



*International Civil Aviation Organization*

**SECOND MEETING OF SPECTRUM REVIEW WORKING GROUP (SRWG/2)**

Bangkok, Thailand 12 – 14 May 2015

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**Agenda Item 5: Recommendations for improvement of VHF frequency planning**

**THE MAINTENANCE OF FREQUENCY DATABASE IN THE FREQUENCY FINDER**

(Presented by Japan)

**SUMMARY**

JCAB had described needs to manage software and database, such as Spectrum Manager, ICAO Global Database, and Frequency Finder. JCAB has introduced some concerns about Frequency database of Frequency Finder.

**ACTION**

The meeting is invited to:

- a) note this informations
- b) confirm allocation lists of each States ; and
- c) consider to manage each Frequency lists in ICAO

## **1. Introduction**

1.1 JCAB had not been able to join the first F2F(face to face) meeting, but JCAB had submitted the IP01.

According to IP01 at the 1st meeting, JCAB had described needs to manage software and database, such as Spectrum Manager, ICAO Global Database, and Frequency Finder.

### 1.2 Current Status of Database

JCAB reports the current status in Japan.  
Please see the Attachment A

Attachment A is a part of each frequency lists. There are three block in frequency list. The left block is the current Japanese allocation, the center block is issued state letter (SL allocation) by APAC office, and the right block is FF's Frequency allocation.

As you understand by seeing it, those three allocation lists are different.

## **2. Discussion**

### 2.1 The simulation using Frequency Finder

This time, the simulation of Japan was not executed. I guess if it were simulated by using current database, the results of simulation will be the wrong results. And, I guess that it may bring the wrong strategic planning.

### 2.2 The necessity of management of the database

On the simulation, the database is required exactness or consistency, because it is to be applied as simulation parameters. In the future, SRWG should consider the managements to manage software and database.

## **3. Action by the meeting**

### 3.1 Management to manage the software and database

- Each states and administrators should confirm that the consistency between each database
- Clarify that the rule should be established, when, who, where, and how does do it in ICAO
- On the established rule to manage them, it will be required the scheme or framework to operate it.

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Yellow: Append  
 Blue: Replace  
 Gray: Remove

## Current allocation

27th Edition -December 2013

| Location     | Service | Frequency MHz | CAT | Status | Coordinates<br>Latitude Longitude | Remark       |
|--------------|---------|---------------|-----|--------|-----------------------------------|--------------|
| 1            | 2       | 3             | 4   | 5      | 6                                 | 7            |
| 1 AGUNI      |         |               |     |        |                                   |              |
| 2            | FIS     | 118.000       | NAT | OP     | 26°36'00"N 127°14'00"E            | RAG_NAHA     |
| 3 AKENO      |         |               |     |        |                                   |              |
| 4            | TWR     | 126.200       | NAT | OP     | 34°32'00"N 136°40'00"E            |              |
| 5            | APP     | 120.100       | NAT | OP     | 34°32'00"N 136°40'00"E            |              |
| 6            | APP-SR  | 134.100       | NAT | OP     | 34°32'00"N 136°40'00"E            |              |
| 7            | APP-SR  | 122.000       | NAT | OP     | 34°32'00"N 136°40'00"E            |              |
| 8 AKITA      |         |               |     |        |                                   |              |
| 9            | TWR     | 118.600       | NAT | OP     | 39°37'00"N 140°13'00"E            |              |
| 10           | TWR     | 126.200       | NAT | OP     | 39°37'00"N 140°13'00"E            |              |
| 11 AMAKUSA   |         |               |     |        |                                   |              |
| 12           | FIS     | 130.775       | NAT | OP     | 32°29'00"N 130°09'00"E            |              |
| 13           | FIS     | 119.000       | NAT | OP     | 32°29'00"N 130°09'00"E            | RAG_KUMAMOTO |
| 14           | FIS     | 126.500       | NAT | OP     | 32°29'00"N 130°09'00"E            | RAG_KUMAMOTO |
| 15 AMAMI     |         |               |     |        |                                   |              |
| 16           | FIS     | 118.150       | NAT | OP     | 28°26'00"N 129°43'00"E            |              |
| 17           | FIS     | 126.200       | NAT | OP     | 28°26'00"N 129°43'00"E            |              |
| 18 AOMORI    |         |               |     |        |                                   |              |
| 19           | TWR     | 118.300       | NAT | OP     | 40°44'00"N 140°41'00"E            |              |
| 20           | TWR     | 126.200       | NAT | OP     | 40°44'00"N 140°41'00"E            |              |
| 21 ASAHIKAWA |         |               |     |        |                                   |              |
| 22           | TWR     | 118.550       | NAT | OP     | 43°40'00"N 142°27'00"E            |              |
| 23           | TWR     | 126.200       | NAT | OP     | 43°40'00"N 142°27'00"E            |              |
| 24 ASHIYA    |         |               |     |        |                                   |              |
| 25           | TWR     | 123.100       | NAT | OP     | 33°53'00"N 130°39'00"E            |              |
| 26           | TWR     | 126.200       | NAT | OP     | 33°53'00"N 130°39'00"E            |              |
| 27           | APP-SR  | 125.300       | NAT | OP     | 33°53'00"N 130°39'00"E            |              |
| 28           | APP-SR  | 134.100       | NAT | OP     | 33°53'00"N 130°39'00"E            |              |
| 29 ATSUGI    |         |               |     |        |                                   |              |

ICAOのListと相違している  
 内容を赤字  
 セルの色はICAB提出時の  
 まま

緑色全体が空白になって  
 いるものは追加され  
 なくなっていると思われる

## AP-006/15(State letter) Frequencylist3

ASIA/PAC Frequency List 3\_2013  
 K-U列は04freqlist03\_2013.pdfより抽出したものである。

| Location  | Service | Frequency MHz | CAT | Status | Coordinates<br>Latitude Longitude | Remark       |
|-----------|---------|---------------|-----|--------|-----------------------------------|--------------|
| AGUNI     | TWR     | 123.100       | NAT | OP     | 26°36'00"N 127°14'00"E            | FI 30-Dec-13 |
|           | TWR     | 126.200       | NAT | OP     | 26°36'00"N 127°14'00"E            | FI 30-Dec-13 |
| AKENO     | APP     | 120.100       | NAT | OP     | 34°32'00"N 136°40'00"E            |              |
|           | TWR     | 126.200       | NAT | OP     | 34°32'00"N 136°40'00"E            |              |
|           | APP-SR  | 122.000       | NAT | OP     | 34°32'00"N 136°40'00"E            | FI           |
|           | APP-SR  | 134.100       | NAT | OP     | 34°32'00"N 136°40'00"E            |              |
| AKITA     | TWR     | 118.600       | NAT | OP     | 39°37'00"N 140°13'00"E            |              |
|           | TWR     | 126.200       | NAT | OP     | 39°37'00"N 140°13'00"E            |              |
| AMAMI     | FIS     | 118.150       | NAT | OP     | 28°26'00"N 129°43'00"E            |              |
|           | FIS     | 126.200       | NAT | OP     | 28°26'00"N 129°43'00"E            |              |
| AOMORI    | FIS     | 118.300       | NAT | OP     | 40°44'00"N 140°41'00"E            |              |
|           | FIS     | 126.200       | NAT | OP     | 40°44'00"N 140°41'00"E            |              |
| ASAHIKAWA | TWR     | 118.550       | NAT | OP     | 43°40'00"N 142°27'00"E            |              |
|           | TWR     | 126.200       | NAT | OP     | 43°40'00"N 142°27'00"E            |              |
| ASHIYA    | TWR     | 123.100       | NAT | OP     | 33°53'00"N 130°39'00"E            |              |
|           | TWR     | 126.200       | NAT | OP     | 33°53'00"N 130°39'00"E            |              |
|           | APP-SR  | 125.300       | NAT | OP     | 33°53'00"N 130°39'00"E            |              |
|           | APP-SR  | 134.100       | NAT | OP     | 33°53'00"N 130°39'00"E            |              |
| ATSUGI    |         |               |     |        |                                   |              |

緑色のセルはICAB提出  
 の内容と相違している

## FF Database

GOLD DB

| Location          | Service | Frequency MHz | CAT   | Status  | Coordinates<br>Latitude Longitude | Remark                                   |
|-------------------|---------|---------------|-------|---------|-----------------------------------|--|
| E 76012 AGUNI     | TWR     | 123.100       | TWR   | 25/40   | 26D35'00" N 127D14'00" E          | NAT FI 30Dec13 30/12/2013 PU             |
| E 76011 AGUNI     | TWR     | 126.200       | TWR   | 25/40   | 26D35'00" N 127D14'00" E          | NAT FI 30Dec13 30/12/2013 PU             |
| E 71447 AKENO     | APP-U   | 120.100       | APP-U | 150/450 | 34D32'00" N 136D40'00" E          | NAT 26/12/2013 PU                        |
| E 75866 AKENO     | APP-U   | 122.000       | APP-U | 150/450 | 34D32'00" N 136D40'00" E          | NAT FI: Surveillance radar 26/12/2013 PU |
| E 71444 AKENO     | TWR     | 125.500       | TWR   | 25/40   | 34D32'00" N 136D41'00" E          | NAT Direction finding 26/12/2013 PU      |
| E 71445 AKENO     | TWR     | 126.200       | TWR   | 25/40   | 34D32'00" N 136D40'00" E          | NAT 26/12/2013 PU                        |
| E 71446 AKENO     | APP-U   | 134.100       | APP-U | 150/450 | 34D32'00" N 136D40'00" E          | NAT Surveillance radar 26/12/2013 PU     |
| E 71448 AKITA     | TWR     | 118.600       | TWR   | 25/40   | 39D37'00" N 140D13'00" E          | NAT TWR 26/12/2013 PU                    |
| E 71449 AKITA     | TWR     | 126.200       | TWR   | 25/40   | 39D37'00" N 140D13'00" E          | NAT 26/12/2013 PU                        |
| E 71451 AMAMI     | FIR-U   | 118.150       | FIR-U | 260/450 | 28D26'00" N 129D43'00" E          | NAT 26/12/2013 PU                        |
| E 71450 AMAMI     | FIR-U   | 126.200       | FIR-U | 260/450 | 28D26'00" N 129D43'00" E          | NAT 26/12/2013 PU                        |
| E 71452 AOMORI    | FIR-U   | 118.300       | FIR-U | 260/450 | 40D44'00" N 140D41'00" E          | NAT 26/12/2013 PU                        |
| E 71453 AOMORI    | FIR-U   | 126.200       | FIR-U | 260/450 | 40D44'00" N 140D41'00" E          | NAT 26/12/2013 PU                        |
| E 71455 ASAHIKAWA | TWR     | 118.550       | TWR   | 25/40   | 43D40'00" N 142D27'00" E          | NAT 26/12/2013 PU                        |
| E 71454 ASAHIKAWA | TWR     | 126.200       | TWR   | 25/40   | 43D40'00" N 142D27'00" E          | NAT 26/12/2013 PU                        |
| E 71458 ASHIYA    | TWR     | 123.100       | TWR   | 25/40   | 33D53'00" N 130D39'00" E          | NAT 01/01/1999 Expert 21:02:03           |
| E 71457 ASHIYA    | APP-U   | 125.300       | APP-U | 150/450 | 33D53'00" N 130D39'00" E          | NAT Surveillance radar 26/12/2013 PU     |
| E 71459 ASHIYA    | TWR     | 126.200       | TWR   | 25/40   | 33D53'00" N 130D39'00" E          | NAT 01/01/1999 Expert 21:02:03           |
| E 71456 ASHIYA    | APP-U   | 134.100       | APP-U | 150/450 | 33D53'00" N 130D39'00" E          | NAT Surveillance radar 26/12/2013 PU     |

