

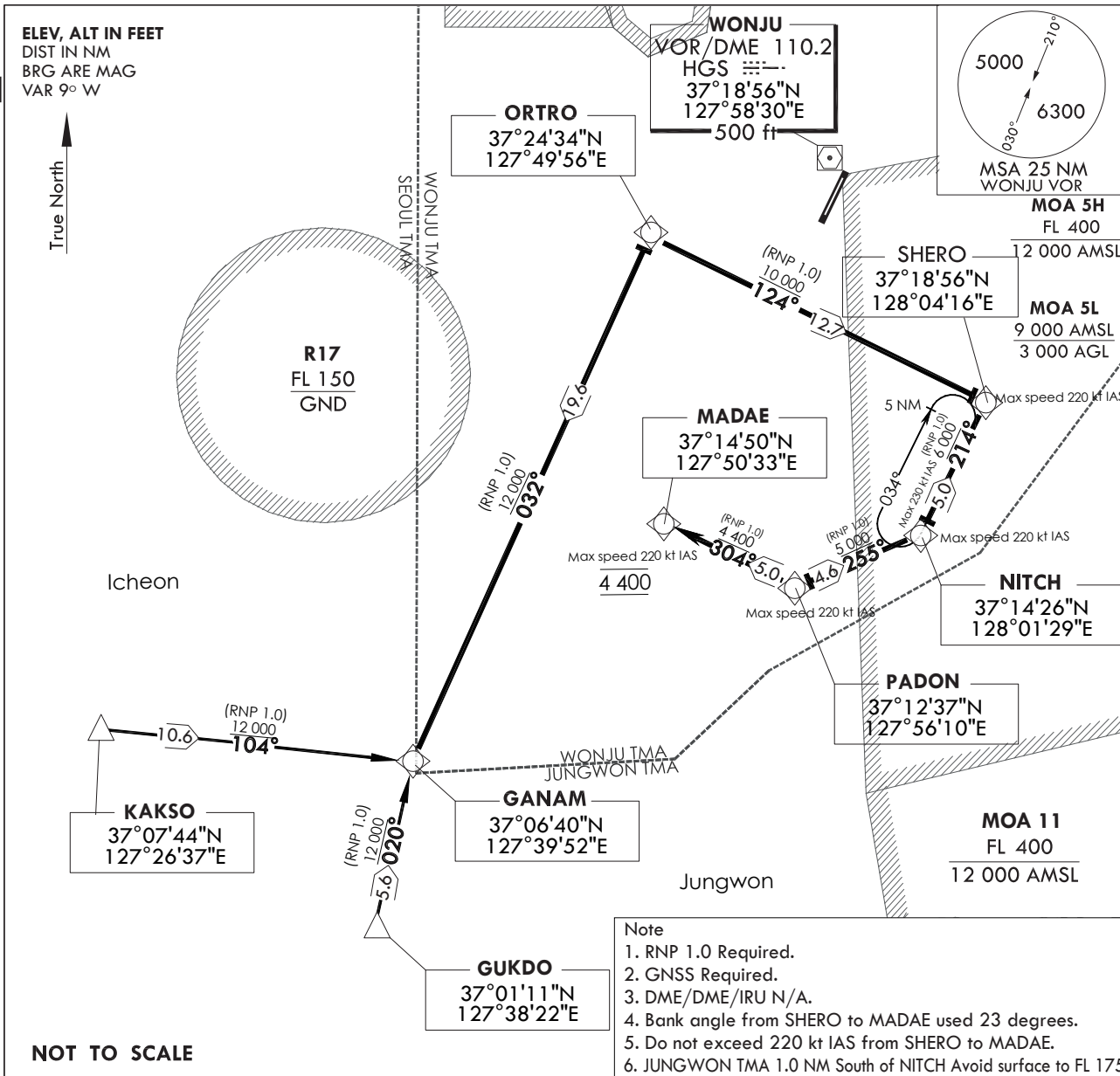
**STANDARD ARRIVAL CHART  
INSTRUMENT(STAR)**

TRANSITION ALT 14 000  
TRANSITION LVL FL 140

|           |       |         |       |
|-----------|-------|---------|-------|
| WONJU APP | 130.2 | 234.4   | 255.0 |
| WONJU TWR | 126.2 | 118.325 |       |
|           | 236.6 | 265.5   |       |

**WONJU/wonju (RKNW)  
RWY 03  
RNAV(GNSS) GANAM 1**

Note : Arrival under U.S TERPS.



