# ENR 3.3 AREA NAVIGATION ROUTES

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits or (MOCA) ft AMSL or FL / Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **L512**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC**<br>FREQ : 122.25 MHz<br>125.925 MHz<br>122.75 MHz[1)]<br>*1) Common frequency* |
| △ TENAS<br>373820N 1313427E | N/A | 098 / 279 | 52.3 | UNL / FL 270(1 500) Class A, G | ↓ | | Airspace Classification refer to ENR 3.1-1<br>* L512 OPS HR between TENAS and ANDOL<br>- EASTBOUND : H24<br>- WESTBOUND : H24 |
| △ SABET<br>373829N 1324019E | | 093 / 274 | 15.7 | | | ↑ | |
| ▲ ANDOL(FIR BDRY)<br>373958N 1330000E | | | | | | | ** After ANDOL, MEA is FL 290, see AIP JAPAN. |
| INCHEON FIR | | | | | | | *** Extended DME DOC volume service is 220 NM. |
| FUKUOKA FIR | | | | | | | |
| 1. Critical DME : KAE<TENAS/SABET>, KPO<TENAS/SABET><br>2. DME GAP : SABET/ANDOL, GNSS required. | | | | | | | |
| **Y233**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC**<br>FREQ : 122.25 MHz<br>125.925 MHz<br>122.75 MHz[2)]<br>*2) Common frequency* |
| △ BUSKO<br>374033N 1301610E | N/A | 069 / 250 | 30.0 | UNL / FL 200(1 500) Class A, D, G | ↓ | | Airspace Classification refer to ENR 3.1-1 |
| △ SELPA<br>375515N 1304911E | | 070 / 251 | 69.1 | | | | |
| △ ONATA<br>382832N 1320602E | | 071 / 251 | 20.0 | | | ↑ | |
| ▲ KANSU(FIR BDRY)<br>383800N 1322830E | | | | | | | |
| INCHEON FIR | | | | | | | |
| PYONGYANG FIR | | | | | | | |
| 1. Critical DME : KAE<BUSKO/SELPA>, KPO<BUSKO/SELPA>, KAE<SELPA/ONATA>, KPO<SELPA/ONATA><br>2. DME GAP : ONATA/KANSU, GNSS required. | | | | | | | |

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Information of title and index number(ENR 3.2 → 3.3).

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Y253**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Incheon ACC**<br>FREQ : 123.725 MHz<br>124.50 MHz<br>132.20 MHz[1)]<br>*1) Common frequency*<br>Airspace Classification refer to ENR 3.1-1 |
| △ DALSU<br>350731N 1264206E | N/A | 097 / 277 | 5.4 | UNL / 8 000(2 400) Class A, D, G | ↓ | | |
| △ GWANGJU VOR(KWA)<br>350734N 1264844E | | 097 / 278 | 2.6 | UNL / 8 000(2 000) Class A, D, G | | | |
| △ SAMUL<br>350736N 1265154E | | 097 / 278 | 22.1 | UNL / 8 000(5 200) Class A, D, G | | | |
| ▲ TEDAN<br>350744N 1271852E | | 098 / 278 | 13.5 | UNL / 8 000(5 400) Class A, D, G | | | **Incheon ACC**<br>FREQ : 128.175 MHz<br>128.325 MHz<br>132.20 MHz[2)]<br>*2) Common frequency*<br>Airspace Classification refer to ENR 3.1-1 |
| △ ANUBA<br>350746N 1273523E | | 098 / 278 | 44.7 | | | | |
| ▲ SAPDI<br>350737N 1282952E | | 098 / 278 | 1.6 | UNL / 8 000(2 400) Class A, D, G | | | **Daegu ACC**<br>FREQ : 125.375 MHz<br>125.775 MHz<br>124.575 MHz<br>122.75 MHz[3)]<br>*3) Common frequency*<br>Airspace Classification refer to ENR 3.1-1 |
| ▲ SARAM<br>350736N 1283147E | | 098 / 279 | 11.9 | UNL / 8 000(4 000) Class A, D, G | | | |
| △ ANKUS<br>350730N 1284616E | | 099 / 279 | 11.2 | UNL / 8 000(3 500) Class A, D, G | | | |
| △ BUSAN VORTAC(PSN)<br>350721N 1285958E | | | | | ↑ | | |

1. Critical DME : PSN<SAPDI/SARAM>, CJU<SAPDI/SARAM>, PSN<SARAM/ANKUS>, CJU<SARAM/ANKUS>, PSN<ANKUS/PSN>, CJU<ANKUS/PSN>

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL / Airspace classification | Direction of cruising levels: Odd | Direction of cruising levels: Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Y437**<br>**(RNAV2)**<br>**[GNSS,DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC**<br>FREQ : 122.25 MHz<br>125.925 MHz<br>122.75 MHz[1)]<br>*1) Common frequency*<br>Airspace Classification refer to ENR 3.1-1 |
| △ GANGWON VORTAC(KAE)<br>374203N 1284514E | N/A | 100 / 280 | 47.2 | UNL / 8 000(6 400) / Class A, D, G | ↓ | | |
| ▲ NOMEX<br>374112N 1294441E | | 100 / 281 | 25.0 | UNL / 8 000(1 500) / Class A, D, G | | | |
| △ BUSKO<br>374033N 1301610E | | 101 / 281 | 62.2 | | | | |
| △ TENAS<br>373820N 1313427E | | 044 / 224 | 20.0 | UNL / FL 200(1 500) / Class A, D, G | | | |
| △ MALSO<br>375440N 1314904E | | 044 / 225 | 53.3 | | | ↑ | |
| ▲ KANSU(FIR BDRY)<br>383800N 1322830E | | | | | | | |
| INCHEON FIR | | | | | | | |
| PYONGYANG FIR | | | | | | | |

1. Critical DME : KAE<KAE/NOMEX>, KPO<KAE/NOMEX>, KAE<NOMEX/BUSKO>, KPO<NOMEX/BUSKO>, KAE<BUSKO/TENAS>, KPO<BUSKO/TENAS>, KAE<TENAS/MALSO>, KPO<TENAS/MALSO>
2. DME GAP : MALSO/KANSU GNSS required.

