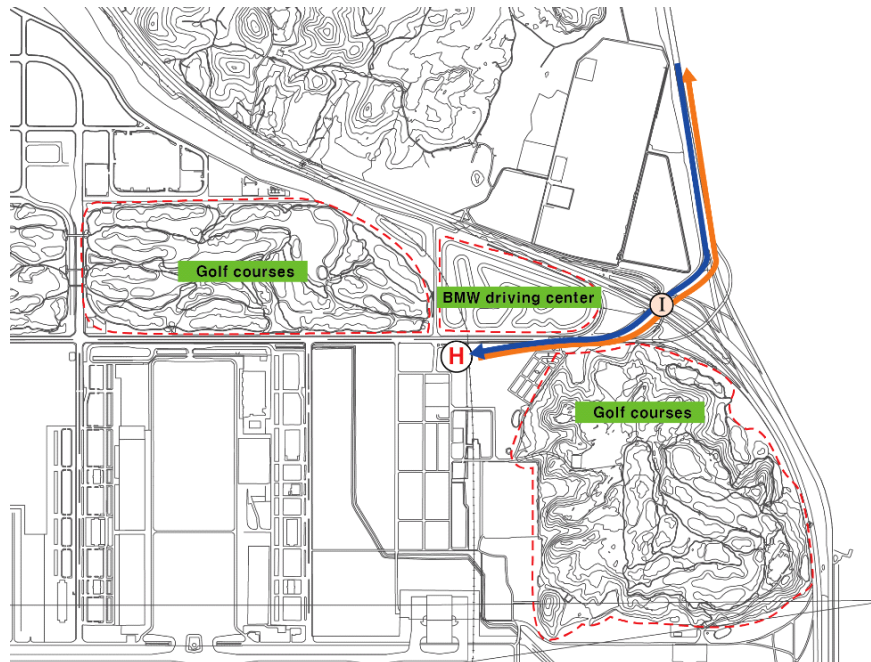
2. VFR

2.1. VFR PROCEDURE

1. VFR Weather minimum : VFR flight will be permitted under the condition as below
 - a. Ground Visibility : Not less than 5 km (3 SM)
 - b. Ceiling : at or above 450 m (1 500 ft)
2. VFR Reporting points : Refer to Page RKSI AD 2-41.
3. VFR Traffic circuit : Refer to Page RKSI AD 2-40.

Change : Information of missed APCH procedure.

4. VFR Pattern Altitude
 - a. Helicopter
 - 1) Runway : 1 000 ft AMSL
 - 2) East Pattern for H : 800 ft AMSL
 - b. Fixed wing : 1 500 ft AMSL
5. VFR Flight procedure
 - a. VFR aircraft shall maintain two way radio communication and get permission to enter Class B airspace from Seoul Approach Control except
 - 1) When landing and departing within Incheon Control Zone via VFR reporting points.
 - 2) to transiting through Incheon Control Zone.
 - b. When landing on or taking off from H, helicopter shall use caution for separation from IFR traffic. Helicopter shall contact Incheon TWR prior to departure and delay may be possible for separation between IFR and VFR traffic.
 - c. Helicopters flying between "Z" and "Y" point along SIHWA breakwater shall maintain at or below 1 000 ft AMSL to ensure the safety of IFR takeoff and landing traffic from/to Incheon INTL airport.
 - d. As practical as possible, pilot should avoid congested areas, hospital, school, institute and so on (especially airport town near "D" point).
 - e. When landing on H, use caution not to fly beyond VFR reporting point "I" in order to protect Shinbul radar.
 - f. When approaching H, pilot should fly via "I" and follow the roads in order not to make downwash onto the congested area where is golf courses and BMW driving center.



2.2 Special VFR

1. Special VFR flight for taking off or landing may only be permitted except helicopters, when :
 - a. The ground visibility is not less than 1 500 m.
 - b. If ground visibility is not reported at airport, flight visibility is not less than 1 500 m (transition).
2. For Special VFR operations, the pilot shall :
 - a. Fly only within control zone as cleared by Incheon Tower.
 - b. Remain clear of clouds.
 - c. Maintain at least 1 500 m of flight visibility.
 - d. Maintain visual reference with surface or water.
 - e. Special VFR may be permitted only between sunrise and sunset unless the pilot is instrument rated and the aircraft is equipped for IFR flight in accordance with the requirement specified in civil aeronautics law. (Except helicopters)

3. RADIO COMMUNICATION FAILURE PROCEDURE

3.1 In VMCs :

- 1) Squawk 7600.
- 2) Continue to fly in VMC.
- 3) Land at nearest suitable aerodrome.