NOT TO SCALE

Note  
1. RNP 1.0 Required.  
2. GNSS Required.  
3. DME/DME/IRU N/A.  
4. Bank angle from SHERO to MADAE used 23 degrees.  
5. Do not exceed 220 kt IAS from SHERO to MADAE.  
6. JUNGWON TMA 1.0 NM South of NITCH Avoid surface to FL 175

**ARRIVAL ROUTE DESCRIPTION**

**KAKSO TRANSITION**

From KAKSO on track 104° to cross GANAM at or above 12 000 ft thence....

**GUKDO TRANSITION**

From GUKDO on track 020° to cross GANAM at or above 12 000 ft thence....

....From GANAM on track 032° to cross ORTRO at or above 12 000 ft, then on track 124° to cross SHERO at or above 10 000 ft, then on track 214° to cross NITCH at or above 6 000 ft, then on track 255° to cross PADON at or above 5 000 ft, then on track 304° to cross MADAE at 4 400 ft. Expect RNAV approach.

Change : Information of MAG VAR(8° W → 9° W).

WONJU/wonju (RKNW)  
RWY 03  
RNAV(GNSS) GANAM 1

AERONAUTICAL DATA TABULATION

Standard Instrument Departure Procedure Coding Tables

RNAV(GNSS) GANAM 1

| Serial Number | Path Descriptor | Waypoint Identifier | Fly -Over | Course/Track<br>° M(° T) | Distance (NM) | Turn Direction | Altitude (ft) | Speed (kt) | Coordinates                  | VPA /TCH | Navigation specification | Remarks |
|---------------|-----------------|---------------------|-----------|--------------------------|---------------|----------------|---------------|------------|------------------------------|----------|--------------------------|---------|
| 001           | TF              | ORTRO               | -         | 032(024.1)               | 19.6          | -              | +12 000       | -          | 37°24'34.20"N 127°49'55.77"E | -        | RNPAPCH                  | -       |
| 002           | TF              | SHERO               | -         | 124(116.2)               | 12.7          | -              | +10 000       | -220       | 37°18'55.50"N 128°04'15.64"E | -        | RNPAPCH                  |         |
| 003           | TF              | NITCH               | -         | 214(206.3)               | 5.0           | -              | +6 000        | -220       | 37°14'26.31"N 128°01'28.98"E | -        | RNPAPCH                  |         |
| 004           | TF              | PADON               | -         | 255(246.9)               | 4.6           | -              | +5 000        | -220       | 37°12'37.42"N 127°56'09.75"E | -        | RNPAPCH                  | IAF     |
| 005           | TF              | MADAE               | -         | 304(296.3)               | 5.0           | -              | 4 400         | -220       | 37°14'50.45"N 127°50'32.84"E | -        | RNPAPCH                  | IF      |

KAKSO Transition

| Serial Number | Path Descriptor | Waypoint Identifier | Fly -Over | Course/Track<br>° M(° T) | Distance (NM) | Turn Direction | Altitude (ft) | Speed (kt) | Coordinates                  | VPA /TCH | Navigation specification | Remarks |
|---------------|-----------------|---------------------|-----------|--------------------------|---------------|----------------|---------------|------------|------------------------------|----------|--------------------------|---------|
| 001           | TF              | KAKSO               | -         | -                        | -             | -              | -             | -          | 37°07'44.60"N 127°26'37.40"E | -        | RNPAPCH                  | -       |
| 002           | TF              | GANAM               | -         | 104(095.7)               | 10.6          | -              | +12 000       | -          | 37°06'40.05"N 127°39'52.09"E | -        | RNPAPCH                  | -       |

GUKDO Transition

| Serial Number | Path Descriptor | Waypoint Identifier | Fly -Over | Course/Track<br>° M(° T) | Distance (NM) | Turn Direction | Altitude (ft) | Speed (kt) | Coordinates                  | VPA /TCH | Navigation specification | Remarks |
|---------------|-----------------|---------------------|-----------|--------------------------|---------------|----------------|---------------|------------|------------------------------|----------|--------------------------|---------|
| 001           | TF              | GUKDO               | -         | -                        | -             | -              | -             | -          | 37°01'10.93"N 127°38'22.86"E | -        | RNPAPCH                  | -       |
| 002           | TF              | GANAM               | -         | 020°(012.3°)             | 5.6           | -              | +12 000       | -          | 37°06'40.05"N 127°39'52.09"E | -        | RNPAPCH                  | -       |