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Y571**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Incheon ACC**<br>FREQ : 124.525 MHz<br>132.425 MHz<br>132.20 MHz[4)]<br>*4) Common frequency*<br>Airspace Classification refer to ENR 3.1-1 |
| ▲ SOSDO<br>330012N 1262735E | N/A | 048 / 229 | 17.4 | UNL / 11 000(1 500) Class A, D, G | ↓ | | |
| △ OMKIM<br>331320N 1264114E | | 049 / 229 | 28.4 | UNL / 11 000(2 200) Class A, D, G | | | |
| △ PAPLU<br>333441N 1270337E | | 056 / 236 | 18.2 | UNL / 11 000(1 500) Class A, D, G | | | |
| ▲ AKPON<br>334650N 1271953E | | 056 / 236 | 42.9 | UNL / 11 000(1 800) Class A, D, G | | | **Daegu ACC**<br>FREQ : 128.175 MHz<br>124.575 MHz<br>122.75 MHz[2)]<br>*2) Common frequency*<br>Airspace Classification refer to ENR 3.1-1 |
| ▲ NISAV<br>341519N 1275835E | | 056 / 237 | 34.4 | UNL / 11 000(2 100) Class A, D, G | | | |
| ▲ ANROD<br>343758N 1282952E | | 057 / 237 | 26.6 | UNL / 11 000(2 800) Class A, D, G | | | |
| △ POVEM<br>345523N 1285416E | | 029 / 209 | 12.8 | UNL / 11 000(3 000) Class A, D, G | | | |
| △ BUSAN VORTAC(PSN)<br>350721N 1285958E | | | | | | | |

1. DME GAP : SOSDO/OMKIM, OMKIM/PAPLU, PAPLU/AKPON, AKPON/NISAV GNSS required.

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Y572 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC** FREQ : 128.175 MHz 124.575 MHz 122.75 MHz[2] *2) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| △ BUSAN VORTAC(PSN) 350721N 1285958E | | | | | | | |
| △ OLMUD 350225N 1284916E | | 249 / 069 | 10.1 | UNL / 11 000(3 000) Class A, D, G | | ↓ | |
| ▲ ENGOT 344834N 1282952E | | 237 / 057 | 21.1 | UNL / 11 000(3 200) Class A, D, G | | | |
| ▲ POVOR 341520N 1274400E | | 237 / 056 | 50.4 | UNL / 11 000(2 600) Class A, D, G | | | |
| ▲ UPGOS 335733N 1271953E | | 236 / 056 | 26.8 | UNL / 11 000(2 000) Class A, D, G | | | |
| △ BILUM 334613N 1270439E | N/A | 236 / 056 | 17.0 | UNL / 11 000(1 500) Class A, D, G | | | **Incheon ACC** FREQ : 124.525 MHz 132.425 MHz 132.20 MHz[4] *4) Common frequency* Airspace Classification refer to ENR 3.1-1 ※ The cruising levels from CJU to RUGMA are even levels due to operational reasons. ※ The cruising levels from RUGMA to CJU are odd levels due to operational reasons. |
| △ BEPKO 333910N 1265514E | | 236 / 056 | 10.5 | UNL / 11 000(1 500) Class A, D, G | | | |
| △ JEJU VORTAC(CJU) 332305N 1263727E | | 230 / 050 | 21.9 | UNL / 11 000(5 600) Class A, D, G | | | |
| △ OMKIM 331320N 1264114E | | 169 / 349 | 10.2 | UNL / 11 000(8 700) Class A, D, G | | ↓ | |
| ▲ TOSAN 330012N 1264619E | | 169 / 349 | 13.8 | UNL / 11 000(1 500) Class A, D, G | | | |
| ▲ RUGMA(FIR BDRY) 323012N 1265753E | | 169 / 349 | 31.5 | UNL / 11 000(1 500) Class A, D, G | ↑ | | |
| INCHEON FIR | | | | | | | |
| FUKUOKA FIR | | | | | | | |
| 1. DME GAP : UPGOS/BILUM, BILUM/BEPKO, BEPKO/CJU, CJU/OMKIM, OMKIM/TOSAN, TOSAN/RUGMA GNSS required. | | | | | | | |

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Y579 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC** FREQ : 122.25 MHz 134.375 MHz 120.575 MHz 125.925 MHz 122.75 MHz[1)] *1) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| △ TENAS 373820N 1313427E | N/A | 228 / 047 | 68.1 | UNL / FL 140(1 500) Class A, D, G | ↓ | ↓ | |
| △ AGSUS 364521N 1304044E | | 229 / 049 | 36.2 | | | | |
| ▲ DABIK 361743N 1301143E | | 229 / 048 | 28.1 | | | | |
| ▲ BULGA 355609N 1294924E | | 228 / 048 | 40.2 | UNL / FL 140(2 700) Class A, D, G | | | |
| ▲ BEDOM 352513N 1291754E | | 228 / 047 | 23.1 | UNL / FL 140(3 800) Class A, D, G | ↑ | | |
| △ BUSAN VORTAC(PSN) 350721N 1285958E | | | | | | | |

1. TENAS-PSN CDR1 Operational hour(UTC) - Weekdays : 1400~2200 - SAT: 2200 on the preceding until 2400 on the Saturday - SUN : 0000~2200 - Holiday : 1400 on the preceding until 2200 on the holiday. Rest of Y579-PERM. See ENR 1.1-1.2.

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL / Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Y644 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC**<br>FREQ : 128.70 MHz<br>132.80 MHz<br>122.75 MHz[1)]<br>*1) Common frequency* |
| SANGHAI FIR | | | | | | | |
| INCHEON FIR | | | | | | | |
| ▲ AGAVO(FIR BDRY)<br>371010N 1235953E | | | | | | | |
| △ RILRO<br>371033N 1241442E | N/A | 096/276 | 11.8 | UNL/FL 150(1 500) Class A, D, G | ↓ | | Eastbound (AGAVO-EGOBA)<br>FL 410, FL 390, FL 370, FL 350, FL 330, FL 310, FL 290, FL 270, FL 250, FL 230<br>REF.<br>ENR 3.1-10 for the detailed altitude conversion procedures.<br>Airspace Classification refer to ENR 3.1-1 |
| △ GONAV<br>371048N 1242453E | | 096/276 | 8.1 | | | | |
| △ BODOL<br>371122N 1244954E | | 096/277 | 20.0 | | | | |
| ▲ REBIT<br>371203N 1252913E | | 097/277 | 31.4 | | | | |
| △ BELTU<br>371218N 1254759E | | 097/278 | 15.0 | | | | |
| △ BOGAN<br>371241N 1262812E | | 098/278 | 32.1 | UNL/8 000(2 400) Class A, D, G | | | |
| ▲ MONSI<br>371247N 1265015E | | 098/278 | 17.6 | UNL/8 000(3 200) Class A, D, G | | | |
| △ POLEG<br>371249N 1265935E | | 098/278 | 7.5 | UNL/8 000(2 400) Class A, D, G | | | |
| △ EGOBA<br>372915N 1272246E | | 057/237 | 24.7 | UNL/FL 140(3 300) Class A, D, G | | | |