|    |        |         |     |    |             |              |
|----|--------|---------|-----|----|-------------|--------------|
| 30 | APP-SR | 125.300 | NAT | OP | 35°27'00" N | 139°27'00" E |
| 31 | APP-SR | 123.100 | NAT | OP | 35°27'00" N | 139°27'00" E |
| 32 | APP-SR | 128.700 | NAT | OP | 35°27'00" N | 139°27'00" E |
| 33 | APP-SR | 134.100 | NAT | OP | 35°27'00" N | 139°27'00" E |
| 34 | TWR    | 126.200 | NAT | OP | 35°27'00" N | 139°27'00" E |
| 35 | TWR    | 123.100 | NAT | OP | 35°27'00" N | 139°27'00" E |

|         |         |         |     |    |             |              |
|---------|---------|---------|-----|----|-------------|--------------|
| CHITOSE |         |         |     |    |             |              |
| 37      | APP-SR  | 120.100 | NAT | OP | 42°48'00" N | 141°40'00" E |
| 38 g    | APP-SR  | 124.700 | NAT | OP | 42°48'00" N | 141°40'00" E |
| 39 g    | APP-L   | 127.700 | NAT | OP | 42°48'00" N | 141°40'00" E |
| 40 g    | TWR     | 118.200 | NAT | OP | 42°48'00" N | 141°40'00" E |
| 41 g    | TWR     | 126.200 | NAT | OP | 42°48'00" N | 141°40'00" E |
| 42 g    | TWR     | 123.100 | NAT | OP | 42°48'00" N | 141°40'00" E |
| 43 g    | NS      | 121.700 | NAT | OP | 42°48'00" N | 141°40'00" E |
| 44 g    | IS      | 121.900 | NAT | OP | 42°48'00" N | 141°40'00" E |
| 45 g    | APP-PAR | 119.100 | NAT | OP | 42°48'00" N | 141°40'00" E |
| 46 g    | APP-PAR | 119.500 | NAT | OP | 42°48'00" N | 141°40'00" E |
| 47 g    | APP-PAR | 124.000 | NAT | OP | 42°48'00" N | 141°40'00" E |
| 48 g    | APP-PAR | 125.300 | NAT | OP | 42°48'00" N | 141°40'00" E |
| 49 g    | APP-PAR | 131.400 | NAT | OP | 42°48'00" N | 141°40'00" E |

|       |    |         |     |    |             |              |
|-------|----|---------|-----|----|-------------|--------------|
| CHOFU |    |         |     |    |             |              |
| 51    | NS | 130.800 | NAT | OP | 35°40'00" N | 139°32'00" E |

|                    |        |         |      |    |             |                       |
|--------------------|--------|---------|------|----|-------------|-----------------------|
| CHUBU CENTREA INTL |        |         |      |    |             |                       |
| 53 g               | APP-SR | 121.050 | ICAO | OP | 34°51'00" N | 136°49'00" E          |
| 54                 | APP-SR | 444-474 | ICAO | OP | 34°51'00" N | 136°49'00" E          |
| 55 g               | APP-SR | 125.550 | ICAO | OP | 34°51'00" N | 136°49'00" E          |
| 56 g               | APP-SR | 120.000 | ICAO | OP | 34°51'00" N | 136°49'00" E          |
| 57                 | APP-SR | 119.250 | ICAO | OP | 34°51'00" N | 136°49'00" E          |
| 58                 | APP-SR | 424-474 | ICAO | OP | 34°51'00" N | 136°49'00" E          |
| 59 g               | TWR    | 118.850 | ICAO | OP | 34°51'00" N | 136°49'00" E          |
| 60 g               | TWR    | 126.200 | ICAO | OP | 34°51'00" N | 136°49'00" E          |
| 61 g               | NS     | 121.800 | ICAO | OP | 34°51'00" N | 136°49'00" E          |
| 62 g               | IS     | 121.850 | NAT  | OP | 34°51'00" N | 136°49'00" E          |
| 63 g               | ATIS   | 127.075 | ICAO | OP | 34°52'00" N | 136°49'00" E          |
| 64 g               | NS     | 135.050 | ICAO | OP | 36°24'00" N | 136°25'00" E KOMATSU  |
| 65 g               | NS     | 135.500 | ICAO | OP | 34°52'00" N | 137°13'00" E MIKAWA   |
| 66 g               | AFIS   | 126.600 | NAT  | OP | 34°42'00" N | 137°07'00" E KOWA     |
| 381                | AFIS   | 135.050 | NAT  | OP | 35°23'00" N | 136°16'00" E NAGAHAMA |
| 597                | AFIS   | 135.500 | NAT  | OP | 34°38'00" N | 135°40'00" E SHINGO   |

67 FUKUE

|        |         |     |    |         |          |
|--------|---------|-----|----|---------|----------|
| TWR    | 126.200 | NAT | OP | 35°2' N | 139°2' E |
| APP-SR | 123.100 | NAT | OP | 35°2' N | 139°2' E |
| APP-SR | 125.300 | NAT | OP | 35°2' N | 139°2' E |
| APP-SR | 128.700 | NAT | OP | 35°2' N | 139°2' E |
| APP-SR | 134.100 | NAT | OP | 35°2' N | 139°2' E |

|         |         |     |    |         |          |    |           |
|---------|---------|-----|----|---------|----------|----|-----------|
| CHITOSE |         |     |    |         |          |    |           |
| SMC     | 121.700 | NAT | OP | 42°4' N | 141°4' E | FI | 27-Dec-13 |
| APP-L   | 127.700 | NAT | OP | 42°4' N | 141°4' E | FI | 26-Dec-13 |
| TWR     | 118.200 | NAT | OP | 42°4' N | 141°4' E | FI | 26-Dec-13 |
| TWR     | 123.100 | NAT | OP | 42°4' N | 141°4' E | FI | 26-Dec-13 |
| TWR     | 126.200 | NAT | OP | 42°4' N | 141°4' E | FI | 26-Dec-13 |
| APP-SR  | 121.100 | NAT | OP | 42°4' N | 141°4' E | FI | 26-Dec-13 |
| APP-SR  | 124.700 | NAT | OP | 42°4' N | 141°4' E | FI | 26-Dec-13 |
| CD      | 121.900 | NAT | OP | 42°4' N | 141°4' E | FI | 27-Dec-13 |

|       |         |     |    |         |          |    |  |
|-------|---------|-----|----|---------|----------|----|--|
| CHOFU |         |     |    |         |          |    |  |
| FIS   | 130.800 | NAT | OP | 35°4' N | 139°3' E | FI |  |

|            |         |      |    |         |          |    |           |
|------------|---------|------|----|---------|----------|----|-----------|
| CHUBU INTL |         |      |    |         |          |    |           |
| SMC        | 121.800 | NAT  | OP | 34°5' N | 136°4' E |    | 30-Dec-13 |
| TWR        | 118.850 | NAT  | OP | 34°5' N | 136°4' E | FI | 30-Dec-13 |
| TWR        | 126.200 | NAT  | OP | 34°5' N | 136°4' E | FI | 30-Dec-13 |
| APP-SR     | 120.000 | NAT  | OP | 34°5' N | 136°4' E | FI | 30-Dec-13 |
| APP-SR     | 121.050 | NAT  | OP | 34°5' N | 136°4' E |    | 30-Dec-13 |
| APP-SR     | 125.550 | NAT  | OP | 34°5' N | 136°4' E | FI | 30-Dec-13 |
| FIS        | 135.050 | ICAO | OP | 36°2' N | 136°2' E | FI | 30-Dec-13 |
| FIS        | 135.500 | NAT  | OP | 34°5' N | 137°1' E | FI | 3Mikawa   |
| ATIS       | 127.075 | NAT  | OP | 34°5' N | 136°4' E | FI | 30-Dec-13 |
| AFIS       | 126.600 | NAT  | OP | 34°4' N | 137°5' E | FI | KOWA      |
| CD         | 121.850 | NAT  | OP | 34°5' N | 136°4' E | FI | 30-Dec-13 |

|       |         |     |    |         |          |  |  |
|-------|---------|-----|----|---------|----------|--|--|
| ERABU |         |     |    |         |          |  |  |
| FIS   | 122.700 | NAT | OP | 27°2' N | 128°4' E |  |  |
| FIS   | 126.200 | NAT | OP | 27°2' N | 128°4' E |  |  |

|         |        |         |                  |           |              |   |     |                       |                            |    |
|---------|--------|---------|------------------|-----------|--------------|---|-----|-----------------------|----------------------------|----|
| E 71461 | ATSUGI | 123.100 | APP-U<br>150/450 | 35027'00" | N 139027'00" | E | NAT | Surveillance<br>radar | 26/12/2<br>013<br>21:02:03 | PU |
| E 71462 | ATSUGI | 125.300 | APP-U<br>150/450 | 35027'00" | N 139027'00" | E | NAT | Surveillance<br>radar | 26/12/2<br>013<br>21:02:03 | PU |
| E 71460 | ATSUGI | 126.200 | TWR 25/40        | 35027'00" | N 139027'00" | E | NAT |                       | 26/12/2<br>013<br>21:02:03 | PU |
| E 71463 | ATSUGI | 128.700 | APP-U<br>150/450 | 35027'00" | N 139027'00" | E | NAT | Surveillance<br>radar | 26/12/2<br>013<br>21:02:03 | PU |
| E 71464 | ATSUGI | 134.100 | APP-U<br>150/450 | 35027'00" | N 139027'00" | E | NAT | Surveillance<br>radar | 26/12/2<br>013<br>21:02:03 | PU |

|         |         |         |                  |           |              |   |     |                             |                |    |
|---------|---------|---------|------------------|-----------|--------------|---|-----|-----------------------------|----------------|----|
| CHITOSE |         |         |                  |           |              |   |     |                             |                |    |
| E 75868 | CHITOSE | 100.100 | APP-U<br>150/450 | 42048'00" | N 141D40'00" | E | NAT | FI 26Dec13;<br>Surveillance | 26/12/2<br>013 | PU |
| E 75872 | CHITOSE | 118.200 | TWR 25/40        | 42048'00" | N 141D40'00" | E | NAT | FI 26Dec13                  | 26/12/2<br>013 | PU |
| E 75875 | CHITOSE | 119.100 | APP-U<br>150/450 | 42048'00" | N 141D40'00" | E | NAT | FI 26Dec13;<br>Precision    | 27/12/2<br>013 | PU |
| E 75876 | CHITOSE | 119.500 | APP-U<br>150/450 | 42048'00" | N 141D40'00" | E | NAT | FI 26Dec13;<br>Precision    | 27/12/2<br>013 | PU |
| E 75869 | CHITOSE | 121.100 | APP-U<br>150/450 | 42048'00" | N 141D40'00" | E | NAT | FI 26Dec13;<br>Surveillance | 26/12/2<br>013 | PU |
| E 75938 | CHITOSE | 121.700 | AS 5/1           | 42048'00" | N 141D40'00" | E | NAT | FI 27Dec13                  | 27/12/2<br>013 | PU |
| E 75939 | CHITOSE | 121.900 | APP-L<br>50/120  | 42048'00" | N 141D40'00" | E | NAT | FI 27Dec13;<br>Clearance    | 26/12/2<br>013 | PU |
| E 75874 | CHITOSE | 123.100 | TWR 25/40        | 42048'00" | N 141D40'00" | E | NAT | FI 26Dec13                  | 26/12/2<br>013 | PU |
| E 75877 | CHITOSE | 124.000 | APP-U<br>150/450 | 42048'00" | N 141D40'00" | E | NAT | FI 26Dec13;<br>Precision    | 27/12/2<br>013 | PU |
| E 75870 | CHITOSE | 124.700 | APP-U<br>150/450 | 42048'00" | N 141D40'00" | E | NAT | FI 26Dec13;<br>Surveillance | 26/12/2<br>013 | PU |
| E 75878 | CHITOSE | 125.300 | APP-U<br>150/450 | 42048'00" | N 141D40'00" | E | NAT | FI 26Dec13;<br>Precision    | 27/12/2<br>013 | PU |
| E 75873 | CHITOSE | 126.200 | TWR 25/40        | 42048'00" | N 141D40'00" | E | NAT | FI 26Dec13                  | 26/12/2<br>013 | PU |
| E 75871 | CHITOSE | 127.700 | APP-L<br>50/120  | 42048'00" | N 141D40'00" | E | NAT | FI 26Dec13                  | 26/12/2<br>013 | PU |
| E 75879 | CHITOSE | 131.400 | APP-U<br>150/450 | 42048'00" | N 141D40'00" | E | NAT | FI 26Dec13;<br>Precision    | 27/12/2<br>013 | PU |