3.1.1 Procedure for VFR Flights

VFR Flight which has encountered radio communication failure shall

- 1) Squawk 7600, and
- 2) If able to see the light gun signal from control tower, follow that instruction.
- 3) If unable to see the light gun signal from control tower, hold over downwind for RWY 16R/34L, 15L/33R until ETA or for 10 minutes, whichever is longer; then
- 4) land on RWY 16R/34L, 15L/33R or H in use as appropriate.

3.2 In IMCs or when conditions are such that it does not appear likely that the pilot will complete the flight in accordance with 3.1 :

3.2.1 DEPARTURE AIRCRAFT

- 1) Squawk 7600
- 2) Maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 7 minutes following :
 - i) the time the transponder is set to Code 7600; or
 - ii) the time the last assigned level or minimum flight altitude is reached; whichever is later and thereafter adjust level and speed in accordance with the filed flight plan;
- 3) When being vectored or having been directed by ATC, proceed in the most direct manner possible to rejoin the current flight plan route no later than the next significant point, taking into consideration the applicable minimum flight altitude.

3.2.2 ARRIVAL AIRCRAFT

- 1) Squawk 7600
 - 2) Follow the STAR issued by ATC. When being vectored or having been directed by ATC, proceed in the most direct manner possible to join the STAR(1.5 Assignment of STAR notified at RKSJ AD 2.22 Flight Procedures) no later than the next significant point. Then commence descent as filed.
 - 3) Start approach to the assigned runway without delay.
 - 4) If no specific runway for landing has been assigned, start approach to runway 15L/33R without delay. If runway 15L/33R is closed, start approach to runway 15R/33L or runway 16R/34L.
- * No fly area : The aircraft shall not fly north of R 271 YJU, except simultaneous approach RWY 15L/R aircraft.

4. Take-off Weather Minima

Facilities	RWY	3 RVR REQ			REDL & RCLL	REDL & RCL ***	REDL or RCL ***	NIL (Day Only)
		TGS*, HIRL & RCLL	HIRL & RCLL	REDL & RCLL				
		RVR / VIS**						
Multi-Engine ACFT	15L	75 m / 300 ft	125 m / 400 ft	150 m / 500 ft	200 m / 600 ft	300 m / 1 000 ft	400 m / 1 200 ft	500 m / 1 600 ft
	33R	75 m / 300 ft	125 m / 400 ft	150 m / 500 ft	200 m / 600 ft	300 m / 1 000 ft	400 m / 1 200 ft	500 m / 1 600 ft
	15R	75 m / 300 ft	125 m / 400 ft	150 m / 500 ft	200 m / 600 ft	300 m / 1 000 ft	400 m / 1 200 ft	500 m / 1 600 ft
	33L	75 m / 300 ft	125 m / 400 ft	150 m / 500 ft	200 m / 600 ft	300 m / 1 000 ft	400 m / 1 200 ft	500 m / 1 600 ft
	16L	75 m / 300 ft	125 m / 400 ft	150 m / 500 ft	200 m / 600 ft	300 m / 1 000 ft	400 m / 1 200 ft	500 m / 1 600 ft
	34R	75 m / 300 ft	125 m / 400 ft	150 m / 500 ft	200 m / 600 ft	300 m / 1 000 ft	400 m / 1 200 ft	500 m / 1 600 ft
	16R	75 m / 300 ft	125 m / 400 ft	150 m / 500 ft	200 m / 600 ft	300 m / 1 000 ft	400 m / 1 200 ft	500 m / 1 600 ft
	34L	75 m / 300 ft	125 m / 400 ft	150 m / 500 ft	200 m / 600 ft	300 m / 1 000 ft	400 m / 1 200 ft	500 m / 1 600 ft