1. Critical DME : SEL<AGAVO/RILRO>, KUZ<AGAVO/RILRO>, SEL<RILRO/GONAV>, KUZ<RILRO/GONAV>, SEL<MONSI/POLEG>, SOT<MONSI/POLEG>, SEL<POLEG/EGOBA>, SOT<POLEG/EGOBA>

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL / Airspace classification | Direction of cruising levels: Odd | Direction of cruising levels: Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Y655 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC** FREQ : 132.80 MHz 128.70 MHz 122.75 MHz[1] *1) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| △ GONAV 371048N 1242453E | N/A | 188/008 | 12.2 | UNL / FL 140(1 500) Class A, D, G | ↓ | | |
| △ DALPO 365835N 1242453E | | 188/008 | 17.8 | | | | |
| ▲ NONOS 364046N 1242453E | | 188/008 | 70.1 | | | | **Incheon ACC** FREQ : 132.15 MHz 123.55 MHz 132.20 MHz[2] *2) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| ▲ DANPA 353036N 1242453E | | 188/007 | 88.9 | | | | **Incheon ACC** FREQ : 120.725 MHz 128.30 MHz 132.20 MHz[3] *3) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| ▲ PALSA 340131N 1242453E | | 187/007 | 11.0 | | | | **Incheon ACC** FREQ : 124.525 MHz 132.425 MHz 132.20 MHz[4] *4) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| △ TOLIS 335030N 1242453E | | 111/291 | 73.0 | UNL / 9 000(1 500) Class A, D, G | | | |
| ▲ LIMDI 333313N 1254953E | | 111/292 | 29.0 | UNL / 9 000(4 100) Class A, D, G | | | |
| △ REMOS 332605N 1262329E | | 112/292 | 12.1 | UNL / 9 000(8 700) Class A, D, G | | ↑ | |
| △ JEJU VORTAC(CJU) 332305N 1263727E | | | | | | | |
| 1. Critical DME : SEL<GONAV/DALPO>, KUZ<GONAV/DALPO>, SEL<DALPO/NONOS>, KUZ<DALPO/NONOS>, SEL<NONOS/DANPA>, KUZ<NONOS/DANPA>, KWA<LIMDI/REMOS>, CJU<LIMDI/REMOS> | | | | | | | |
| 2. DME GAP : DANPA/PALSA, PALSA/TOLIS, TOLIS/LIMDI, REMOS/CJU GNSS required. | | | | | | | |
| **Y657 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Incheon ACC** FREQ : 123.725 MHz 124.50 MHz 132.20 MHz[5] *5) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| △ GWANGJU VOR(KWA) 350734N 1264844E | N/A | 072/253 | 54.7 | 10 000 / 8 000(7 100) Class D | ↓ | | |
| ▲ IGDOK 353104N 1274907E | | 073/254 | 41.6 | 10 000 / 8 000(4 800) Class D | | ↑ | **Daegu ACC** FREQ : 125.375 MHz 125.775 MHz 124.575 MHz 122.75 MHz[6] *6) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| △ DALSEONG VORTAC(TGU) 354835N 1283527E | | | | | | | |

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL / Airspace classification | Direction of cruising levels: Odd | Direction of cruising levels: Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Y659**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Incheon ACC**<br>FREQ : 126.175 MHz<br>134.375 MHz<br>132.20 MHz[1)]<br>*1) Common frequency* |
| △ GUNSAN VORTAC(KUZ)<br>355437N 1263641E | N/A | 101 / 281 | 8.5 | 10 000 / 7 000(1 700) Class D | ↓ | | Airspace Classification refer to ENR 3.1-1 |
| △ ELPOS<br>355410N 1264707E | | 101 / 281 | 5.5 | | | | |
| △ RINBO<br>355352N 1265349E | | 101 / 282 | 17.8 | 10 000 / 7 000(3 700) Class D | | | |
| △ MELES<br>355251N 1271542E | | 102 / 282 | 17.2 | 10 000 / 7 000(5 000) Class D | | | |
| △ OPEDA<br>355149N 1273652E | | 102 / 282 | 47.7 | 10 000 / 7 000(6 600) Class D | | | **Daegu ACC**<br>FREQ : 125.375 MHz<br>125.775 MHz<br>124.575 MHz<br>122.75 MHz[2)]<br>*2) Common frequency* |
| △ DALSEONG VORTAC(TGU)<br>354835N 1283527E | | 085 / 265 | 24.6 | UNL / 6 000(4 200) Class A, D, G | | | Airspace Classification refer to ENR 3.1-1 |
| ▲ LAPAL<br>355413N 1290452E | | 085 / 265 | 19.7 | UNL / 6 000(3 300) Class A, D, G | | ↑ | |
| △ POHANG VORTAC(KPO)<br>355838N 1292828E | | | | | | | |
| | | | | | | | |
| **Y677**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Incheon ACC**<br>FREQ : 124.525 MHz<br>132.425 MHz<br>132.20 MHz[3)]<br>*3) Common frequency* |
| △ JEJU VORTAC(CJU)<br>332305N 1263727E | N/A | 089 / 269 | 35.9 | UNL / 9 000(6 300) Class A, D, G | ↓ | | Airspace Classification refer to ENR 3.1-1 |
| ▲ TAMNA<br>332815N 1271953E | | 089 / 270 | 49.8 | UNL / 9 000(1 500) Class A, D, G | | | **Incheon ACC**<br>FREQ : 128.175 MHz<br>128.325 MHz<br>132.20 MHz[4)]<br>*4) Common frequency* |
| ▲ SAMDO(FIR BDRY)<br>333503N 1281857E | | | | | | ↑ | |
| INCHEON FIR | | | | | | | Airspace Classification refer to ENR 3.1-1 |
| FUKUOKA FIR | | | | | | | |
| 1. Critical DME : PSN<CJU/TAMNA>, CJU<CJU/TAMNA>, PSN<TAMNA/SAMDO>, CJU<TAMNA/SAMDO> | | | | | | | |