|         |       |         |           |           |              |   |     |  |                            |    |
|---------|-------|---------|-----------|-----------|--------------|---|-----|--|----------------------------|----|
| E 71465 | CHOFU | 118.000 | TWR 25/40 | 35040'00" | N 139032'00" | E | NAT |  | 26/12/2<br>013<br>21:02:03 | PU |
| E 71466 | CHOFU | 126.200 | TWR 25/40 | 35040'00" | N 139032'00" | E | NAT |  | 26/12/2<br>013<br>21:02:03 | PU |

|         |            |         |                  |           |              |   |      |                             |                            |    |
|---------|------------|---------|------------------|-----------|--------------|---|------|-----------------------------|----------------------------|----|
| E 75867 | CHOFU      | 130.800 | FIR-U<br>260/450 | 35040'00" | N 139032'00" | E | NAT  | FI                          | 26/12/2<br>013<br>21:02:03 | PU |
| E 75965 | CHUBU INTL | 118.850 | TWR 25/40        | 34051'00" | N 136049'00" | E | NAT  | FI 30Dec13                  | 30/12/2<br>013             | PU |
| E 75964 | CHUBU INTL | 120.000 | APP-U<br>150/450 | 34051'00" | N 136049'00" | E | NAT  | FI 30Dec13;<br>Surveillance | 30/12/2<br>013             | PU |
| E 75962 | CHUBU INTL | 121.050 | APP-U<br>150/450 | 34051'00" | N 136049'00" | E | NAT  | FI 30Dec13;<br>Surveillance | 30/12/2<br>013             | PU |
| E 75967 | CHUBU INTL | 121.800 | AS 5/1           | 34051'00" | N 136049'00" | E | NAT  | 30-Dec-13                   | 30/12/2<br>013             | PU |
| E 75968 | CHUBU INTL | 121.850 | APP-L<br>50/120  | 34051'00" | N 136049'00" | E | NAT  | FI 30Dec13;<br>Clearance    | 30/12/2<br>013             | PU |
| E 75963 | CHUBU INTL | 125.550 | APP-U<br>150/450 | 34051'00" | N 136049'00" | E | NAT  | FI 30Dec13;<br>Surveillance | 30/12/2<br>013             | PU |
| E 75966 | CHUBU INTL | 126.200 | TWR 25/40        | 34051'00" | N 136049'00" | E | NAT  | FI 30Dec13                  | 30/12/2<br>013             | PU |
| E 75972 | CHUBU INTL | 126.600 | AFIS 25/40       | 34042'00" | N 137D57'00" | E | NAT  | FI KOWA                     | 30/12/2<br>013             | PU |
| E 75969 | CHUBU INTL | 127.075 | ATIS<br>260/450  | 34052'00" | N 136049'00" | E | NAT  | FI 30Dec13                  | 30/12/2<br>013             | PU |
| E 75970 | CHUBU INTL | 135.050 | FIR-U<br>260/450 | 36024'00" | N 136025'00" | E | ICAO | FI 30Dec13<br>KOMATSU       | 30/12/2<br>013             | PU |
| E 75971 | CHUBU INTL | 135.500 | FIR-U<br>260/450 | 34052'00" | N 137D13'00" | E | NAT  | FI 3Mikawa                  | 30/12/2<br>013             | PU |

|         |       |         |                  |           |              |   |     |  |                |        |
|---------|-------|---------|------------------|-----------|--------------|---|-----|--|----------------|--------|
| E 71467 | ERABU | 122.700 | FIR-U<br>260/450 | 27026'00" | N 128D42'00" | E | NAT |  | 01/01/1<br>999 | Expert |
| E 71468 | ERABU | 126.200 | FIR-U<br>260/450 | 27026'00" | N 128D42'00" | E | NAT |  | 01/01/1<br>999 | Expert |

68 g FIS 118.350 NAT OP 32°40'00"N 128°50'00"E

69 g FIS 126.200 NAT OP 32°40'00"N 128°50'00"E

70 FUKUI FIS 118.600 NAT OP 36°11'00"N 136°13'00"E RAG\_CHUBU

72 FUKUOKA SMC 121.700 ICAO OP 33°35'00"N 130°26'00"E

73 g TWR 118.400 ICAO OP 33°35'00"N 130°26'00"E

74 TWR 126.200 ICAO OP 33°35'00"N 130°26'00"E

75 g TWR 119.100 ICAO OP 33°35'00"N 130°26'00"E

76 g APP-SR 119.100 ICAO OP 33°35'00"N 130°26'00"E

77 APP-SR 119.650 ICAO OP 33°35'00"N 130°26'00"E

78 APP-SR 120.700 ICAO OP 33°35'00"N 130°26'00"E

79 APP-SR 121.125 ICAO OP 33°35'00"N 130°26'00"E

80 APP-SR 121.275 ICAO OP 33°35'00"N 130°26'00"E

81 g APP-SR 119.700 ICAO OP 33°35'00"N 130°26'00"E

82 g ATIS 121.925 NAT OP 33°35'00"N 130°26'00"E

83 g APP-SR 127.900 ICAO OP 33°35'00"N 130°26'00"E

84 g FIS 126.700 ICAO OP 34°05'00"N 132°09'00"E IWAKUNI

85 FIS 135.100 ICAO OP 32°51'00"N 132°51'00"E IMANOHAMA

86 FIS 126.950 ICAO OP 33°33'00"N 130°35'00"E SANGUNZAN

87 FIS 134.650 ICAO OP 32°37'00"N 128°43'00"E FUKUE

88 g AFIS 128.200 NAT OP 34°05'00"N 132°09'00"E IWAKUNI

89 g AFIS 127.650 NAT OP 32°45'00"N 133°00'00"E SHIMIZU

90 g TWR 118.400 NAT OP 32°50'00"N 130°51'00"E RAG\_KUMAMOTO

307 g APP-SR 120.700 NAT OP 32°50'00"N 130°51'00"E RAG\_KUMAMOTO

308 g APP-SR 121.125 NAT OP 32°50'00"N 130°51'00"E RAG\_KUMAMOTO

309 g APP-SR 121.275 NAT OP 32°50'00"N 130°51'00"E RAG\_KUMAMOTO

310 g APP-SR 121.275 NAT OP 32°50'00"N 130°51'00"E RAG\_KUMAMOTO

FUKUI FIS 118.350 NAT OP 32°41'N 128°5'E

FIS 126.200 NAT OP 32°41'N 128°5'E

FIS 118.600 NAT OP 36°11'N 136°1'E RAG Chubu

FUKUOKA SMC 121.700 ICAO OP 33°31'N 130°2'E

TWR 118.400 NAT OP 32°51'N 130°5'E Kumamoto

TWR 126.200 ICAO OP 33°31'N 130°2'E

TWR 119.100 NAT OP 33°31'N 130°2'E

APP-SR 120.700 NAT OP 32°51'N 130°5'E R Kumamoto

APP-SR 121.125 NAT OP 32°51'N 130°5'E FI RCAG

APP-SR 121.275 NAT OP 32°51'N 130°5'E FI RCAG

APP-SR-I 119.000 ICAO OP 33°31'N 130°2'E

APP-SR-I 119.400 ICAO OP 33°31'N 130°2'E

APP-SR-I 119.700 ICAO OP 33°31'N 130°2'E

APP-SR-I 120.600 ICAO OP 33°31'N 130°2'E

APP-SR-I 127.900 ICAO OP 33°31'N 130°2'E

APP-SR-U 124.800 ICAO OP 33°31'N 130°2'E

APP-SR-U 126.300 NAT OP 33°31'N 130°2'E

FIS 134.650 NAT OP 32°31'N 128°4'E FUKUE

ATIS 127.200 NAT OP 33°31'N 130°2'E

AFIS 127.650 NAT OP 32°41'N 133°0'E SHIM BCST

AFIS 128.200 NAT OP 34°01'N 132°0'E IWAKUNI

CD 121.925 NAT OP 33°31'N 130°2'E FI 30-Dec-13

OP-CTL 131.850 NAT OP 33°31'N 130°2'E

OP-CTL 131.900 NAT OP 33°31'N 130°2'E

FUKUOKA ACC ACC-L 127.500 NAT OP 28°21'N 129°4'E FI AMAMI+1

ACC-L 132.500 NAT OP 33°31'N 130°3'E FI SANGUNZAN+1LOC

ACC-L 132.600 ICAO OP 32°51'N 132°5'E IMANOHAMA+2

ACC-L 134.350 NAT OP 34°21'N 135°2'E FI MIKUNUYAMA+1

ACC-U 126.100 ICAO OP 33°31'N 130°3'E SANGUNZAN+1LOC

ACC-U 133.300 ICAO OP 32°41'N 133°0'E SHIMIZU+1

ACC-U 133.550 NAT OP 33°41'N 130°2'E FI GANNOSU+2

ACC-U 135.300 NAT OP 31°21'N 130°1'E KASEDA+3LOC

ACC-SR-I 118.900 ICAO OP 33°41'N 130°2'E GANNOSU+1

E 71469 FUKUE 118.350 FIR-U 260/450 32040'00" N 128050'00" E NAT 01/01/1 999 Expert 21:02:03

E 71470 FUKUE 126.200 FIR-U 260/450 32040'00" N 128050'00" E NAT 01/01/1 999 Expert 21:02:03

E 71471 FUKUI 118.600 FIR-U 260/450 36008'00" N 136013'00" E NAT RCAG Chubu 27/12/2 013 PU 21:02:03

E 71472 FUKUI 126.200 FIR-U 260/450 36008'00" N 136013'00" E NAT 27/12/2 013 PU 21:02:03

E 71474 FUKUOKA 118.400 TWR 25/40 32050'00" N 130051'00" E NAT Kumamoto 30/12/2 013 PU

E 71480 FUKUOKA 119.000 APP-I 75/250 33035'00" N 130027'00" E ICAO Surveillance radar 01/01/1 999 Expert

E 71476 FUKUOKA 119.100 APP-U 150/450 33035'00" N 130026'00" E NAT Surveillance radar 27/12/2 013 PU

E 71479 FUKUOKA 119.400 APP-I 75/250 33035'00" N 130027'00" E ICAO Surveillance radar 01/01/1 999 Expert

E 71478 FUKUOKA 119.700 APP-I 75/250 33035'00" N 130026'00" E ICAO Surveillance radar 27/12/2 013 PU

E 71477 FUKUOKA 120.600 APP-I 75/250 33035'00" N 130027'00" E ICAO Surveillance radar 01/01/1 999 Expert

E 71482 FUKUOKA 120.700 APP-U 150/450 32050'00" N 130051'00" E NAT R Kumamoto 30/12/2 013 PU

E 75940 FUKUOKA 121.125 APP-U 150/450 32050'00" N 130051'00" E NAT Kumamoto 27/12/2 013 PU

E 75941 FUKUOKA 121.275 APP-U 150/450 32050'00" N 130051'00" E NAT FI RCAG Kumamoto 27/12/2 013 PU

E 71485 FUKUOKA 121.700 AS 5/1 33035'00" N 130026'00" E ICAO 27/12/2 013 PU

E 75973 FUKUOKA 121.925 APP-L 50/120 33035'00" N 130026'00" E NAT FI 30Dec13; Clearance 30/12/2 013 PU

E 71489 FUKUOKA 124.800 APP-U 150/450 33035'00" N 130027'00" E ICAO Surveillance radar 01/01/1 999 Expert

E 71481 FUKUOKA 126.200 TWR 25/40 33035'00" N 130026'00" E ICAO 27/12/2 013 PU

E 71484 FUKUOKA 126.300 APP-U 150/450 33035'00" N 130027'00" E NAT Surveillance radar 01/01/1 999 Expert