Holding Data

| Serial Number | Path Descriptor | Waypoint Identifier | Fly -Over | Course/Track<br>° M(° T) | Distance (NM) | Turn Direction | Altitude (ft) | Speed (kt) | Coordinates                  | Remarks   |
|---------------|-----------------|---------------------|-----------|--------------------------|---------------|----------------|---------------|------------|------------------------------|---|
| 001           | TF              | NITCH               | -         | 214(206.3)               | 5.0           | -              | -             | -230       | 37°14'26.31"N 128°01'28.98"E | Holding at NITCH NE Right Turn 214° Inbound 5 NM Leg. |

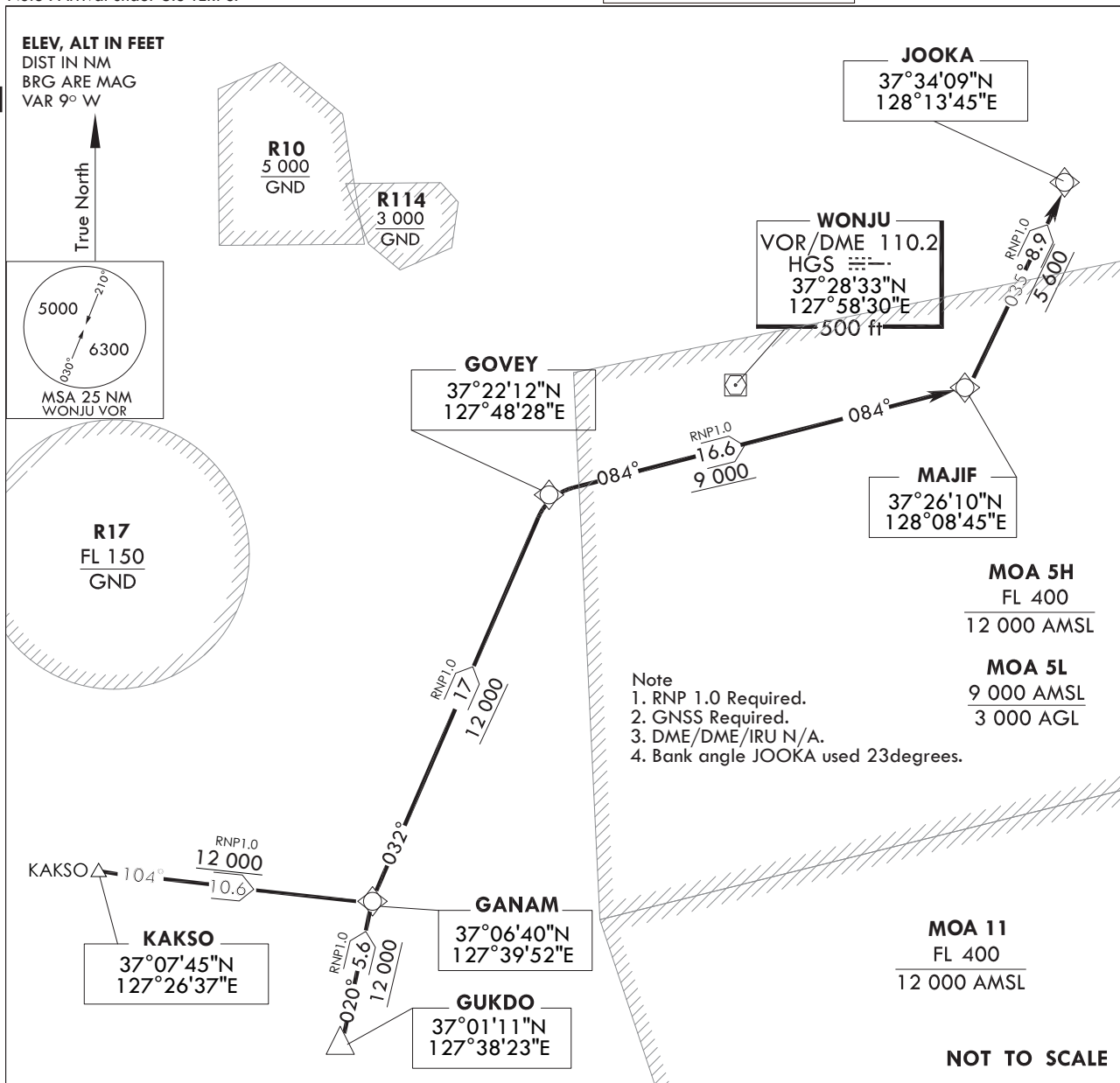
**STANDARD ARRIVAL CHART  
INSTRUMENT(STAR)**