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Y685 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC** FREQ : 132.80 MHz 128.70 MHz 118.925 MHz 120.525 MHz 122.75 MHz[1] *1) Common frequency* |
| △ ANYANG VORTAC(SEL) 372449N 1265542E | | | | | | | |
| △ KALMA 371845N 1270645E | | 133/313 | 10.7 | UNL / 8 000(3 200) Class A, D, G | ↓ | | Only flying westbound from KPO to SEL on Y685 is authorized except ACFT departing from RKTY or RKTI. Aircraft flying eastbound from SEL to KPO at or above 11 000 ft on Y685 shall get PPR 24 hours before from Incheon/Daegu ACC. No PPR is needed at or below 10 000 ft. Airspace Classification refer to ENR 3.1-1 |
| △ KAKSO 370745N 1272637E | | 133/313 | 19.3 | UNL / 8 000(2 900) Class A, D, G | | | |
| ▲ GUKDO 370111N 1273823E | | 133/313 | 11.5 | UNL / 8 000(3 600) Class A, D, G | | | |
| △ ENSAL 365554N 1274747E | | 133/314 | 9.2 | UNL / 8 000(3 700) Class A, D, G | | | **Daegu ACC** FREQ : 120.575 MHz 119.375 MHz 134.375 MHz 122.75 MHz[2] *2) Common frequency* Only flying westbound from KPO to SEL on Y685 is authorized except ACFT departing from RKTY or RKTI. Aircraft flying eastbound from SEL to KPO at or above 11 000 ft on Y685 shall get PPR 24 hours before from Incheon/Daegu ACC. No PPR is needed at or below 10 000 ft. Airspace Classification refer to ENR 3.1-1 |
| △ BASEM 365037N 1275710E | N/A | 134/314 | 9.2 | UNL / 8 000(4 000) Class A, D, G | | | |
| ▲ BIGOB 364325N 1280952E | | 134/314 | 12.5 | UNL / 8 000(5 000) Class A, D, G | | | |
| △ YECHEON VOR(CUN) 363755N 1281931E | | 134/314 | 9.5 | UNL / 8 000(4 900) Class A, D, G | | | |
| △ ELAPI 362014N 1285051E | | 133/314 | 30.8 | UNL / 8 000(3 800) Class A, D, G | | | |
| △ POHANG VORTAC(KPO) 355838N 1292828E | | 134/314 | 37.3 | UNL / 8 000(4 700) Class A, D, G | | | |
| ▲ BULGA 355609N 1294924E | | 107/287 | 17.2 | UNL / 8 000(2 100) Class A, D, G | | | |
| ▲ SAPRA(FIR BDRY) 354926N 1304325E | | 107/287 | 44.4 | UNL / 8 000(1 500) Class A, D, G | | ↑ | |
| INCHEON FIR | | | | | | | |
| FUKUOKA FIR | | | | | | | |

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL / Airspace classification | Direction of cruising levels: Odd | Direction of cruising levels: Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Y697 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC** FREQ : 128.70 MHz 132.80 MHz 122.75 MHz[1] *1) Common frequency* |
| SANGHAI FIR | | | | | | | |
| INCHEON FIR | | | | | | | |
| ▲ AGAVO(FIR BDRY) 371010N 1235953E | | | | | | | Westbound(SEL-AGAVO) FL 400, FL 380, FL 360, FL 340, FL 320, FL 300, FL 280, FL 260, FL 240, FL 220, FL 200 REF. ENR 3.1-9 for the detailed altitude conversion procedures. Only flying westbound from SEL to AGAVO on Y697 is authorized. |
| ▲ OLBIM 371411N 1240751E | N/A | 066 / 246 | 7.5 | UNL / FL 150(1 500) Class A, D, G | | | |
| △ NOGON 372250N 1242505E | | 066 / 246 | 16.2 | | | | |
| △ ANSIM 372323N 1245009E | | 097 / 277 | 20.0 | | | | |
| ▲ BINIL 372349N 1251359E | | 097 / 277 | 19.0 | | | | |
| ▲ NOPIK 372412N 1253905E | | 097 / 277 | 20.0 | | | | |
| △ GOGET 372442N 1263036E | | 097 / 278 | 41.0 | UNL / 8 000(2 100) Class A, D, G | | | |
| △ ANYANG VORTAC(SEL) 372449N 1265542E | | 098 / 278 | 20.0 | UNL / 7 500(3 400) Class A, D, G | ↓ | ↑ | |
| △ EGOBA 372915N 1272246E | | 087 / 267 | 22.0 | | | | **Daegu ACC** FREQ : 132.80 MHz 118.925 MHz 122.75 MHz[2] *2) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| ▲ KARBU 373159N 1273952E | | 087 / 267 | 13.9 | UNL / 7 500(5 100) Class A, D, G | | | |
| ▲ TORUS 373625N 1280807E | | 087 / 268 | 22.9 | UNL / 7 500(4 500) Class A, D, G | | | **Daegu ACC** FREQ : 134.175 MHz 123.65 MHz 122.75 MHz[3] *3) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| ▲ BIKSI 374032N 1283504E | | 088 / 268 | 21.8 | UNL / 7 500(7 500) Class A, D, G | | | |
| △ GANGWON VORTAC(KAE) 374203N 1284514E | | 088 / 268 | 8.2 | UNL / 7 500(7 100) Class A, D, G | | | |
| ▲ PILIT 372631N 1291731E | | 130 / 310 | 30.0 | UNL / 8 000(7 100) Class A, D, G | | | **Daegu ACC** FREQ : 134.175 MHz 123.65 MHz 122.75 MHz[4] *4) Common frequency* Only flying westbound from LANAT to KAE on G597 shall get 24HR PPR from Daegu ACC. Airspace Classification refer to ENR 3.1-1 |
| ▲ NIMUS 371210N 1294656E | | 130 / 310 | 27.5 | UNL / 9 000(1 500) Class A, D, G | | | |
| △ AGSUS 364521N 1304044E | | 130 / 310 | 50.8 | | | | |
| ▲ LANAT(FIR BDRY) 362224N 1312542E | | 130 / 311 | 42.9 | | | ↑ | |
| INCHEON FIR | | | | | | | |
| FUKUOKA FIR | | | | | | | |