E 71488 FUKUOKA 127.200 ATIS 260/450 33035'00" N 130026'00" E ICAO 27/12/2 013 PU

E 71475 FUKUOKA 127.650 AFIS 25/40 32045'00" N 133000'00" E NAT SHIMIZU BCST 03/02/1 999 EXPERT

E 71473 FUKUOKA 127.900 APP-I 75/250 33035'00" N 130026'00" E ICAO Surveillance radar 27/12/2 013 PU

E 71511 FUKUOKA 128.200 AFIS 25/40 34005'00" N 132009'00" E NAT IWAKUNI 30/12/2 013 PU

E 71486 FUKUOKA 131.850 U 0/0 33035'00" N 130027'00" E NAT 01/01/1 999 Expert

E 71487 FUKUOKA 131.900 U 0/0 33035'00" N 130027'00" E NAT 01/01/1 999 Expert

E 71483 FUKUOKA 134.650 FIR-U 260/450 32037'00" N 128043'00" E NAT FUKUE 27/12/2 013 PU

E 71495 FUKUOKA ACC 118.900 ACC-I 194/250 33040'00" N 130023'00" E ICAO GANNOSU+1; Surveillance radar 31/12/2 013 PU 21:02:03

E 71492 FUKUOKA ACC 123.700 ACC-U 260/450 33033'00" N 130035'00" E NAT RCAG 31/12/2 013 PU 21:02:03

E 71491 FUKUOKA ACC 124.100 ACC-I 194/250 33033'00" N 130035'00" E NAT RCAG; Surveillance radar 31/12/2 013 PU 21:02:03

E 71494 FUKUOKA ACC 124.300 ACC-U 260/450 33040'00" N 130023'00" E NAT 31/12/2 013 PU 21:02:03

E 71499 FUKUOKA ACC 124.500 ACC-U 260/450 33040'00" N 130023'00" E NAT 31/12/2 013 PU 21:02:03

E 71505 FUKUOKA ACC 124.900 ACC-U 260/450 33033'00" N 130035'00" E NAT Surveillance radar 31/12/2 013 PU 21:02:03

E 71506 FUKUOKA ACC 126.100 ACC-U 260/450 33033'00" N 130035'00" E ICAO SANGUNZAN+1LOC 31/12/2 013 PU 21:02:03

E 71507 FUKUOKA ACC 126.700 FIR-U 260/450 34005'00" N 132009'00" E NAT IWAKUNI 31/12/2 013 PU 21:02:03

E 71509 FUKUOKA ACC 126.950 FIR-U 260/450 33033'00" N 130035'00" E NAT SANGUNZAN 31/12/2 013 PU 21:02:03

E 76171 FUKUOKA ACC 127.500 ACC-L 194/250 28028'00" N 129041'00" E NAT FI AMAMI+1 31/12/2 013 PU 21:02:03

管制部は1017行目以降でチェック

管制部、ATMCはICABのエクセルシートでは最後に  
なっているため、1017  
行目以降で比較

|          |         |     |    |         |          |    |              |
|----------|---------|-----|----|---------|----------|----|--------------|
| ACC-SR-I | 132.400 | NAT | OP | 34°2' N | 135°2' E | FI | MIKUNIYAMA+1 |
| ACC-SR-U | 133.600 | NAT |    | 31°2' N | 130°1' E |    | KASEDA+1     |

|   |       |             |         |                  |           |              |   |      |  |                            |    |
|---|-------|-------------|---------|------------------|-----------|--------------|---|------|--|----------------------------|----|
| E | 71497 | FUKUOKA ACC | 127.700 | ACC-I<br>194/250 | 33033'00" | N 130035'00" | E | NAT  | Surveillance<br>radar                            | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71508 | FUKUOKA ACC | 128.500 | ACC-U<br>260/450 | 33033'00" | N 130035'00" | E | ICAO | Surveillance<br>radar                            | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71503 | FUKUOKA ACC | 128.800 | FIR-U<br>260/450 | 34005'00" | N 132009'00" | E | NAT  | WAKUNI   | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76172 | FUKUOKA ACC | 132.400 | ACC-I<br>194/250 | 34022'00" | N 135029'00" | E | NAT  | FI<br>MIKUNIYAMA<br>+1;<br>Surveillance<br>radar | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71510 | FUKUOKA ACC | 132.500 | ACC-U<br>260/450 | 31023'00" | N 130016'00" | E | ICAO | RCAG;<br>Surveillance<br>radar                   | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76169 | FUKUOKA ACC | 132.500 | ACC-L<br>194/250 | 33033'00" | N 130035'00" | E | NAT  | FI<br>SANGUNZAN+<br>1LOC                         | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71501 | FUKUOKA ACC | 132.600 | ACC-L<br>194/250 | 32051'00" | N 132051'00" | E | ICAO | FI<br>IMANOHAMA<br>+2                            | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71490 | FUKUOKA ACC | 132.900 | ACC-U<br>260/450 | 32045'00" | N 133000'00" | E | ICAO | RCAG;<br>Surveillance<br>radar                   | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71502 | FUKUOKA ACC | 133.000 | ACC-I<br>194/250 | 32045'00" | N 133000'00" | E | NAT  | Surveillance<br>radar                            | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71498 | FUKUOKA ACC | 133.300 | ACC-U<br>260/450 | 32045'00" | N 133000'00" | E | ICAO | SHIMIZU+1  | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76170 | FUKUOKA ACC | 133.550 | ACC-U<br>260/450 | 33040'00" | N 130023'00" | E | NAT  | FI<br>GANNOSU+2                                  | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71496 | FUKUOKA ACC | 133.600 | ACC-U<br>260/450 | 31023'00" | N 130016'00" | E | NAT  | KASEDA+1;<br>Surveillance<br>radar               | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76173 | FUKUOKA ACC | 134.350 | ACC-L<br>194/250 | 34022'00" | N 135029'00" | E | NAT  | FI<br>MIKUNIYAMA<br>+1                           | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71500 | FUKUOKA ACC | 135.100 | FIR-U<br>260/450 | 32045'00" | N 133000'00" | E | NAT  | SHIMIZU  | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71493 | FUKUOKA ACC | 135.300 | ACC-U<br>260/450 | 31023'00" | N 130016'00" | E | NAT  | KASEDA+3LO<br>C                                  | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71504 | FUKUOKA ACC | 135.800 | FIR-U<br>260/450 | 31023'00" | N 130016'00" | E | NAT  | KASEDA   | 31/12/2<br>013<br>21:02:03 | PU |

|              |       |         |     |    |          |          |           |
|--------------|-------|---------|-----|----|----------|----------|-----------|
| FUKUOKA ATMC |       |         |     |    |          |          |           |
|              | ACC-U | 126.700 | NAT | OP | 37°51' N | 140°5' E | FI Sendai |
|              | ACC-U | 127.300 | NAT | OP | 35°1' N  | 139°0' E | FI HAKONE |
|              | ACC-U | 127.400 | NAT | OP | 34°4' N  | 139°2' E | FI OSHIMA |

|   |       |                 |         |                  |           |              |   |     |           |                            |    |
|---|-------|-----------------|---------|------------------|-----------|--------------|---|-----|-----------|----------------------------|----|
| E | 76174 | FUKUOKA<br>ATMC | 126.700 | ACC-U<br>260/450 | 37059'00" | N 140050'00" | E | NAT | FI Sendai | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76175 | FUKUOKA<br>ATMC | 127.300 | ACC-U<br>260/450 | 35011'00" | N 139003'00" | E | NAT | FI HAKONE | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76176 | FUKUOKA<br>ATMC | 127.400 | ACC-U<br>260/450 | 34042'00" | N 139026'00" | E | NAT | FI OSHIMA | 31/12/2<br>013<br>21:02:03 | PU |

|    |           |         |         |     |             |              |              |
|----|-----------|---------|---------|-----|-------------|--------------|--------------|
| 91 | FUKUSHIMA |         |         |     |             |              |              |
| 92 | FS        | 118.050 | NAT     | OP  | 37°14'00" N | 140°26'00" E |              |
| 93 | FS        | 126.200 | NAT     | OP  | 37°14'00" N | 140°26'00" E |              |
| 94 | FUTENMA   |         |         |     |             |              |              |
| 95 | g         | SMC     | 122.800 | NAT | OP          | 26°16'00" N  | 127°45'00" E |
| 96 | g         | TWR     | 123.600 | NAT | OP          | 26°16'00" N  | 127°45'00" E |
| 97 | GIFU      |         |         |     |             |              |              |

|           |     |         |     |    |          |          |              |
|-----------|-----|---------|-----|----|----------|----------|--------------|
| FUKUSHIMA |     |         |     |    |          |          |              |
|           | FIS | 118.050 | NAT | OP | 37°14' N | 140°2' E | FI 27-Dec-13 |
|           | FIS | 126.200 | NAT | OP | 37°14' N | 140°2' E | FI 27-Dec-13 |
| FUTENMA   |     |         |     |    |          |          |              |
|           | SMC | 122.800 | NAT | OP | 26°11' N | 127°4' E |              |
|           | TWR | 123.600 | NAT | OP | 26°11' N | 127°4' E |              |
| GIFU      |     |         |     |    |          |          |              |

|   |       |           |         |                  |           |              |   |     |            |                            |        |
|---|-------|-----------|---------|------------------|-----------|--------------|---|-----|------------|----------------------------|--------|
| E | 75942 | FUKUSHIMA | 118.050 | FIR-U<br>260/450 | 37014'00" | N 140026'00" | E | NAT | FI 27Dec13 | 27/12/2<br>013<br>21:02:03 | PU     |
| E | 75943 | FUKUSHIMA | 126.200 | FIR-U<br>260/450 | 37014'00" | N 140026'00" | E | NAT | FI 27Dec13 | 27/12/2<br>013<br>21:02:03 | PU     |
| E | 71513 | FUTENMA   | 122.800 | AS 5/1           | 26016'00" | N 127045'00" | E | NAT |            | 01/01/1<br>999<br>21:02:03 | Expert |
| E | 71512 | FUTENMA   | 123.600 | TWR 25/40        | 26016'00" | N 127045'00" | E | NAT |            | 01/01/1<br>999<br>21:02:03 | Expert |

|       |            |         |      |    |            |             |
|-------|------------|---------|------|----|------------|-------------|
| 98 g  | TWR        | 120.100 | NAT  | OP | 35°24'00"N | 136°52'00"E |
| 99 g  | TWR        | 126.200 | NAT  | OP | 35°24'00"N | 136°52'00"E |
| 100 g | TWR        | 122.000 | NAT  | OP | 35°24'00"N | 136°52'00"E |
| 101   | HACHUOJIMA |         |      |    |            |             |
| 102 g | FIS        | 118.700 | NAT  | OP | 33°07'00"N | 139°47'00"E |
| 103 g | FIS        | 126.200 | NAT  | OP | 33°07'00"N | 139°47'00"E |
| 104   | HACHINOHE  |         |      |    |            |             |
| 105 g | TWR        | 126.200 | NAT  | OP | 40°33'00"N | 141°28'00"E |
| 106 g | APP-PR     | 125.300 | NAT  | OP | 40°33'00"N | 141°28'00"E |
| 107 g | APP-PR     | 134.100 | NAT  | OP | 40°33'00"N | 141°28'00"E |
| 108 g | TWR        | 123.100 | NAT  | OP | 40°33'00"N | 141°28'00"E |
| 109   | HAKODATE   |         |      |    |            |             |
| 110 g | TWR        | 118.350 | ICAO | OP | 41°47'00"N | 140°49'00"E |
| 111 g | TWR        | 126.200 | ICAO | OP | 41°47'00"N | 140°49'00"E |
| 112 g | APP-L      | 118.000 | ICAO | OP | 41°47'00"N | 140°49'00"E |
| 113 g | APP-L      | 121.000 | ICAO | OP | 41°47'00"N | 140°49'00"E |
| 114   | APP-L      | 127.900 | ICAO | OP | 41°47'00"N | 140°49'00"E |
| 115 g | ATIS       | 126.600 | ICAO | OP | 41°47'00"N | 140°49'00"E |
| 116   | HAMAMATSU  |         |      |    |            |             |
| 117 g | TWR        | 126.200 | NAT  | OP | 34°45'00"N | 137°42'00"E |
| 118 g | TWR        | 123.100 | NAT  | OP | 34°45'00"N | 137°42'00"E |
| 119 g | APP-L      | 127.950 | NAT  | OP | 34°45'00"N | 137°42'00"E |
| 120 g | APP-PAR    | 134.100 | NAT  | OP | 34°45'00"N | 137°42'00"E |
| 121 g | APP-PAR    | 125.300 | NAT  | OP | 34°45'00"N | 137°42'00"E |
| 122 g | APP-L      | 120.100 | NAT  | OP | 34°45'00"N | 137°42'00"E |
| 123   | HANAMAKI   |         |      |    |            |             |
| 124   | FIS        | 118.200 | NAT  | OP | 39°26'00"N | 141°08'00"E |
| 125   | FIS        | 126.200 | NAT  | OP | 39°26'00"N | 141°08'00"E |