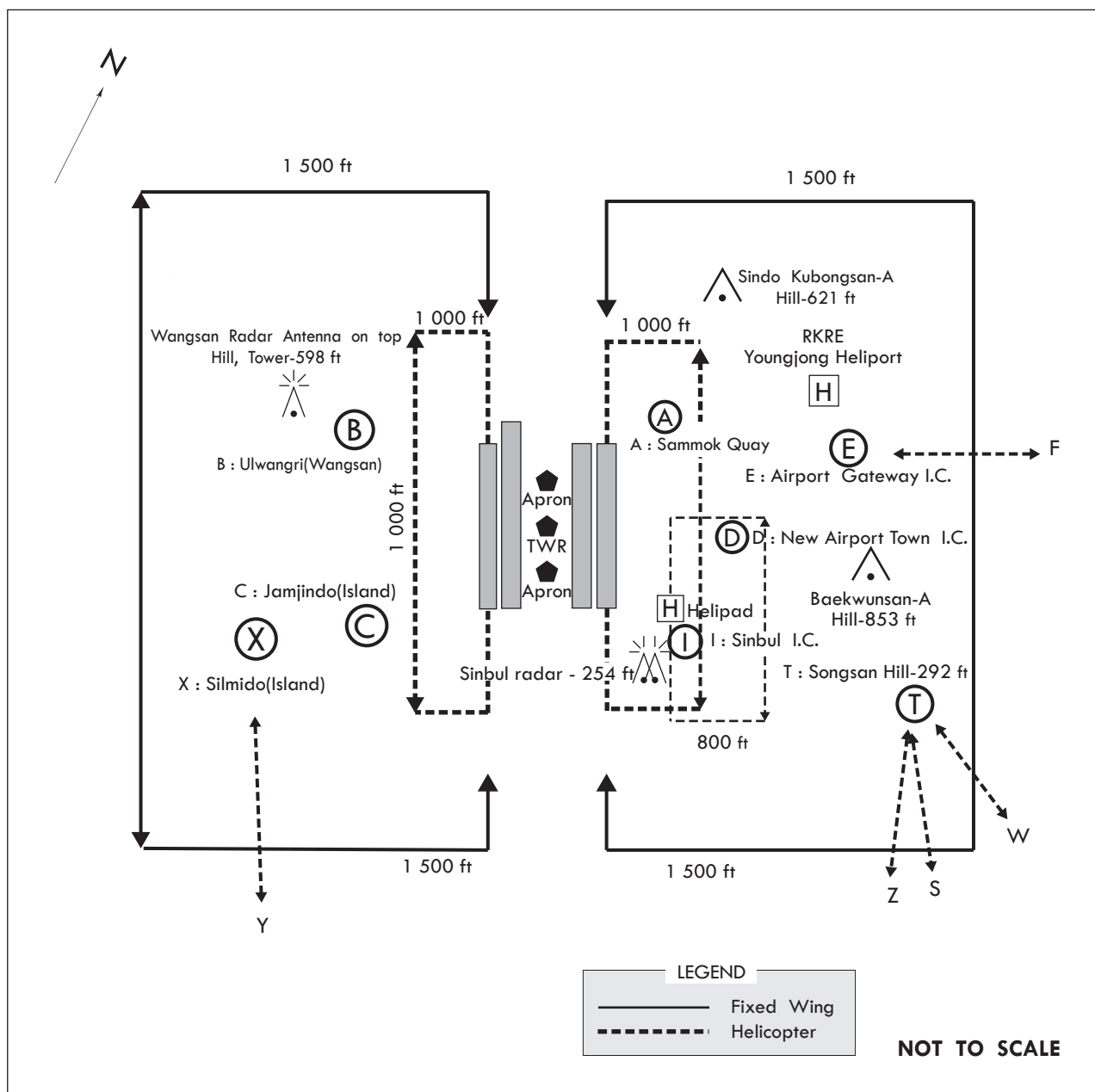
Note : SIDs are designed in accordance with STANDARDS for FLIGHT PROCEDURE DESIGN.

* With certified TGS(Take-off Guidance System).