1. Critical DME : SEL<AGAVO/OLBIM>, KUZ<AGAVO/OLBIM>, SEL<OLBIM/NOGON>, KUZ<OLBIM/NOGON>, SEL<NOGON/ANSIM>, KUZ<NOGON/ANSIM>, SEL<KARBU/TORUS>, KAE<KARBU/TORUS>, SEL<TORUS/BIKSI>, KAE<TORUS/BIKSI>, SEL<BIKSI/KAE>, KAE<BIKSI/KAE>, KAE<KAE/PILIT>, KPO<KAE/PILIT>, KAE<PILIT/NIMUS>, KPO<PILIT/NIMUS>, KAE<NIMUS/AGSUS>, KPO<NIMUS/AGSUS>, KAE<AGSUS/LANAT>, KPO<AGSUS/LANAT>

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL / Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 7 | | 10 |
| **Y711 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC** FREQ : 132.80 MHz 128.70 MHz 122.75 MHz[1] *1) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| ▲ MONSI 371247N 1265015E | N/A | 190 / 010 | 29.4 | UNL / FL 140(2 900) Class A, D, G | | | |
| ▲ BULTI 364322N 1264930E | | 187 / 007 | 10.0 | | | | **Incheon ACC** FREQ : 132.150 MHz 123.55 MHz 132.20 MHz[2] *2) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| ▲ MEKIL 363322N 1264953E | | 187 / 006 | 10.2 | UNL / FL 140(3 200) Class A, D, G | | | |
| △ GONAX 362311N 1265016E | | 193 / 013 | 14.1 | | | | |
| △ BEDES 360905N 1264844E | | 193 / 013 | 14.9 | UNL / FL 140(2 200) Class A, D, G | | | |
| △ ELPOS 355410N 1264707E | | 193 / 013 | 24.0 | UNL / FL 140(2 800) Class A, D, G | | | |
| ▲ MANGI 353011N 1264432E | | 193 / 013 | 22.7 | UNL / FL 140(3 800) Class A, D, G | | | **Incheon ACC** FREQ : 120.725 MHz 128.30 MHz 132.20 MHz[3] *3) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| △ DALSU 350731N 1264206E | | 193 / 013 | 42.4 | UNL / FL 140(4 000) Class A, D, G | | | |
| △ NULDI 342514N 1263739E | | 193 / 013 | 10.0 | UNL / FL 140(3 300) Class A, D, G | | | |
| ▲ DOTOL 341515N 1263637E | | 193 / 012 | 24.8 | UNL / FL 140(2 700) Class A, D, G | | | **Incheon ACC** FREQ : 124.525 MHz 132.425 MHz 132.20 MHz[4] *4) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| △ KIDOS 335028N 1263402E | | 207 / 027 | 25.9 | UNL / FL 140(6 000) Class A, D, G | | | |
| △ REMOS 332605N 1262329E | | 207 / 027 | 27.4 | UNL / FL 140(6 300) Class A, D, G | | | |
| ▲ PANSI 330014N 1261225E | | 207 / 027 | 33.4 | UNL / FL 140(1 500) Class A, D, G | | | |
| △ DOMKO 322848N 1255859E | | 207 / 027 | 30.1 | | | | **Incheon ACC** FREQ : (At or above FL 335) 133.425 MHz 134.15 MHz 132.20 MHz[5] (below FL 335) 125.725 MHz 132.825 MHz 128.375 MHz 132.20 MHz[5] *5) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| △ PONIK 320021N 1254659E | | 207 / 026 | 18.2 | | | | |
| △ IKEDO 314314N 1253948E | | 207 / 026 | 12.0 | | | | |
| ▲ KANKA 313155N 1253504E | | 207 / 026 | 67.0 | | | | |
| △ BONSO 302840N 1250851E | | 206 / 026 | 30.2 | | | | |
| ▲ MUGUS(FIR BDRY) 300006N 1245712E | | | | | | | |
| INCHEON FIR | | | | | | | |
| FUKUOKA FIR | | | | | | | |

1. Critical DME : KWA<DOTOL/KIDOS>, CJU<DOTOL/KIDOS>
2. DME GAP : KIDOS/REMOS, REMOS/PANSI, PANSI/DOMKO, DOMKO/PONIK, PONIK/KANKA, KANKA/BONSO, BONSO/MUGUS GNSS required.

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL / Airspace classification | Direction of cruising levels: Odd | Direction of cruising levels: Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 7 | | 10 |
| **Y722**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Incheon ACC**<br>FREQ : 126.175 MHz<br>134.375 MHz<br>132.20 MHz[1)]<br>*1) Common frequency*<br>Airspace Classification refer to ENR 3.1-1 |
| △ SONGTAN VORTAC(SOT)<br>370540N 1270154E | N/A | 194/014 | 21.5 | UNL / FL 140(3 100) / Class A, D, G | | | |
| ▲ OLMEN<br>364413N 1265928E | | 187/007 | 10.0 | UNL / FL 140(3 600) / Class A, D, G | | | |
| △ GUNKU<br>363414N 1265949E | | 187/007 | 11.0 | UNL / FL 140(3 300) / Class A, D, G | | | |
| ▲ PEBRI<br>362311N 1270013E | | 193/013 | 29.5 | UNL / FL 140(2 300) / Class A, D, G | | | |
| △ ATASO<br>355344N 1265657E | | 193/013 | 23.6 | UNL / FL 140(3 800) / Class A, D, G | | | |
| ▲ MAKSA<br>353011N 1265422E | | 193/013 | 22.7 | UNL / FL 140(4 000) / Class A, D, G | | | **Incheon ACC**<br>FREQ : 123.725 MHz<br>124.50 MHz<br>132.20 MHz[2)]<br>*2) Common frequency*<br>Airspace Classification refer to ENR 3.1-1 |
| △ SAMUL<br>350736N 1265154E | | 193/013 | 52.5 | UNL / FL 140(3 400) / Class A, D, G | | | |
| ▲ KAMIT<br>341514N 1264618E | | 193/013 | 22.4 | UNL / FL 140(2 100) / Class A, D, G | | | **Incheon ACC**<br>FREQ : 124.525 MHz<br>132.425 MHz<br>132.20 MHz[3)]<br>*3) Common frequency*<br>Airspace Classification refer to ENR 3.1-1 |
| △ GUKSU<br>335251N 1264357E | | 193/012 | 19.6 | UNL / FL 140(1 700) / Class A, D, G | | | |
| △ LOSNI<br>333315N 1264153E | | 207/027 | 10.8 | UNL / FL 140(7 600) / Class A, D, G | | | |
| △ JEJU VORTAC(CJU)<br>332305N 1263727E | | 207/027 | 24.3 | UNL / FL 140(8 700) / Class A, D, G | | | |
| ▲ SOSDO<br>330012N 1262735E | | 207/027 | 29.5 | UNL / FL 140(1 500) / Class A, D, G | | | |
| △ SAMLO<br>323223N 1261536E | | 207/027 | 30.2 | | | | **Incheon ACC**<br>FREQ : (At or above FL 335)<br>133.425 MHz<br>134.15 MHz<br>132.20 MHz[4)]<br>(below FL 335)<br>125.725 MHz<br>132.825 MHz<br>128.375 MHz<br>132.20 MHz[4)]<br>*4) Common frequency*<br>Airspace Classification refer to ENR 3.1-1 |
| △ NIRAT<br>320354N 1260329E | | 207/027 | 18.1 | | | | |
| △ ELGEP<br>314653N 1255617E | | 207/027 | 12.1 | | | | |
| ▲ TESIM<br>313526N 1255128E | | 207/026 | 100.9 | | ↑ | | |
| ▲ ATOTI(FIR BDRY)<br>300013N 1251154E | | | | | | | |
| INCHEON FIR | | | | | | | |
| SANGHAI FIR | | | | | | | |