|  |            |         |      |    |        |         |
|--|------------|---------|------|----|--------|---------|
|  | TWR        | 120.100 | NAT  | OP | 35°2'N | 136°5'E |
|  | TWR        | 122.000 | NAT  | OP | 35°2'N | 136°5'E |
|  | TWR        | 126.200 | NAT  | OP | 35°2'N | 136°5'E |
|  | HACHUOJIMA |         |      |    |        |         |
|  | FIS        | 118.700 | NAT  | OP | 33°0'N | 139°4'E |
|  | HACHINOHE  |         |      |    |        |         |
|  | TWR        | 123.100 | NAT  | OP | 40°3'N | 141°2'E |
|  | TWR        | 126.200 | NAT  | OP | 40°3'N | 141°2'E |
|  | APP-PR     | 125.300 | NAT  | OP | 40°3'N | 141°2'E |
|  | APP-PR     | 134.100 | NAT  | OP | 40°3'N | 141°2'E |
|  | HAKODATE   |         |      |    |        |         |
|  | APP-L      | 119.000 | NAT  | OP | 41°4'N | 140°4'E |
|  | APP-L      | 121.000 | NAT  | OP | 41°4'N | 140°4'E |
|  | APP-L      | 127.900 | NAT  | OP | 41°4'N | 140°4'E |
|  | TWR        | 118.350 | ICAO | OP | 41°4'N | 140°4'E |
|  | TWR        | 126.200 | NAT  | OP | 41°4'N | 140°4'E |
|  | ATIS       | 126.600 | NAT  | OP | 41°4'N | 140°4'E |
|  | HAMAMATSU  |         |      |    |        |         |
|  | APP-L      | 127.950 | NAT  | OP | 34°4'N | 137°4'E |
|  | APP-L      | 120.100 | NAT  | OP | 34°4'N | 137°4'E |
|  | TWR        | 123.100 | NAT  | OP | 34°4'N | 137°4'E |
|  | TWR        | 126.200 | NAT  | OP | 34°4'N | 137°4'E |
|  | HANAMAKI   |         |      |    |        |         |
|  | FIS        | 118.200 | NAT  | OP | 39°2'N | 141°0'E |
|  | FIS        | 126.200 | NAT  | OP | 39°2'N | 141°0'E |

|         |            |         |       |         |           |              |   |      |            |        |
|---------|------------|---------|-------|---------|-----------|--------------|---|------|------------|--------|
| E 71514 | GIFU       | 120.100 | TWR   | 25/40   | 35024'00" | N 136052'00" | E | NAT  | 27/12/2013 | PU     |
| E 75944 | GIFU       | 122.000 | TWR   | 25/40   | 35024'00" | N 136052'00" | E | NAT  | 27/12/2013 | PU     |
| E 71515 | GIFU       | 126.200 | TWR   | 25/40   | 35024'00" | N 136052'00" | E | NAT  | 27/12/2013 | PU     |
| E 71517 | HACHUOJIMA | 118.700 | FIR-U | 260/450 | 33007'00" | N 139047'00" | E | NAT  | 27/12/2013 | PU     |
| E 71516 | HACHUOJIMA | 126.200 | FIR-U | 260/450 | 33007'00" | N 139047'00" | E | NAT  | 27/12/2013 | PU     |
| E 71521 | HACHINOHE  | 123.100 | TWR   | 25/40   | 40033'00" | N 141028'00" | E | NAT  | 27/12/2013 | PU     |
| E 71520 | HACHINOHE  | 125.300 | APP-U | 150/450 | 40033'00" | N 141028'00" | E | NAT  | 27/12/2013 | PU     |
| E 71519 | HACHINOHE  | 126.200 | TWR   | 25/40   | 40033'00" | N 141028'00" | E | NAT  | 27/12/2013 | PU     |
| E 71518 | HACHINOHE  | 134.100 | APP-U | 150/450 | 40033'00" | N 141028'00" | E | NAT  | 27/12/2013 | PU     |
| E 71522 | HAKODATE   | 118.350 | TWR   | 25/40   | 41046'00" | N 140049'00" | E | ICAO | 27/12/2013 | PU     |
| E 75945 | HAKODATE   | 119.000 | APP-L | 50/120  | 41047'00" | N 140049'00" | E | NAT  | 27/12/2013 | PU     |
| E 75946 | HAKODATE   | 121.000 | APP-L | 50/120  | 41047'00" | N 140049'00" | E | NAT  | 27/12/2013 | PU     |
| E 71523 | HAKODATE   | 126.200 | TWR   | 25/40   | 41046'00" | N 140049'00" | E | NAT  | 27/12/2013 | PU     |
| E 75948 | HAKODATE   | 126.600 | ATIS  | 260/450 | 41047'00" | N 140049'00" | E | NAT  | 27/12/2013 | PU     |
| E 75947 | HAKODATE   | 127.900 | APP-L | 50/120  | 41047'00" | N 140049'00" | E | NAT  | 27/12/2013 | PU     |
| E 71526 | HAMAMATSU  | 120.100 | APP-L | 50/120  | 34045'00" | N 137042'00" | E | NAT  | 27/12/2013 | PU     |
| E 75949 | HAMAMATSU  | 123.100 | TWR   | 25/40   | 34045'00" | N 137042'00" | E | NAT  | 27/12/2013 | PU     |
| E 71527 | HAMAMATSU  | 125.300 | APP-U | 150/450 | 34045'00" | N 137042'00" | E | NAT  | 27/12/2013 | PU     |
| E 71525 | HAMAMATSU  | 126.200 | TWR   | 25/40   | 34045'00" | N 137042'00" | E | NAT  | 01/01/1999 | Expert |
| E 75950 | HAMAMATSU  | 127.950 | APP-L | 50/120  | 34045'00" | N 137042'00" | E | NAT  | 27/12/2013 | PU     |
| E 71524 | HAMAMATSU  | 134.100 | APP-U | 150/450 | 34045'00" | N 137042'00" | E | NAT  | 27/12/2013 | PU     |
| E 71528 | HANAMAKI   | 118.200 | FIR-U | 260/450 | 39026'00" | N 141008'00" | E | NAT  | 01/01/1999 | Expert |
| E 71529 | HANAMAKI   | 126.200 | FIR-U | 260/450 | 39026'00" | N 141008'00" | E | NAT  | 01/01/1999 | Expert |

HANEDANIJIMA





|         |         |         |     |    |             |                          |
|---------|---------|---------|-----|----|-------------|--------------------------|
| 150 g   | APP-PAR | 125.300 | NAT | OP | 36°11'00" N | 140°25'00" E             |
| 151 g   | APP-PAR | 127.975 | NAT | OP | 36°11'00" N | 140°25'00" E             |
| 152 g   | APP-PAR | 134.100 | NAT | OP | 36°11'00" N | 140°25'00" E             |
| 153 g   | ISB     | 119.500 | NAT | OP | 36°11'00" N | 140°25'00" E             |
| 154 IKI |         |         |     |    |             |                          |
| 155     | ISB     | 118.200 | NAT | OP | 33°45'00" N | 129°47'00" E RAG_FUKUOKA |

|              |        |         |     |    |             |              |
|--------------|--------|---------|-----|----|-------------|--------------|
| 156 IRUMA    |        |         |     |    |             |              |
| 157 g        | TWR    | 126.200 | NAT | OP | 35°51'00" N | 139°25'00" E |
| 158          | TWR    | 488.050 | NAT | OP | 36°54'00" N | 139°26'00" E |
| 159 g        | TWR    | 122.050 | NAT | OP | 35°51'00" N | 139°25'00" E |
| 160 g        | TWR    | 123.100 | NAT | OP | 35°51'00" N | 139°25'00" E |
| 161 g        | APP-PR | 125.300 | NAT | OP | 35°51'00" N | 139°25'00" E |
| 162 g        | APP-PR | 134.100 | NAT | OP | 35°51'00" N | 139°25'00" E |
| 162 ISHIGAKI |        |         |     |    |             |              |
| 163          | TWR    | 118.000 | NAT | OP | 24°21'00" N | 124°11'00" E |
| 164          | TWR    | 426.200 | NAT | OP | 24°21'00" N | 124°11'00" E |
| 165          | APP-SR | 426.300 | NAT | OP | 24°21'00" N | 124°11'00" E |
| 166          | APP-SR | 424.200 | NAT | OP | 24°21'00" N | 124°11'00" E |
| 167          | APP-SR | 426.000 | NAT | OP | 24°21'00" N | 124°11'00" E |

|             |         |         |     |    |             |                        |
|-------------|---------|---------|-----|----|-------------|------------------------|
| 170 IWAKUNI |         |         |     |    |             |                        |
| 171 g       | APP-L   | 128.000 | NAT | OP | 34°09'00" N | 132°15'00" E           |
| 172 g       | APP-L   | 119.700 | NAT | OP | 34°09'00" N | 132°15'00" E           |
| 173 g       | ISB     | 135.700 | NAT | OP | 34°09'00" N | 132°15'00" E           |
| 174 g       | TWR     | 123.800 | NAT | OP | 34°09'00" N | 132°15'00" E           |
| 175 g       | ISB     | 121.300 | NAT | OP | 34°09'00" N | 132°15'00" E           |
| 176 g       | APP-PAR | 131.400 | NAT | OP | 34°09'00" N | 132°15'00" E           |
| 177         | ATIS    | 128.400 | NAT | OP | 34°09'00" N | 132°15'00" E           |
| 178 IWAMI   |         |         |     |    |             |                        |
| 179         | ISB     | 118.550 | NAT | OP | 34°41'00" N | 131°48'00" E RAG_OSAKA |

|           |         |         |     |    |             |              |
|-----------|---------|---------|-----|----|-------------|--------------|
| 180 IWOTO |         |         |     |    |             |              |
| 181 g     | TWR     | 126.200 | NAT | OP | 24°47'00" N | 141°19'00" E |
| 182 g     | TWR     | 133.400 | NAT | OP | 24°47'00" N | 141°19'00" E |
| 183       | APP-L   | 138.300 | NAT | OP | 24°47'00" N | 141°19'00" E |
| 184       | APP-SR  | 125.300 | NAT | OP | 24°47'00" N | 141°19'00" E |
| 185 g     | APP-PAR | 134.100 | NAT | OP | 24°47'00" N | 141°19'00" E |
| 186 IZUMO |         |         |     |    |             |              |

|        |         |     |    |         |          |    |              |
|--------|---------|-----|----|---------|----------|----|--------------|
| APP-SR | 123.875 | NAT | OP | 36°1' N | 140°2' E | FI | 27-Dec-13    |
| APP-PR | 127.975 | NAT | OP | 36°1' N | 140°2' E | FI | 27-Dec-13    |
| FIS    | 118.200 | NAT | OP | 33°4' N | 129°4' E | FI | RCAG Fukuoka |

|          |         |     |    |         |          |  |  |
|----------|---------|-----|----|---------|----------|--|--|
| IKISHIMA |         |     |    |         |          |  |  |
| FIS      | 118.200 | NAT | OP | 33°4' N | 129°4' E |  |  |
| FIS      | 126.200 | NAT | OP | 33°4' N | 129°4' E |  |  |