** The TDZ RVR/VIS may be assessed by the pilot.

*** For Night Operations at least REDL or RCLL and RENL are available.

VFR Traffic Circuits - INCHEON INTL Airport

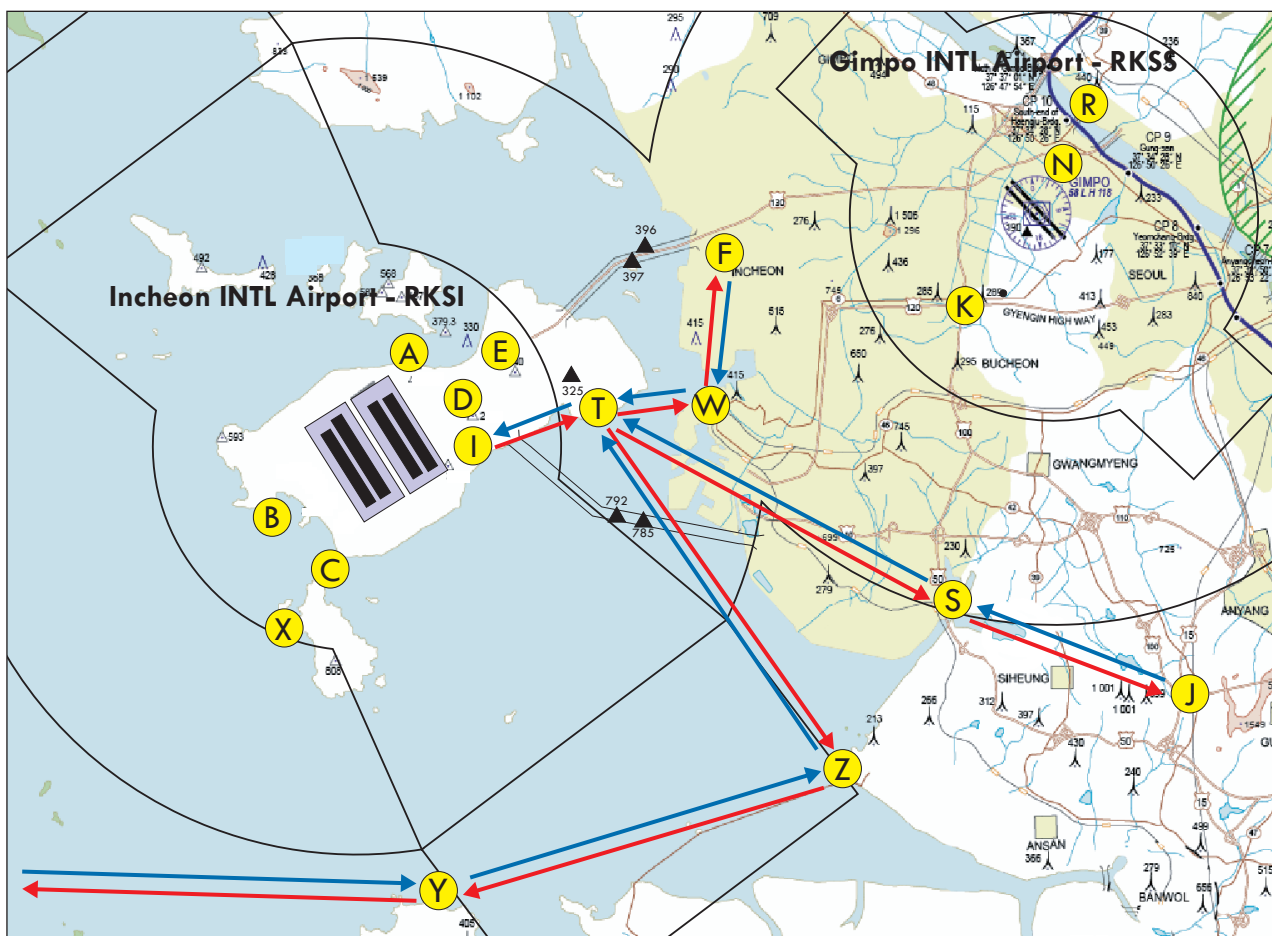


Note

1. The area was established according to the Regulation of Airspace Management, notification of the MOLIT.
2. For information about H refer to RKSI AD 2.16 Helicopter Landing Area and East Pattern Altitude is 800 ft within 1 NM from H.
3. Traffic pattern altitudes for runways are for CAT H - D.
4. Aircraft/helicopter flying via E(Airport Gateway IC) should use caution for VFR traffic around RKRE(Youngjong Heliport).
5. As practical as possible, pilot should avoid congested areas, hospital, school, institute, and so on (especially airport town near D point).
6. If runway 15L/R or 16L/R is in use, VFR should fly via I or C at or below 500 ft along southern breakwater when crossing over the south of airport.
7. If runway 33L/R or 34L/R is in use, VFR should fly via A or B at or below 500 ft along northern breakwater when crossing over the north of airport.

Change : Amended phrase(Helipad → Heliport).