1. Critical DME : KWA<KAMIT/GUKSU>, CJU<KAMIT/GUKSU>
2. DME GAP : GUKSU/LOSNI, LOSNI/CJU, CJU/SOSDO, SOSDO/SAMLO, SAMLO/NIRAT, NIRAT/TESIM, TESIM/ATOTI, GNSS required.

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL Airspace classification | Direction of cruising levels Odd | Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Y744**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC**<br><br>FREQ : 134.175 MHz<br>120.575 MHz<br>123.65 MHz<br>119.375 MHz<br>122.75 MHz[1)]<br>*1) Common frequency*<br><br>1. 11 000 ft to FL 240, at or above FL 280 will be blocked.<br><br>2. At or above 11 000 ft, required 15 days PPR from Air Traffic Management Office.<br><br>3. Airspace Classification refer to ENR 3.1-1 |
| ▲ PILIT<br>372631N 1291731E | N/A | 183 / 003 | 19.3 | UNL / 9 000(4 900) Class A, D, G | | ↓ | |
| ▲ NOBUT<br>370715N 1291957E | | 183 / 003 | 47.2 | UNL / 9 000(5 600) Class A, D, G | | | |
| ▲ LOSTO<br>362016N 1292548E | | 183 / 003 | 21.7 | UNL / 9 000(2 100) Class A, D, G | | | |
| △ POHANG VORTAC(KPO)<br>355838N 1292828E | | 213 / 033 | 37.2 | UNL / 9 000(4 400) Class A, D, G | | | |
| ▲ APARU<br>352442N 1290932E | | 213 / 032 | 19.0 | UNL / 9 000(4 400) Class A, D, G | ↑ | | |
| △ BUSAN VORTAC(PSN)<br>350721N 1285958E | | | | | | | |
| | | | | | | | |
| **Y781**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC**<br><br>FREQ : 125.375 MHz<br>125.775 MHz<br>124.575 MHz<br>122.75 MHz[2)]<br>*2) Common frequency*<br><br>Airspace Classification refer to ENR 3.1-1 |
| △ DALSEONG VORTAC(TGU)<br>354835N 1283527E | N/A | 192 / 012 | 19.8 | UNL / 7 000(4 900) Class A, D, G | ↓ | | |
| ▲ MASTA<br>352847N 1283340E | | 162 / 342 | 23.6 | UNL / 7 000(4 000) Class A, D, G | | | |
| △ ANKUS<br>350730N 1284616E | | 162 / 342 | 7.7 | UNL / 7 000(3 500) Class A, D, G | | | |
| △ OMOTU<br>350033N 1285022E | | 156 / 336 | 27.3 | UNL / 7 000(2 800) Class A, D, G | | | |
| ▲ BESNA(FIR BDRY)<br>343718N 1290751E | | | | | | | |
| INCHEON FIR | | | | | | | |
| FUKUOKA FIR | | | | | | | |

1. Critical DME : PSN<OMOTU/BESNA>, CJU<OMOTU/BESNA>
2. DME GAP : ANKUS/OMOTU, GNSS required.

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL / Airspace classification | Direction of cruising levels: Odd | Direction of cruising levels: Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Y782**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC**<br>FREQ : 128.70 MHz<br>120.525 MHz<br>122.75 MHz[1)]<br>*1) Common frequency*<br>Airspace Classification refer to ENR 3.1-1 |
| △ ANYANG VORTAC(SEL)<br>372449N 1265542E | N/A | 174 / 354 | 12.4 | UNL / 4 500(3 000) / Class A, D, G | ↓ | | |
| △ POLEG<br>371249N 1265935E | | 174 / 354 | 7.4 | UNL / 4 500(2 000) / Class A, D, G | | | |
| △ SONGTAN VORTAC(SOT)<br>370540N 1270154E | | 144 / 324 | 21.6 | UNL / 8 000(3 300) / Class A, D, G | | | |
| ▲ OSPOT<br>365018N 1272055E | | 144 / 324 | 10.4 | | | | **Daegu ACC**<br>FREQ : 125.375 MHz<br>125.775 MHz<br>124.575 MHz<br>122.75 MHz[2)]<br>*2) Common frequency*<br>Airspace Classification refer to ENR 3.1-1 |
| ▲ VASLI<br>364252N 1273003E | | 144 / 324 | 21.9 | UNL / 8 000(4 200) / Class A, D, G | | | |
| ▲ MAKDU<br>362712N 1274909E | | 144 / 324 | 14.6 | | | | |
| ▲ BITUX<br>361645N 1280148E | | 144 / 324 | 39.2 | UNL / 10 000(4 500) / Class A, D, G | | | |
| △ DALSEONG VORTAC(TGU)<br>354835N 1283527E | | 162 / 342 | 20.4 | UNL / 8 000(4 400) / Class A, D, G | | | |
| ▲ KALOD<br>353012N 1284626E | | 162 / 342 | 25.4 | UNL / 5 000(3 600) / Class A, D, G | | | |
| △ BUSAN VORTAC(PSN)<br>350721N 1285958E | | 162 / 342 | 26.6 | UNL / 4 000(3 000) / Class A, D, G | | ↑ | |
| ▲ APELA(FIR BDRY)<br>344323N 1291400E | | | | | | | |
| INCHEON FIR | | | | | | | |
| FUKUOKA FIR | | | | | | | |
| 1. Critical DME : SEL<SEL/POLEG>, SOT<SEL/POLEG>, SEL<POLEG/SOT>, SOT<POLEG/SOT> | | | | | | | |