|        |         |     |    |         |          |    |           |
|--------|---------|-----|----|---------|----------|----|-----------|
| IRUMA  |         |     |    |         |          |    |           |
| TWR    | 122.050 | NAT | OP | 35°5' N | 139°2' E |    | 30-Dec-13 |
| TWR    | 123.100 | NAT | OP | 35°5' N | 139°2' E | FI | 30-Dec-13 |
| TWR    | 126.200 | NAT | OP | 35°5' N | 139°2' E |    |           |
| APP-PR | 125.300 | NAT | OP | 35°5' N | 139°2' E |    |           |
| APP-PR | 134.100 | NAT | OP | 35°5' N | 139°2' E |    |           |

|         |         |     |    |         |          |    |           |
|---------|---------|-----|----|---------|----------|----|-----------|
| IWAKUNI |         |     |    |         |          |    |           |
| SMC     | 121.300 | NAT | OP | 34°0' N | 132°1' E | FI | 30-Dec-13 |
| APP-L   | 119.700 | NAT | OP | 34°0' N | 132°1' E | FI | 30-Dec-13 |
| APP-L   | 128.000 | NAT | OP | 34°0' N | 132°1' E |    |           |
| TWR     | 123.800 | NAT | OP | 34°0' N | 132°1' E |    |           |
| APP-PR  | 134.100 | NAT | OP | 34°0' N | 132°1' E |    |           |
| CD      | 135.700 | NAT | OP | 34°0' N | 132°1' E | FI | 30-Dec-13 |
| IWAMI   |         |     |    |         |          |    |           |
| FIS     | 118.550 | NAT | OP | 34°4' N | 131°4' E | FI | RAG OSAKA |

|        |         |     |    |         |          |    |           |
|--------|---------|-----|----|---------|----------|----|-----------|
| IWOTO  |         |     |    |         |          |    |           |
| TWR    | 126.200 | NAT | OP | 24°4' N | 141°1' E |    | 30-Dec-13 |
| TWR    | 133.400 | NAT | OP | 24°4' N | 141°1' E |    |           |
| APP-PR | 134.100 | NAT | OP | 24°4' N | 141°1' E | FI | 30-Dec-13 |
| IZUMO  |         |     |    |         |          |    |           |

|                 |         |               |           |              |   |     |                             |             |    |
|-----------------|---------|---------------|-----------|--------------|---|-----|-----------------------------|-------------|----|
| E 71543 HYAKURI | 125.300 | APP-U 150/450 | 36D11'00" | N 140D25'00" | E | NAT | Precision Approach Radar    | 27/12/2 013 | PU |
| E 71542 HYAKURI | 126.200 | TWR 25/40     | 36D11'00" | N 140D25'00" | E | NAT |                             | 27/12/2 013 | PU |
| E 75959 HYAKURI | 127.975 | APP-U 150/450 | 36D11'00" | N 140D25'00" | E | NAT | FI 27Dec13; Precision radar | 27/12/2 013 | PU |
| E 71544 HYAKURI | 134.100 | APP-U 150/450 | 36D11'00" | N 140D25'00" | E | NAT | Precision Approach Radar    | 27/12/2 013 | PU |
| E 75961 IKI     | 118.200 | FIR-U 260/450 | 33D45'00" | N 129D47'00" | E | NAT | FI RCAG Fukuoka             | 27/12/2 013 | PU |

|                  |         |               |           |              |   |     |  |             |        |
|------------------|---------|---------------|-----------|--------------|---|-----|--|-------------|--------|
| E 71546 IKISHIMA | 118.200 | FIR-U 260/450 | 33D45'00" | N 129D47'00" | E | NAT |  | 01/01/1 999 | Expert |
| E 71547 IKISHIMA | 126.200 | FIR-U 260/450 | 33D45'00" | N 129D47'00" | E | NAT |  | 01/01/1 999 | Expert |

|               |         |               |           |              |   |     |                 |             |    |
|---------------|---------|---------------|-----------|--------------|---|-----|-----------------|-------------|----|
| E 75974 IRUMA | 122.050 | TWR 25/40     | 35D51'00" | N 139D25'00" | E | NAT |                 | 30/12/2 013 | PU |
| E 75975 IRUMA | 123.100 | TWR 25/40     | 35D51'00" | N 139D25'00" | E | NAT | FI 30Dec13      | 30/12/2 013 | PU |
| E 71548 IRUMA | 125.300 | APP-U 150/450 | 35D51'00" | N 139D25'00" | E | NAT | Precision radar | 30/12/2 013 | PU |
| E 71551 IRUMA | 126.200 | TWR 25/40     | 35D51'00" | N 139D25'00" | E | NAT |                 | 30/12/2 013 | PU |
| E 71549 IRUMA | 134.100 | APP-U 150/450 | 35D51'00" | N 139D25'00" | E | NAT | Precision radar | 30/12/2 013 | PU |
| E 71550 IRUMA | 135.000 | TWR 25/40     | 35D50'00" | N 139D25'00" | E | NAT |                 | 30/12/2 013 | PU |

|                  |         |               |           |              |   |     |  |             |    |
|------------------|---------|---------------|-----------|--------------|---|-----|--|-------------|----|
| E 71553 ISHIGAKI | 118.000 | FIR-U 260/450 | 24D20'00" | N 124D11'00" | E | NAT |  | 30/12/2 013 | PU |
| E 71552 ISHIGAKI | 126.200 | FIR-U 260/450 | 24D20'00" | N 124D11'00" | E | NAT |  | 30/12/2 013 | PU |

|                 |         |               |           |              |   |     |                 |             |    |
|-----------------|---------|---------------|-----------|--------------|---|-----|-----------------|-------------|----|
| E 75976 IWAKUNI | 119.700 | APP-L 50/120  | 34D09'00" | N 132D15'00" | E | NAT | FI 30Dec13      | 30/12/2 013 | PU |
| E 75978 IWAKUNI | 121.300 | AS 5/1        | 34D09'00" | N 132D15'00" | E | NAT | FI 30Dec13      | 30/12/2 013 | PU |
| E 71554 IWAKUNI | 123.800 | TWR 25/40     | 34D09'00" | N 132D15'00" | E | NAT |                 | 30/12/2 013 | PU |
| E 71556 IWAKUNI | 128.000 | APP-L 50/120  | 34D09'00" | N 132D15'00" | E | NAT |                 | 30/12/2 013 | PU |
| E 71555 IWAKUNI | 134.100 | APP-U 150/450 | 34D09'00" | N 132D15'00" | E | NAT | Precision radar | 30/12/2 013 | PU |
| E 75977 IWAKUNI | 135.700 | APP-L 50/120  | 34D09'00" | N 132D15'00" | E | NAT | Clearance       | 30/12/2 013 | PU |
| E 75979 IWAMI   | 118.550 | FIR-U 260/450 | 34D41'00" | N 131D48'00" | E | NAT | FI RAG OSAKA    | 30/12/2 013 | PU |

|               |         |               |           |              |   |     |                             |             |    |
|---------------|---------|---------------|-----------|--------------|---|-----|-----------------------------|-------------|----|
| E 71557 IWOTO | 126.200 | TWR 25/40     | 24D47'00" | N 141D19'00" | E | NAT |                             | 30/12/2 013 | PU |
| E 71558 IWOTO | 133.400 | TWR 25/40     | 24D47'00" | N 141D19'00" | E | NAT |                             | 30/12/2 013 | PU |
| E 75980 IWOTO | 134.100 | APP-U 150/450 | 24D47'00" | N 141D19'00" | E | NAT | FI 30Dec13; Precision radar | 30/12/2 013 | PU |

|     |         |         |     |    |            |             |
|-----|---------|---------|-----|----|------------|-------------|
| 187 | FIS     | 122.700 | NAT | OP | 35°25'00"N | 132°53'00"E |
| 188 | FIS     | 126.200 | NAT | OP | 35°25'00"N | 132°53'00"E |
| 189 | KADENA  |         |     |    |            |             |
| 187 | TWR     | 121.500 | NAT | OP | 26°21'00"N | 127°46'00"E |
| 190 | TWR     | 126.200 | NAT | OP | 26°21'00"N | 127°46'00"E |
| 191 | SMC     | 118.500 | NAT | OP | 26°21'00"N | 127°46'00"E |
| 192 | IS      | 123.300 | NAT | OP | 26°21'00"N | 127°46'00"E |
| 193 | APP-L   | 131.400 | NAT | OP | 26°21'00"N | 127°46'00"E |
| 194 | APP-PAR | 121.100 | NAT | OP | 26°21'00"N | 127°46'00"E |
| 195 | APP-PAR | 134.100 | NAT | OP | 26°21'00"N | 127°46'00"E |
| 196 | APP-PAR | 132.800 | NAT | OP | 26°21'00"N | 127°46'00"E |
| 197 | ATIS    | 124.200 | NAT | OP | 26°21'00"N | 127°46'00"E |

KADENA

|        |         |     |    |            |             |
|--------|---------|-----|----|------------|-------------|
| SMC    | 118.500 | NAT | OP | 26°21'00"N | 127°46'00"E |
| APP-L  | 131.400 | NAT | OP | 26°21'00"N | 127°46'00"E |
| TWR    | 126.200 | NAT | OP | 26°21'00"N | 127°46'00"E |
| APP-PR | 121.100 | NAT | OP | 26°21'00"N | 127°46'00"E |
| APP-PR | 132.800 | NAT | OP | 26°21'00"N | 127°46'00"E |
| APP-PR | 134.100 | NAT | OP | 26°21'00"N | 127°46'00"E |
| ATIS   | 124.200 | NAT | OP | 26°21'00"N | 127°46'00"E |
| CD     | 123.300 | NAT | OP | 26°21'00"N | 127°46'00"E |

|         |        |         |               |           |              |   |     |                    |            |
|---------|--------|---------|---------------|-----------|--------------|---|-----|--------------------|------------|
| E 71559 | IZUMO  | 122.700 | FIR-U 260/450 | 35025'00" | N 132D53'00" | E | NAT | 01/01/1999         | Expert     |
| E 71560 | IZUMO  | 126.200 | FIR-U 260/450 | 35025'00" | N 132D53'00" | E | NAT | 01/01/1999         | Expert     |
| E 71568 | KADENA | 118.500 | AS 5/1        | 26021'00" | N 127D46'00" | E | NAT | 30/12/2013         | PU         |
| E 71563 | KADENA | 119.100 | APP-L 50/120  | 26020'00" | N 127D45'00" | E | NAT | 30/12/2013         | PU         |
| E 71570 | KADENA | 121.100 | APP-U 150/450 | 26021'00" | N 127D46'00" | E | NAT | Precision radar    | 30/12/2013 |
| E 71565 | KADENA | 123.300 | APP-L 50/120  | 26021'00" | N 127D46'00" | E | NAT | Clearance delivery | 30/12/2013 |
| E 75983 | KADENA | 124.200 | ATIS 260/450  | 26021'00" | N 127D46'00" | E | NAT | FI 30Dec13         | 30/12/2013 |
| E 71569 | KADENA | 126.200 | TWR 25/40     | 26021'00" | N 127D46'00" | E | NAT | 30/12/2013         | PU         |
| E 71562 | KADENA | 126.500 | APP-U 150/450 | 26020'00" | N 127D45'00" | E | NAT | Precision radar    | 30/12/2013 |
| E 71567 | KADENA | 131.100 | U 0/0         | 26020'00" | N 127D45'00" | E | NAT | 30/12/2013         | PU         |
| E 75981 | KADENA | 131.400 | APP-L 50/120  | 26021'00" | N 127D46'00" | E | NAT | FI 30Dec13         | 30/12/2013 |
| E 71566 | KADENA | 131.800 | U 0/0         | 26020'00" | N 127D45'00" | E | NAT | 30/12/2013         | PU         |
| E 71571 | KADENA | 131.900 | U 0/0         | 26020'00" | N 127D45'00" | E | NAT | 30/12/2013         | PU         |
| E 75982 | KADENA | 132.800 | APP-U 150/450 | 26021'00" | N 127D46'00" | E | NAT | FI 30Dec13         | 30/12/2013 |
| E 71564 | KADENA | 134.100 | APP-U 150/450 | 26021'00" | N 127D46'00" | E | NAT | Precision radar    | 30/12/2013 |
| E 71561 | KADENA | 135.900 | APP-L 50/120  | 26020'00" | N 127D45'00" | E | NAT | Surveillance radar | 30/12/2013 |