VFR Reporting Points Information



Reporting Point	Geographical Name	Position	Coordinates(WGS-84)
A	삼목선착장 Sammok Quay	2.3 NM NE of Incheon R 084 NCN/D1.1	372959N 1262713E
B	을왕리 Ulwangri	2.9 NM SW of Incheon R 230 NCN/D3.5	372709N 1262251E
C	잠진도 Jamjindo(Island)	2.9 NM SW of Incheon R 197 NCN/D4.6	372505N 1262451E
D	공항신도시 IC New Airport Town IC	2.7 NM E of Incheon R 112 NCN/D3	372859N 1262924E
E	공항입구 IC Airport Gateway IC	4.0 NM ENE of Incheon R 087 NCN/D4	373021N 1263024E
F	북인천 IC Buk-Incheon IC	10.3 NM NE of Incheon R 076 NCN/D1 R 277 KIP/D8.2	373319N 1263713E
I	신불 IC Sinbul IC	2.3 NM SE of Incheon R 137 NCN/D3.6	372725N 1262923E
J	조남분기점 Jonam JCT	11.7 NM SSE of Gimpo R 169 KIP/D12	372213N 1265206E
K	서운분기점 Kilo(Seoun JCT)	3.0 NM SW of Gimpo R 231 KIP/D3	373125N 1264506E
N	개화산 Gaehwasan(Hill)	1.5 NM NNE of Gimpo R 049 KIP/D1.6	373505N 1264817E
R	행주대교 Hangjukyo(Bridge)	2.7 NM NNE of Gimpo R 030 KIP/D2.4	373610N 1264849E
S	소래 Sorae	10.0 NM SSW of Gimpo R 201 KIP/D10	372340N 1264439E
T	송산 Songsan(Hill)	5.7 NM E of Incheon R 106 NCN/D6	372853N 1263319E
W	월미도 Wolmido(Island)	10.9 NM SSE of Gimpo R 248 KIP/D10.8 R 108 NCN/D8.2	372810N 1263553E
X	실미도 Silmido(Island)	4.2 NM SW of Incheon R 207 NCN/D5.8	372415N 1262325E
Y	영흥도 Younghungdo(Island)	10.6 NM S of Incheon R 180 NCN/D12.6	371715N 1262800E
Z	시화방조제 Sihwa Breakwater	14.2 NM SE of Incheon R 137 NCN/D15.7	372000N 1264120E

Change : Amended phrase(Jamjindo → Jamjindo).

RKSI AD 2.23 ADDITIONAL INFORMATION

1. Green Area Maintenance within Movement Area
 - a. Duration: March to November
 - b. Type of maintenance :

Mowing the lawn, weeding, watering, and blight and harmful insects prevention.
 - c. Area affected

All green areas within Movement Area.
Maintenance work shall be conducted only when 4 000 m or more of visibility is secured.

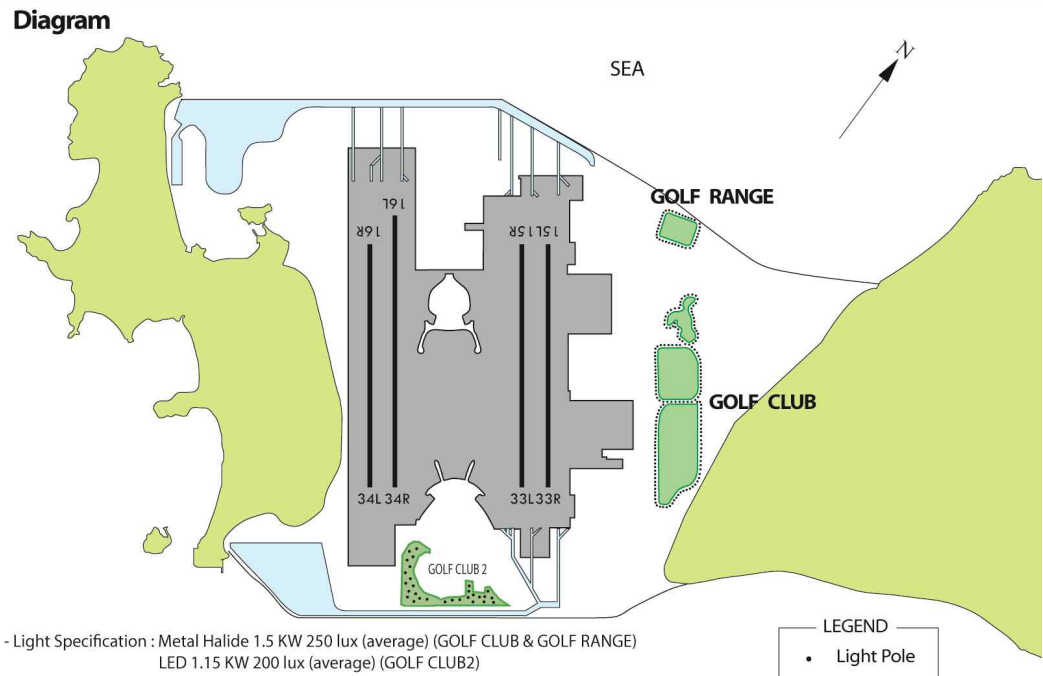
 - 1) Area 1
 - Dimension : Area of 60 m width from runway edge.
 - Working hour : At midnight only when there are few aircraft movements.
 - 2) Area 2
 - Dimension : Other green area (including taxiways) except "Area 1".
 - Working hour : During the day time only.
 - d. Remarks