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL / Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Z50 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC** FREQ : 128.70 MHz 134.175 MHz 122.75 MHz[1] *1) Common frequency* |
| △ EGOBA 372915N 1272246E | N/A | 224 / 044 | 28.8 | UNL / FL 140(3 300) Class A, D, G | | ↓ | Airspace Classification refer to ENR 3.1-1 |
| △ SONGTAN VORTAC(SOT) 370540N 1270154E | | 213 / 032 | 24.4 | UNL / FL 140(2 900) Class A, D, G | ↑ | | |
| ▲ BULTI 364322N 1264930E | | | | | | | |
| **Z51 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Incheon ACC** FREQ : 132.15 MHz 123.55 MHz 132.20 MHz[2] *2) Common frequency* |
| ▲ BOPTA 364406N 1263658E | N/A | 173 / 353 | 21.6 | UNL / FL 150(3 900) Class A, D, G | | ↓ | Airspace Classification refer to ENR 3.1-1 |
| △ MOXID 362311N 1264359E | | 173 / 353 | 14.6 | UNL / FL 150(3 600) Class A, D, G | | | |
| △ BEDES 360905N 1264844E | | | | | | | |
| **Z52 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Incheon ACC** FREQ : 126.175 MHz 134.375 MHz 132.20 MHz[3] *3) Common frequency* |
| ▲ OLMEN 364413N 1265928E | N/A | 051 / 231 | 16.4 | UNL / 8 000(3 400) Class A, D, G | ↓ | | Airspace Classification refer to ENR 3.1-1 |
| △ POSAN 365615N 1271316E | | 051 / 232 | 15.7 | UNL / 8 000(3 000) Class A, D, G | | ↑ | |
| △ KAKSO 370745N 1272637E | | | | | | | |
| **Z53 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC** FREQ : 125.375 MHz 120.575 MHz 125.775 MHz 119.375 MHz 122.75 MHz[4] *4) Common frequency* |
| ▲ BITUX 361645N 1280148E | N/A | 002 / 182 | 17.0 | UNL / FL 160(4 000) Class A, D, G | | ↓ | Airspace Classification refer to ENR 3.1-1 |
| △ TEBEX 363341N 1275929E | | 002 / 182 | 17.0 | UNL / FL 160(4 600) Class A, D, G | ↑ | | |
| △ BASEM 365037N 1275710E | | | | | | | |

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL Airspace classification | Direction of cruising levels Odd | Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Z54 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC** FREQ : 128.70 MHz 132.80 MHz 120.525 MHz 122.75 MHz 1) *1) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| △ SONGTAN VORTAC(SOT) 370540N 1270154E | N/A | 316 / 136 | 11.7 | UNL / 8 000(2 400) Class A, D, G | | ↓ | |
| ▲ MONSI 371247N 1265015E | | 316 / 136 | 19.7 | UNL / 8 000(2 300) Class A, D, G | ↑ | | |
| △ GOGET 372442N 1263036E | | | | | | | |
| **Z55 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC** FREQ : 128.70 MHz 132.80 MHz 122.75 MHz 2) *2) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| SANGHAI FIR | | | | | | | |
| INCHEON FIR | | | | | | | |
| ▲ AGAVO(FIR BDRY) 371010N 1235953E | N/A | 154 / 334 | 35.5 | UNL / FL 140(1 500) Class A, D, G | | ↑ | |
| ▲ NONOS 364046N 1242453E | | | | | | | |
| 1. Critical DME : SEL<AGAVO/NONOS>, KUZ<AGAVO/NONOS> | | | | | | | |
| **Z56 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC** FREQ : 122.25 MHz 125.925 MHz 122.75 MHz 3) *3) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| PYONGYANG FIR | | | | | | | |
| INCHEON FIR | | | | | | | |
| ▲ KANSU(FIR BDRY) 383800N 1322830E | N/A | 180 / 360 | 40.2 | UNL / FL 200(1 500) Class A, G | ↓ | | |
| △ PALDU 375813N 1323625E | | 180 / 360 | 19.9 | | | | |
| △ SABET 373829N 1324019E | | 180 / 360 | 19.9 | | | ↑ | |
| ▲ IGRAS(FIR BDRY) 371846N 1324411E | | | | | | | |
| INCHEON FIR | | | | | | | |
| FUKUOKA FIR | | | | | | | |
| 1. Critical DME : KAE<PALDU/SABET>, KPO<PALDU/SABET>, KAE<SABET/IGRAS>, KPO<SABET/IGRAS> 2. DME GAP : KANSU/PALDU, GNSS required. | | | | | | | |

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Z57**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC**<br>FREQ : 128.70 MHz<br>132.80 MHz<br>122.75 MHz[1)]<br>*1) Common frequency* |
| △ RILRO<br>371033N 1241442E | N/A | 154 / 334 | 14.5 | UNL / FL 150(1 500) Class A, D, G | ↓ | | Airspace Classification refer to ENR 3.1-1 |
| △ DALPO<br>365835N 1242453E | | | | | | | |
| 1. Critical DME : SEL<RILRO/DALPO>, KUZ<RILRO/DALPO> | | | | | | | |
| **Z63**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC**<br>FREQ : 134.175 MHz<br>123.65 MHz<br>122.75 MHz[2)]<br>*2) Common frequency* |
| ▲ PILIT<br>372631N 1291731E | N/A | 064 / 245 | 26.1 | UNL / FL 250(1 500) Class A, G | ↓ | ↑ | Airspace Classification refer to ENR 3.1-1 |
| ▲ NOMEX<br>374112N 1294441E | | | | | | | |
| 1. Critical DME : KAE<PILIT/NOMEX>, KPO<PILIT/NOMEX> | | | | | | | |
| **Z81**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Incheon ACC**<br>FREQ : 124.525 MHz<br>132.425 MHz<br>132.20 MHz [3)]<br>*3) Common frequency* |
| △ KIDOS<br>335028N 1263402E | N/A | 182 / 001 | 27.5 | UNL / FL 140(8 700) Class A, D, G | | ↓ | Airspace Classification refer to ENR 3.1-1 |
| △ JEJU VORTAC(CJU)<br>332305N 1263727E | | | | | | | |
| | | | | | | | |
| **Z82**<br>**(RNAV2)**<br>**[GNSS, DME/DME/IRU]** | | | | | | | **Incheon ACC**<br>FREQ : 124.525 MHz<br>132.425 MHz<br>132.20 MHz [4)]<br>*4) Common frequency* |
| △ JEJU VORTAC(CJU)<br>332305N 1263727E | N/A | 230 / 050 | 31.0 | UNL / FL 140(8 700) Class A, D, G | | ↓ | Airspace Classification refer to ENR 3.1-1 |
| ▲ PANSI<br>330014N 1261225E | | | | | | | |
| 1. DME GAP : CJU/PANSI, GNSS required. | | | | | | | |