198 KAGOSHIMA

|     |        |         |      |    |            |             |
|-----|--------|---------|------|----|------------|-------------|
| 199 | SMC    | 121.700 | ICAO | OP | 31°48'00"N | 130°43'00"E |
| 200 | TWR    | 118.200 | ICAO | OP | 31°48'00"N | 130°43'00"E |
| 201 | TWR    | 126.200 | ICAO | OP | 31°48'00"N | 130°43'00"E |
| 202 | IS     | 121.800 | NAT  | OP | 31°48'00"N | 130°43'00"E |
| 203 | APP-L  | 126.000 | ICAO | OP | 31°48'00"N | 130°43'00"E |
| 204 | APP-SR | 120.800 | ICAO | OP | 31°48'00"N | 130°43'00"E |
| 205 | APP-L  | 119.400 | ICAO | OP | 31°48'00"N | 130°43'00"E |
| 206 | APP-L  | 120.000 | ICAO | OP | 31°48'00"N | 130°43'00"E |
| 207 | ATIS   | 127.050 | IS   | OP | 31°48'00"N | 130°43'00"E |
| 208 | IS     | 135.800 | ICAO | OP | 31°23'00"N | 130°16'00"E |
| 209 | IS     | 134.800 | ICAO | OP | 28°28'00"N | 129°41'00"E |
| 210 | AFIS   | 128.600 | NAT  | OP | 27°26'00"N | 128°42'00"E |

KAGOSHIMA

|          |         |      |    |            |             |
|----------|---------|------|----|------------|-------------|
| SMC      | 121.700 | ICAO | OP | 31°48'00"N | 130°43'00"E |
| APP-L    | 120.000 | NAT  | OP | 31°48'00"N | 130°43'00"E |
| TWR      | 118.200 | ICAO | OP | 31°48'00"N | 130°43'00"E |
| TWR      | 126.200 | NAT  | OP | 31°48'00"N | 130°43'00"E |
| APP-I    | 120.500 | NAT  | OP | 31°48'00"N | 130°43'00"E |
| APP-I    | 126.000 | ICAO | OP | 31°48'00"N | 130°43'00"E |
| APP-SR-I | 119.400 | ICAO | OP | 31°48'00"N | 130°43'00"E |
| APP-SR-I | 120.800 | ICAO | OP | 31°48'00"N | 130°43'00"E |
| FIS      | 134.800 | NAT  | OP | 28°28'00"N | 129°41'00"E |
| FIS      | 135.800 | NAT  | OP | 31°23'00"N | 130°16'00"E |
| ATIS     | 127.050 | NAT  | OP | 31°48'00"N | 130°43'00"E |
| AFIS     | 128.600 | NAT  | OP | 27°26'00"N | 128°42'00"E |
| CD       | 121.800 | NAT  | OP | 31°48'00"N | 130°43'00"E |

|         |           |         |               |           |              |   |      |                    |            |
|---------|-----------|---------|---------------|-----------|--------------|---|------|--------------------|------------|
| E 71578 | KAGOSHIMA | 118.200 | TWR 25/40     | 31048'00" | N 130D43'00" | E | ICAO | 01/01/1999         | Expert     |
| E 71576 | KAGOSHIMA | 119.400 | APP-I 75/250  | 31048'00" | N 130D43'00" | E | ICAO | Surveillance radar | 30/12/2013 |
| E 75985 | KAGOSHIMA | 120.000 | APP-L 50/120  | 31048'00" | N 130D43'00" | E | NAT  | FI 30Dec13         | 30/12/2013 |
| E 71574 | KAGOSHIMA | 120.500 | APP-I 75/250  | 31048'00" | N 130D44'00" | E | NAT  | 01/01/1999         | Expert     |
| E 71575 | KAGOSHIMA | 120.800 | APP-I 75/250  | 31048'00" | N 130D42'00" | E | ICAO | Surveillance radar | 30/12/2013 |
| E 71577 | KAGOSHIMA | 121.700 | AS 5/1        | 31048'00" | N 130D43'00" | E | ICAO | 01/01/1999         | Expert     |
| E 75984 | KAGOSHIMA | 121.800 | APP-L 50/120  | 31048'00" | N 130D43'00" | E | NAT  | FI 30Dec13         | 30/12/2013 |
| E 71573 | KAGOSHIMA | 126.000 | APP-I 75/250  | 31048'00" | N 130D43'00" | E | ICAO | 01/01/1999         | Expert     |
| E 71572 | KAGOSHIMA | 126.200 | TWR 25/40     | 31048'00" | N 130D43'00" | E | NAT  | 01/01/1999         | Expert     |
| E 71579 | KAGOSHIMA | 127.050 | ATIS 260/450  | 31048'00" | N 130D43'00" | E | NAT  | 01/01/1999         | Expert     |
| E 75988 | KAGOSHIMA | 128.600 | AFIS 25/40    | 27D26'00" | N 128D42'00" | E | NAT  | FI OKI NOERABU     | 30/12/2013 |
| E 75987 | KAGOSHIMA | 134.800 | FIR-U 260/450 | 28D28'00" | N 129D41'00" | E | NAT  | FI AMAMI           | 30/12/2013 |
| E 75986 | KAGOSHIMA | 135.800 | FIR-U 260/450 | 31D23'00" | N 130D16'00" | E | NAT  | FI KASEDA          | 30/12/2013 |

211 KAMIGOTO

|     |    |         |     |    |            |             |
|-----|----|---------|-----|----|------------|-------------|
| 212 | IS | 118.000 | NAT | OP | 33°01'00"N | 129°11'00"E |
|-----|----|---------|-----|----|------------|-------------|

KAMIGOTO

|     |         |     |    |            |             |
|-----|---------|-----|----|------------|-------------|
| FIS | 118.000 | NAT | OP | 33°01'00"N | 129°11'00"E |
|-----|---------|-----|----|------------|-------------|

|         |          |         |               |           |              |   |     |                 |            |
|---------|----------|---------|---------------|-----------|--------------|---|-----|-----------------|------------|
| E 75989 | KAMIGOTO | 118.000 | FIR-U 260/450 | 33001'00" | N 129D11'00" | E | NAT | FI RAG FUKUJOKA | 30/12/2013 |
|---------|----------|---------|---------------|-----------|--------------|---|-----|-----------------|------------|

283 KANAZAWAKOMATSU ← copy frm #283

|     |         |         |     |    |            |             |
|-----|---------|---------|-----|----|------------|-------------|
| 284 | APP-SR  | 120.100 | NAT | OP | 36°24'00"N | 136°24'00"E |
| 285 | APP-SR  | 121.250 | NAT | OP | 36°24'00"N | 136°24'00"E |
| 286 | APP-L   | 127.950 | NAT | OP | 36°24'00"N | 136°24'00"E |
| 287 | TWR     | 126.200 | NAT | OP | 36°24'00"N | 136°24'00"E |
| 288 | TWR     | 118.250 | NAT | OP | 36°24'00"N | 136°24'00"E |
| 289 | TWR     | 123.100 | NAT | OP | 36°24'00"N | 136°24'00"E |
| 290 | SMC     | 121.700 | NAT | OP | 36°24'00"N | 136°24'00"E |
| 291 | APP-PAR | 125.300 | NAT | OP | 36°24'00"N | 136°24'00"E |
| 292 | APP-PAR | 134.100 | NAT | OP | 36°24'00"N | 136°24'00"E |

KANAZAWAKOMATSU

|          |         |     |    |            |             |
|----------|---------|-----|----|------------|-------------|
| SMC      | 121.700 | NAT | OP | 36°24'00"N | 136°24'00"E |
| APP-L    | 127.950 | NAT | OP | 36°24'00"N | 136°24'00"E |
| TWR      | 118.250 | NAT | OP | 36°24'00"N | 136°24'00"E |
| TWR      | 126.200 | NAT | OP | 36°24'00"N | 136°24'00"E |
| APP-SR   | 120.100 | NAT | OP | 36°24'00"N | 136°24'00"E |
| APP-SR-I | 121.250 | NAT | OP | 36°24'00"N | 136°24'00"E |

|         |                  |         |               |           |              |   |     |                     |                     |
|---------|------------------|---------|---------------|-----------|--------------|---|-----|---------------------|---------------------|
| E 76022 | KANAZAWA KOMATSU | 118.250 | TWR 25/40     | 36024'00" | N 136D24'00" | E | NAT | FI 30Dec13          | 30/12/2013          |
| E 71600 | KANAZAWA KOMATSU | 120.100 | APP-U 150/450 | 36024'00" | N 136D24'00" | E | NAT | Surveillance radar  | 21:02:03 30/12/2013 |
| E 76020 | KANAZAWA KOMATSU | 121.250 | APP-I 75/250  | 36024'00" | N 136D24'00" | E | NAT | FI 30Dec13          | 21:02:03 30/12/2013 |
| E 76023 | KANAZAWA KOMATSU | 121.700 | AS 5/1        | 36024'00" | N 136D24'00" | E | NAT | FI 30Dec13          | 21:02:03 30/12/2013 |
| E 71601 | KANAZAWA KOMATSU | 126.200 | TWR 25/40     | 36024'00" | N 136D24'00" | E | NAT | 21:02:03 30/12/2013 | PU                  |
| E 76021 | KANAZAWA KOMATSU | 127.950 | APP-L 50/120  | 36024'00" | N 136D24'00" | E | NAT | FI 30Dec13          | 21:02:03 30/12/2013 |

213 KANOYA

|     |     |         |     |    |            |             |
|-----|-----|---------|-----|----|------------|-------------|
| 214 | TWR | 133.400 | NAT | OP | 31°22'00"N | 130°50'00"E |
| 215 | TWR | 126.200 | NAT | OP | 31°22'00"N | 130°50'00"E |

KANOYA

|     |         |     |    |            |             |
|-----|---------|-----|----|------------|-------------|
| APP | 122.150 | NAT | OP | 31°22'00"N | 130°50'00"E |
| APP | 133.000 | NAT | OP | 31°22'00"N | 130°50'00"E |

|         |         |         |                 |           |              |   |     |                 |                     |
|---------|---------|---------|-----------------|-----------|--------------|---|-----|-----------------|---------------------|
| E 71602 | KOMATSU | 123.100 | TWR 25/40       | 36024'00" | N 136D24'00" | E | NAT | 01/01/1999      | Expert              |
| E 71599 | KOMATSU | 125.300 | APP-PAR 150/450 | 36024'00" | N 136D24'00" | E | NAT | Precision radar | 21:02:03 30/12/2013 |
| E 71598 | KOMATSU | 134.100 | APP-U 150/450   | 36024'00" | N 136D24'00" | E | NAT | Precision radar | 21:02:03 30/12/2013 |
| E 75990 | KANOYA  | 122.150 | APP-U 150/450   | 31D22'00" | N 130D50'00" | E | NAT | FI 30Dec13      | 21:02:03 30/12/2013 |
| E 71580 | KANOYA  | 125.300 | APP-U 150/450   | 31D22'00" | N 130D50'00" | E | NAT | Precision radar | 21:02:03 30/12/2013 |

← copy frm ROW #363

|       |         |         |     |    |            |             |
|-------|---------|---------|-----|----|------------|-------------|
| 216 g | APP     | 122.150 | NAT | OP | 31°22'00"N | 130°50'00"E |
| 217 g | APP     | 133.000 | NAT | OP | 31°22'00"N | 130°50'00"E |
| 218 g | APP-PAR | 134.100 | NAT | OP | 31°22'00"N | 130°50'00"E |
| 219 g | APP-PAR | 125.300 | NAT | OP | 31°22'00"N | 130°50'00"E |