All working vehicles within the maneuvering area shall be under control of Air Traffic Control, and aircraft in operation shall be under precaution.
2. Bird migration and concentrations in the vicinity of the airport
 - a. Bird migration occurs during spring, fall and winter periods. The greatest degree of activity is observed during the following periods : whole of March ~ end of April(Spring migration), early of October ~ early December(winter migration). Weather conditions may affect bird migration on movements during different periods of the year.
 - b. Spring and Autumn

In this period a large flock of birds, especially shorebirds is resting on the remnant of mudflats at high tide. And at low tide they are moving and scattered to forage their foods. Most of their movement flight is occurred on the ground surface or below about 200 ft.
The population of shorebirds reaches approximately 6 000 ft at one time in spring. Generally the number of birds is more in spring than autumn but on the contrary in the vicinity of airport bird activity is more frequent in autumn.
 - c. Winter

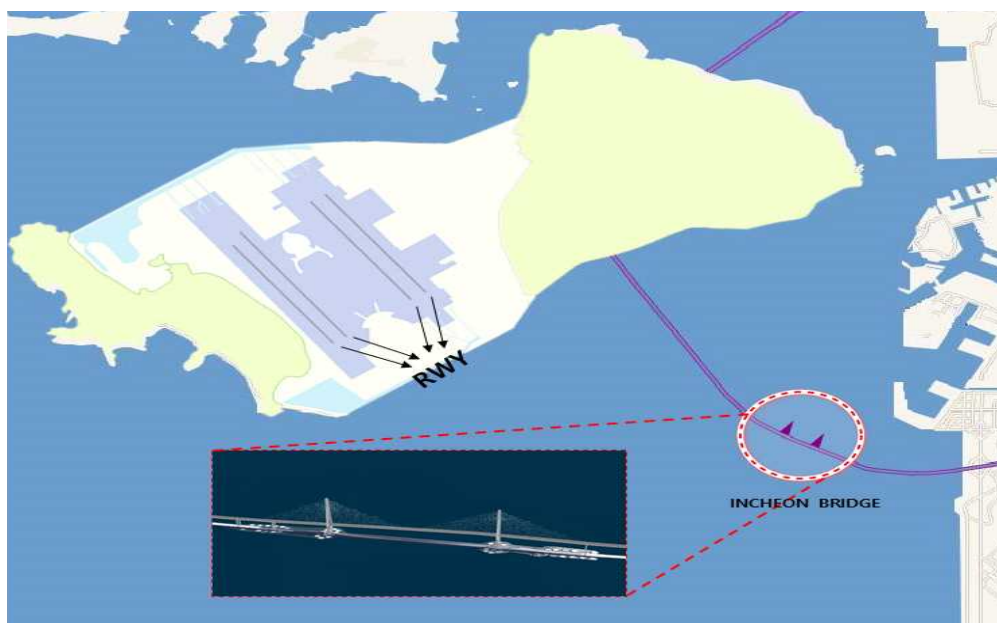
There are two ponds that are located respectively NW & SW of airport at the distance of about 4 km from the runway.
Most of ducks inhabit at these ponds in winter and the flock size of one site is less than 400 individuals. The largest group of birds are Coots and about 1 000. These use this pond as resting site and only a few species feeds in the water. The movement of ducks is not related the tide and they are flying low (200 ft) to sea around the pond.
 - d. In order to reduce the wildlife hazard in the vicinity of runway wildlife control activities are being lasted 24h and include siren, threat of shotgun, visual scares and habitat managements. On the properties of airport farming, garbage treatment facilities are not permitted.
3. ATIS Telephone Service
 - a. Hours of operation : H24
 - b. ARS telephone number : 82-32-743-2676
 - c. Telephone service is reference only. For the flight operation, use ATIS on the FREQ.
 - ARR : 128.4, 230.25 MHz
 - DEP : 128.65, 344.2 MHz
4. Light Pole Operation in the vicinity of the airport
 - a. SKY72 Golf Club and Dream Golf Range (GOLF CLUB & GOLF RANGE)
 - 1) Duration : From April to December
 - 2) Operation time schedule : 1930 ~ 2130 and 1000 ~ 1530 (UTC)
 - b. Orange Dunes YeongJong Golf Club (GOLF CLUB2)
 - 1) Duration : From April to November
 - 2) Operation time schedule : 1000 ~ 1530 (UTC)

c. Diagram



5. Aesthetic Lighting for Incheon Bridge

- Operation time schedule
 - March to May : 0930 ~ 1400 (UTC)
 - June to September : 1000 ~ 1500 (UTC)
 - October to February : 0830 ~ 1400 (UTC)
- Facility : Cable stayed bridge and pylon
- Lamp color(1 KW, 2 KW) : White
- Luminous : 1 KW(40 cd/m²), 2 KW(60~70 cd/m²)
- Diagram