TRANSITION ALT 14 000  
TRANSITION LVL FL 140

WONJU APP 130.2  
234.4 255.0  
WONJU TWR 126.2 118.325  
236.6 265.5

WONJU/wonju (RKNW)  
RWY 21  
RNAV(GNSS) GANAM 2

Note : Arrival under U.S TERPS.



**ARRIVAL ROUTE DESCRIPTION**

**KAKSO TRANSITION**

From KAKSO on track 104° to cross GANAM at or above 12 000 ft thence....

**GUKDO TRANSITION**

From GUKDO on track 020° to cross GANAM at or above 12 000 ft thence....

....From GANAM on track 032° to cross GOVEY at or above 12 000 ft,  
then on track 084° to cross MAJIF at or above 9 000 ft, then on track  
035° to cross JOOKA at 5 600 ft. Expect RNAV approach.

Change : Information of MAG VAR(8° W → 9° W).

WONJU/wonju (RKNW)  
RWY 03  
RNAV(GNSS) GANAM 2

AERONAUTICAL DATA TABULATION

Standard Instrument Departure Procedure Coding Tables

**RNAV(GNSS) GANAM 2**

| Serial Number | Path Descriptor | Waypoint Identifier | Fly -Over | Course/Track<br>° M(° T) | Distance (NM) | Turn Direction | Altitude (ft) | Speed (kt) | Coordinates                  | VPA /TCH | Navigation specification | Remarks |
|---------------|-----------------|---------------------|-----------|--------------------------|---------------|----------------|---------------|------------|------------------------------|----------|--------------------------|---------|
| 001           | TF              | GOVEY               | -         | 032(023.8)               | 17.0          | -              | +12 000       | -          | 37°22'12.18"N 127°48'28.24"E | -        | RNPAPCH                  | -       |
| 002           | TF              | MAJIF               | -         | 084(076.1)               | 16.6          | -              | +9 000        | -          | 37°26'09.80"N 128°08'45.31"E | -        | RNPAPCH                  | -       |
| 003           | TF              | JOOKA               | -         | 035(026.5)               | 8.9           | -              | 5 600         | -          | 37°34'08.84"N 128°13'45.27"E | -        | RNPAPCH                  | -       |

**KAKSO Transition**

| Serial Number | Path Descriptor | Waypoint Identifier | Fly -Over | Course/Track<br>° M(° T) | Distance (NM) | Turn Direction | Altitude (ft) | Speed (kt) | Coordinates                  | VPA /TCH | Navigation specification | Remarks |
|---------------|-----------------|---------------------|-----------|--------------------------|---------------|----------------|---------------|------------|------------------------------|----------|--------------------------|---------|
| 001           | TF              | KAKSO               | -         | -                        | -             | -              | -             | -          | 37°07'44.60"N 127°26'37.40"E | -        | RNPAPCH                  | -       |
| 002           | TF              | GANAM               | -         | 104(095.7)               | 10.6          | -              | +12 000       | -          | 37°06'40.05"N 127°39'52.09"E | -        | RNPAPCH                  | -       |

**GUKDO Transition**

| Serial Number | Path Descriptor | Waypoint Identifier | Fly -Over | Course/Track<br>° M(° T) | Distance (NM) | Turn Direction | Altitude (ft) | Speed (kt) | Coordinates                  | VPA /TCH | Navigation specification | Remarks |
|---------------|-----------------|---------------------|-----------|--------------------------|---------------|----------------|---------------|------------|------------------------------|----------|--------------------------|---------|
| 001           | TF              | GUKDO               | -         | -                        | -             | -              | -             | -          | 37°01'10.93"N 127°38'22.86"E | -        | RNPAPCH                  | -       |
| 002           | TF              | GANAM               | -         | 020°(012.3°)             | 5.6           | -              | +12 000       | -          | 37°06'40.05"N 127°39'52.09"E | -        | RNPAPCH                  | -       |