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Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | 7 |
| **Z83 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | |
| △ DALSEONG VORTAC(TGU) 354835N 1283527E | N/A | 192 / 012 | 19.8 | UNL / 5 000(4 900) Class A, D, G | | ↓ | **Daegu ACC** FREQ : 125.375 MHz 125.775 MHz 124.575 MHz 122.75 MHz 1) *1) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| ▲ MASTA 352847N 1283340E | | 192 / 012 | 21.2 | UNL / 5 000(3 800) Class A, D, G | | | |
| ▲ SARAM 350736N 1283147E | | 193 / 013 | 19.1 | UNL / 5 000(3 000) Class A, D, G | | | |
| ▲ ENGOT 344834N 1282952E | | 188 / 008 | 10.6 | UNL / 5 000(2 300) Class A, D, G | ↑ | | |
| ▲ ANROD 343758N 1282952E | | | | | | | |
| 1. Critical DME : PSN<TGU/MASTA>, TGU<TGU/MASTA>, PSN<MASTA/SARAM>, TGU<MASTA/SARAM>, PSN<SARAM/ENGOT>, TGU<SARAM/ENGOT><br>2. DME GAP : ENGOT/ANROD, GNSS required. | | | | | | | |
| **Z84 (RNAV2) [GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC** FREQ : 125.375 MHz 125.775 MHz 124.575 MHz 122.75 MHz2) *2) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| △ BUSAN VORTAC(PSN) 350721N 1285958E | N/A | 091 / 272 | 43.8 | UNL / 8 000(3 100) Class A, D, G | ↓ | ↑ | |
| ▲ KALEK(FIR BDRY) 351232N 1295305E | | | | | | | |
| INCHEON FIR | | | | | | | |
| FUKUOKA FIR | | | | | | | |
| | | | | | | | |
| **Z85 (RNAV2) [GNSS, DME/DME/IRU]** | | | | | | | **Incheon ACC** FREQ : 124.525 MHz 128.175 MHz 132.20 MHz3) *3) Common frequency* Airspace Classification refer to ENR 3.1-1 |
| △ BILUM 334613N 1270439E | N/A | 192 / 012 | 11.5 | UNL / FL 170(1 500) Class A, D, G | ↓ | | |
| △ PAPLU 333441N 1270337E | | 192 / 011 | 64.5 | | | ↑ | |
| ▲ RUGMA(FIR BDRY) 323012N 1265753E | | | | | | | |
| INCHEON FIR | | | | | | | |
| FUKUOKA FIR | | | | | | | |
| 1. DME GAP : BILUM/PAPLU, PAPLU/RUGMA, GNSS required. | | | | | | | |

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL / Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 7 | | 10 |
| **Z86**<br>**(RNAV2)**<br>**[GNSS, DME/DME/IRU]** | | | | | | | **Incheon ACC**<br>FREQ : 124.525 MHz<br>132.20 MHz[1)]<br>*1) Common frequency* |
| △ BONSO<br>302840N 1250851E | N/A | 181 / 001 | 28.5 | UNL / FL 140(1 500) / Class A, D, G | | ↓ | |
| ▲ ATOTI(FIR BDRY)<br>300013N 1251154E | | | | | | | Airspace Classification refer to ENR 3.1-1 |
| INCHEON FIR | | | | | | | |
| FUKUOKA FIR | | | | | | | |
| 1. DME GAP : BONSO/ATOTI, GNSS required. | | | | | | | |
| **Z91**<br>**(RNAV2)**<br>**[GNSS, DME/DME, DME/DME/IRU]** | | | | | | | **Daegu ACC**<br>FREQ : 125.375 MHz<br>125.775 MHz<br>124.575 MHz<br>122.75 MHz[2)]<br>*2) Common frequency* |
| △ BUSAN VORTAC(PSN)<br>350721N 1285958E | N/A | 149 / 329 | 25.6 | UNL / 10 000(3 000) / Class A, D, G | ↓ | | |
| ▲ INVOK(FIR BDRY)<br>344719N 1291923E | | | | | | ↑ | Airspace Classification refer to ENR 3.1-1 |
| INCHEON FIR | | | | | | | |
| FUKUOKA FIR | | | | | | | |

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

Change : Page control.

| Route designator (Navigation specification) Name of significant points Coordinates [Navigation Specification limitation] | Waypoint IDENT of VOR/DME BRG & DIST ELEV DME Antenna | MAG TRACK ° | Geodetic DIST NM | Upper limits / Lower limits (MOCA) ft AMSL or FL Airspace classification | Direction of cruising levels Odd | Direction of cruising levels Even | Remarks Controlling unit Frequency |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 7 | | 10 |
| **Y590 (RNAV2) [GNSS, DME/DME/IRU]** | | | | | | | **Incheon ACC**<br><br>FREQ : (At or above FL 335)<br>133.425 MHz<br>134.15 MHz<br>132.20 MHz[1)]<br>(below FL 335)<br>125.725 MHz<br>132.825 MHz<br>128.375 MHz<br>132.20 MHz[1)]<br><br>*1) Common frequency*<br><br>Airspace Classification refer to ENR 3.1-1 |
| FUKUOKA FIR | | | | | | | |
| INCHEON FIR | | | | | | | |
| ▲ BEDAR(FIR BDRY)<br>315401N 1262910E | N/A | 263 / 082 | 28.9 | UNL / FL 240(1 500) Class A, G | ↑ | | |
| △ ELGEP<br>314653N 1255617E | | 262 / 082 | 14.5 | | | | |
| △ IKEDO<br>314314N 1253948E | | 288 / 108 | 34.5 | | | | |
| ▲ SADLI<br>314948N 1250000E | | | | | | | |
| 1. DME GAP : BEDAR/SADLI, GNSS required.<br>2. Flight Level Allocation Scheme (FLAS)<br>- For the eastbound over BEDAR : FL 250, FL 290, FL 310, FL 390 | | | | | | | |

* RNAV2 represents a navigation accuracy of ± 2 NM on a 95% containment basis.

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