Change : Information of light specification for golf club, item number and Amended phrases(Kw, kW → KW).



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RKSI AD 2.24 CHARTS RELATED TO THE AERODROME

Aerodrome Chart - ICAO	RKSI AD CHART 2-1
Aircraft Parking/Docking Chart - ICAO	RKSI AD CHART 2-3
Aerodrome Ground Movement Chart(DEP) - ICAO	RKSI AD CHART 2-6
Aerodrome Ground Movement Chart(ARR) - ICAO	RKSI AD CHART 2-7
Aerodrome Ground Movement Chart(DEP) - ICAO	RKSI AD CHART 2-8
Aerodrome Ground Movement Chart(ARR) - ICAO	RKSI AD CHART 2-9
Aerodrome Obstacle Chart - ICAO Type A	RKSI AD CHART 2-10
Aerodrome Obstacle Chart - ICAO Type A	RKSI AD CHART 2-11
Aerodrome Obstacle Chart - ICAO Type A	RKSI AD CHART 2-12
Aerodrome Obstacle Chart - ICAO Type A	RKSI AD CHART 2-13
Aerodrome Obstacle Chart - ICAO Type A	RKSI AD CHART 2-14
Aerodrome Obstacle Chart - ICAO Type A	RKSI AD CHART 2-15
Aerodrome Obstacle Chart - ICAO Type A	RKSI AD CHART 2-16
Aerodrome Obstacle Chart - ICAO Type A	RKSI AD CHART 2-17
Aerodrome Obstacle Chart - ICAO Type B	RKSI AD CHART 2-18
Precision Approach Terrain Chart - ICAO - RWY 15R	RKSI AD CHART 2-19
Precision Approach Terrain Chart - ICAO - RWY 33L	RKSI AD CHART 2-20
Precision Approach Terrain Chart - ICAO - RWY 15L	RKSI AD CHART 2-21
Precision Approach Terrain Chart - ICAO - RWY 33R	RKSI AD CHART 2-22
Precision Approach Terrain Chart - ICAO - RWY 16L	RKSI AD CHART 2-23
Precision Approach Terrain Chart - ICAO - RWY 34R	RKSI AD CHART 2-24
Precision Approach Terrain Chart - ICAO - RWY 16R	RKSI AD CHART 2-25
Precision Approach Terrain Chart - ICAO - RWY 34L	RKSI AD CHART 2-26
Area Chart - ICAO (DEP)	RKSI AD CHART 2-27
SID - ICAO - RWY 15L/R - RNAV BINIL 2C, RNAV BOPTA 2C	RKSI AD CHART 2-28
SID - ICAO - RWY 15L/R - RNAV OSPOT 2C, RNAV EGOBA 2C	RKSI AD CHART 2-29
SID - ICAO - RWY 15L/R - SEL 1S, SOT 1S	RKSI AD CHART 2-30
SID - ICAO - RWY 16L/R - RNAV BINIL 2H, RNAV BOPTA 2H	RKSI AD CHART 2-31
SID - ICAO - RWY 16L/R - RNAV OSPOT 2H, RNAV EGOBA 2H	RKSI AD CHART 2-32
SID - ICAO - RWY 15L/R - RADAR 5S / RWY 16L/R - RADAR 3U	RKSI AD CHART 2-33
SID - ICAO - RWY 33L/R - RNAV NOPIK 2A, RNAV BOPTA 2A	RKSI AD CHART 2-34
SID - ICAO - RWY 33L/R - RNAV OSPOT 2A, RNAV EGOBA 2A	RKSI AD CHART 2-35
SID - ICAO - RWY 33L/R - RNAV OSPOT 2E, RNAV EGOBA 2E	RKSI AD CHART 2-36
SID - ICAO - RWY 33L/R - SEL 2A, SOT 1A	RKSI AD CHART 2-37
SID - ICAO - RWY 34L/R - RNAV NOPIK 2Y, RNAV BOPTA 2Y	RKSI AD CHART 2-38
SID - ICAO - RWY 34L/R - RNAV OSPOT 2Y, RNAV EGOBA 2Y	RKSI AD CHART 2-39
SID - ICAO - RWY 33L/R - RADAR 3A / RWY 34L/R - RADAR 3D	RKSI AD CHART 2-40
Area Chart - ICAO (ARR)	RKSI AD CHART 2-41
STAR - ICAO - RWY 15L - GUKDO 1A, KARBU 1A	RKSI AD CHART 2-42
STAR - ICAO - RWY 15L/R, RWY 16L/R - RNAV OLMEN 2C, RNAV GUKDO 2C, RNAV KARBU 2C	RKSI AD CHART 2-43
STAR - ICAO - RWY 15L/R, RWY 16L/R - RNAV REBIT 2H, RNAV OLMEN 2H	RKSI AD CHART 2-44
STAR - ICAO - RWY 15L/R, RWY 16L/R - RNAV GUKDO 2H, RNAV KARBU 2H	RKSI AD CHART 2-45
STAR - ICAO - RWY 33L/R, RWY 34L/R - RNAV BIKSI 2M, RNAV CUN 2M	RKSI AD CHART 2-46
STAR - ICAO - RWY 33L/R, RWY 34L/R - RNAV MAKSA 2M, RNAV GONAV 3M	RKSI AD CHART 2-47
STAR - ICAO - RWY 33L/R, RWY 34L/R - RNAV OLMEN 2E, RNAV GUKDO 2E, RNAV KARBU 2E	RKSI AD CHART 2-48
STAR - ICAO - RWY 33L/R, RWY 34L/R - RNAV REBIT 2A	RKSI AD CHART 2-49

Change : Information of procedure names(1C → 2C, 1H → 2H, 1E → 2E, 1A → 2A, 1Y → 2Y).

ATC Surveillance Minimum Altitude Chart - ICAO	RKSI AD CHART 2-50
Instrument Approach Chart - ICAO - RWY 15L - ILS Z or LOC Z	RKSI AD CHART 2-51
Instrument Approach Chart - ICAO - RWY 15L - ILS Y or LOC Y	RKSI AD CHART 2-52
Instrument Approach Chart - ICAO - RWY 15L - RNP	RKSI AD CHART 2-53
Instrument Approach Chart - ICAO - RWY 15L - VOR	RKSI AD CHART 2-54
Instrument Approach Chart - ICAO - RWY 15R - ILS Z or LOC Z	RKSI AD CHART 2-55
Instrument Approach Chart - ICAO - RWY 15R - ILS Y or LOC Y	RKSI AD CHART 2-56
Instrument Approach Chart - ICAO - RWY 15R - RNP	RKSI AD CHART 2-57
Instrument Approach Chart - ICAO - RWY 16L - ILS or LOC	RKSI AD CHART 2-58
Instrument Approach Chart - ICAO - RWY 16L - RNP	RKSI AD CHART 2-59
Instrument Approach Chart - ICAO - RWY 16R - ILS or LOC	RKSI AD CHART 2-60
Instrument Approach Chart - ICAO - RWY 16R - RNP	RKSI AD CHART 2-61
Instrument Approach Chart - ICAO - RWY 33L - ILS or LOC	RKSI AD CHART 2-62
Instrument Approach Chart - ICAO - RWY 33L - RNP	RKSI AD CHART 2-63
Instrument Approach Chart - ICAO - RWY 33R - ILS or LOC	RKSI AD CHART 2-64
Instrument Approach Chart - ICAO - RWY 33R - RNP	RKSI AD CHART 2-65
Instrument Approach Chart - ICAO - RWY 33R - VOR	RKSI AD CHART 2-66
Instrument Approach Chart - ICAO - RWY 34L - ILS or LOC	RKSI AD CHART 2-67
Instrument Approach Chart - ICAO - RWY 34L - RNP	RKSI AD CHART 2-68
Instrument Approach Chart - ICAO - RWY 34R - ILS or LOC	RKSI AD CHART 2-69
Instrument Approach Chart - ICAO - RWY 34R - RNP	RKSI AD CHART 2-70
Visual Approach Chart - ICAO - RWY15L - HANEE	RKSI AD CHART 2-71
Visual Approach Chart - ICAO - RWY15R - HANEE	RKSI AD CHART 2-72
Visual Approach Chart - ICAO	RKSI AD CHART 2-73
Bird concentrates in the vicinity of airport	RKSI AD CHART 2-74