220 KANSAI/INTL

|       |        |         |      |    |            |             |
|-------|--------|---------|------|----|------------|-------------|
| 221 g | APP-SR | 120.250 | ICAO | OP | 34°27'00"N | 135°15'00"E |
| 222 g | APP-SR | 120.450 | ICAO | OP | 34°27'00"N | 135°15'00"E |
| 223 g | APP-SR | 125.500 | ICAO | OP | 34°27'00"N | 135°15'00"E |
| 224   | APP-SR | 424.700 | ICAO | QR | 34°27'00"N | 135°15'00"E |
| 225 g | APP-SR | 121.150 | ICAO | OP | 34°27'00"N | 135°15'00"E |
| 226   | APP-SR | 426.000 | ICAO | QR | 34°27'00"N | 135°15'00"E |
| 227   | APP-SR | 424.800 | ICAO | QR | 34°27'00"N | 135°15'00"E |
| 228 g | APP-L  | 119.200 | ICAO | OP | 34°27'00"N | 135°15'00"E |
| 229 g | APP-L  | 120.650 | ICAO | OP | 34°27'00"N | 135°15'00"E |
| 230   | APP-L  | 119.500 | NAT  | OP | 34°27'00"N | 135°15'00"E |
| 231 g | APP-L  | 119.750 | NAT  | OP | 34°27'00"N | 135°15'00"E |
| 232 g | APP-L  | 120.850 | NAT  | OP | 34°27'00"N | 135°15'00"E |
| 233   | APP-L  | 424.800 | NAT  | QR | 34°27'00"N | 135°15'00"E |
| 234   | APP-L  | 426.000 | NAT  | QR | 34°27'00"N | 135°15'00"E |
| 235 g | APP-L  | 121.100 | NAT  | OP | 34°27'00"N | 135°15'00"E |
| 236 g | APP-L  | 125.300 | NAT  | OP | 34°27'00"N | 135°15'00"E |
| 237 g | TWR    | 118.200 | ICAO | OP | 34°27'00"N | 135°15'00"E |
| 238 g | TWR    | 118.050 | ICAO | OP | 34°27'00"N | 135°15'00"E |
| 239 g | TWR    | 126.200 | ICAO | OP | 34°27'00"N | 135°15'00"E |
| 240 g | SMC    | 121.600 | ICAO | OP | 34°27'00"N | 135°15'00"E |
| 241 g | SMC    | 121.650 | ICAO | OP | 34°27'00"N | 135°15'00"E |
| 242 g | CD     | 121.900 | NAT  | OP | 34°27'00"N | 135°15'00"E |
| 243   | CD     | 126.200 | NAT  | OP | 34°27'00"N | 135°15'00"E |
| 244 g | ATIS   | 127.850 | ICAO | OP | 34°26'00"N | 135°14'00"E |

245 KASUMIGAURA

|       |            |         |     |    |            |             |
|-------|------------|---------|-----|----|------------|-------------|
| 246 g | TWR        | 126.200 | NAT | OP | 36°02'00"N | 140°12'00"E |
| 247 g | TWR        | 122.200 | NAT | OP | 36°02'00"N | 140°12'00"E |
| 248 g | TWR        | 123.100 | NAT | OP | 36°02'00"N | 140°12'00"E |
| 249   | KASUMINOME |         |     |    |            |             |
| 250 g | TWR        | 122.200 | NAT | OP | 38°14'00"N | 140°55'00"E |
| 251   | TWR        | 126.200 | NAT | OP | 38°14'00"N | 140°55'00"E |
| 252   | TWR        | 123.100 | NAT | OP | 38°14'00"N | 140°55'00"E |

253 KERAMA

|       |     |         |     |    |            |                      |
|-------|-----|---------|-----|----|------------|----------------------|
| 254 g | FIS | 118.250 | NAT | OP | 26°10'00"N | 127°18'00"E RAG_NAHA |
|-------|-----|---------|-----|----|------------|----------------------|

255 KIKAI

|       |     |         |     |    |            |                           |
|-------|-----|---------|-----|----|------------|---------------------------|
| 256 g | FIS | 118.000 | NAT | OP | 28°19'00"N | 129°55'00"E RAG_KAGOSHIMA |
|-------|-----|---------|-----|----|------------|---------------------------|

257 KISARAZU

|        |         |     |    |        |         |
|--------|---------|-----|----|--------|---------|
| TWR    | 126.200 | NAT | OP | 31°2'N | 130°5'E |
| TWR    | 133.400 | NAT | OP | 31°2'N | 130°5'E |
| APP-FR | 125.300 | NAT | OP | 31°2'N | 130°5'E |
| APP-FR | 134.100 | NAT | OP | 31°2'N | 130°5'E |

KANSAI/INTL

|        |         |     |    |        |         |    |           |
|--------|---------|-----|----|--------|---------|----|-----------|
| SMC    | 121.600 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| SMC    | 121.650 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| APP-L  | 119.200 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| APP-L  | 119.750 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| APP-L  | 120.650 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| APP-L  | 120.850 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| APP-L  | 121.100 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| APP-L  | 125.300 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| TWR    | 118.050 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| TWR    | 118.200 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| TWR    | 126.200 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| APP-SR | 120.250 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| APP-SR | 120.450 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| APP-SR | 121.150 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| APP-SR | 125.500 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| ATIS   | 127.850 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |
| CD     | 121.900 | NAT | OP | 34°2'N | 135°1'E | FI | 30-Dec-13 |

KASUMIGAURA

|     |         |     |    |        |         |    |           |
|-----|---------|-----|----|--------|---------|----|-----------|
| TWR | 122.200 | NAT | OP | 36°0'N | 140°1'E | FI | 30-Dec-13 |
| TWR | 123.100 | NAT | OP | 36°0'N | 140°1'E | FI | 30-Dec-13 |
| TWR | 126.200 | NAT | OP | 36°0'N | 140°1'E | FI | 30-Dec-13 |

KASUMINOME

|     |         |     |    |        |         |    |           |
|-----|---------|-----|----|--------|---------|----|-----------|
| TWR | 122.200 | NAT | OP | 38°1'N | 140°5'E | FI | 30-Dec-13 |
|-----|---------|-----|----|--------|---------|----|-----------|

KERAMA

|     |         |     |    |         |         |    |          |
|-----|---------|-----|----|---------|---------|----|----------|
| FIS | 118.250 | NAT | OP | 26°11'N | 127°1'E | FI | RAG_NAHA |
|-----|---------|-----|----|---------|---------|----|----------|

KIKAI

|     |         |     |    |         |         |    |               |
|-----|---------|-----|----|---------|---------|----|---------------|
| FIS | 118.000 | NAT | OP | 28°11'N | 129°5'E | FI | RAG_KOGOSHIMA |
|-----|---------|-----|----|---------|---------|----|---------------|

KISARAZU

|                     |         |               |           |              |       |   |    |
|---------------------|---------|---------------|-----------|--------------|-------|---|----|
| E 71583 KANOYA      | 126.200 | TWR 25/40     | 31022'00" | N 13005'00"  | E NAT | 30/12/2013                                | PU |
| E 71585 KANOYA      | 133.000 | APP-U 150/450 | 31022'00" | N 13005'00"  | E NAT | 30/12/2013                                | PU |
| E 71582 KANOYA      | 133.400 | TWR 25/40     | 31022'00" | N 13005'00"  | E NAT | 30/12/2013                                | PU |
| E 71581 KANOYA      | 133.960 | APP-U 150/450 | 31021'00" | N 13005'00"  | E NAT | 30/12/2013                                | PU |
| E 71584 KANOYA      | 134.100 | APP-U 150/450 | 31022'00" | N 13005'00"  | E NAT | Precision radar 30/12/2013                | PU |
| E 76002 KANSAI INTL | 118.050 | TWR 25/40     | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13 30/12/2013                     | PU |
| E 76001 KANSAI INTL | 118.200 | TWR 25/40     | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13 30/12/2013                     | PU |
| E 75995 KANSAI INTL | 119.200 | APP-L 50/120  | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13 30/12/2013                     | PU |
| E 75997 KANSAI INTL | 119.750 | APP-L 50/120  | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13 30/12/2013                     | PU |
| E 75991 KANSAI INTL | 120.250 | APP-U 150/450 | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13; Surveillance radar 30/12/2013 | PU |
| E 75992 KANSAI INTL | 120.450 | APP-U 150/450 | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13; Surveillance radar 30/12/2013 | PU |
| E 75996 KANSAI INTL | 120.650 | APP-L 50/120  | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13 30/12/2013                     | PU |
| E 75998 KANSAI INTL | 120.850 | APP-L 50/120  | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13 30/12/2013                     | PU |
| E 75999 KANSAI INTL | 121.100 | APP-L 50/120  | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13 30/12/2013                     | PU |
| E 75994 KANSAI INTL | 121.150 | APP-U 150/450 | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13; Surveillance radar 30/12/2013 | PU |
| E 76004 KANSAI INTL | 121.600 | AS 5/1        | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13 30/12/2013                     | PU |
| E 76005 KANSAI INTL | 121.650 | AS 5/1        | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13 30/12/2013                     | PU |
| E 76006 KANSAI INTL | 121.900 | APP-L 50/120  | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13; Clearance 30/12/2013          | PU |
| E 76000 KANSAI INTL | 125.300 | APP-L 50/120  | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13 30/12/2013                     | PU |
| E 75993 KANSAI INTL | 125.500 | APP-U 150/450 | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13; Surveillance radar 30/12/2013 | PU |
| E 76003 KANSAI INTL | 126.200 | TWR 25/40     | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13 30/12/2013                     | PU |
| E 76007 KANSAI INTL | 127.850 | ATIS 260/450  | 34027'00" | N 135D15'00" | E NAT | FI 30Dec13 30/12/2013                     | PU |

|     |                 |         |         |     |    |            |             |  |
|-----|-----------------|---------|---------|-----|----|------------|-------------|--|
| 258 | g               | TWR     | 126.200 | NAT | OP | 35°24'00"N | 139°55'00"E |  |
| 259 | g               | TWR     | 123.100 | NAT | OP | 35°24'00"N | 139°55'00"E |  |
| 258 |                 | TWR     | 440.600 | NAT | OP | 36°24'00"N | 136°24'00"E |  |
| 259 |                 | TWR     | 441.250 | NAT | OP | 36°24'00"N | 136°24'00"E |  |
| 260 | KITADAITO       |         |         |     |    |            |             |  |
| 261 | g               | TWR     | 126.200 | NAT | OP | 25°57'00"N | 131°20'00"E |  |
| 262 | KITAKYUSHU      |         |         |     |    |            |             |  |
| 263 | g               | TWR     | 118.850 | NAT | OP | 33°50'00"N | 131°02'00"E |  |
| 264 | g               | TWR     | 126.200 | NAT | OP | 33°50'00"N | 131°02'00"E |  |
| 265 | KOBE            |         |         |     |    |            |             |  |
| 266 |                 | APP-SR  | 424.160 | NAT | OP | 34°38'00"N | 135°14'00"E |  |
| 267 |                 | APP-SR  | 426.600 | NAT | OP | 34°38'00"N | 135°14'00"E |  |
| 268 |                 | APP-L   | 424.100 | NAT | OP | 34°38'00"N | 135°14'00"E |  |
| 269 |                 | APP-L   | 426.300 | NAT | OP | 34°38'00"N | 135°14'00"E |  |
| 270 | g               | TWR     | 118.500 | NAT | OP | 34°38'00"N | 135°14'00"E |  |
| 271 | g               | TWR     | 126.200 | NAT | OP | 34°38'00"N | 135°14'00"E |  |
| 272 | g               | ATIS    | 128.075 | NAT | OP | 34°38'00"N | 135°14'00"E |  |
| 273 | KOCHI           |         |         |     |    |            |             |  |
| 274 | g               | APP-SR  | 124.800 | NAT | OP | 33°33'00"N | 133°40'00"E |  |
| 275 | g               | APP-SR  | 125.000 | NAT | OP | 33°33'00"N | 133°40'00"E |  |
| 276 | g               | TWR     | 118.750 | NAT | OP | 33°33'00"N | 133°40'00"E |  |
| 277 | g               | TWR     | 126.200 | NAT | OP | 33°33'00"N | 133°40'00"E |  |
| 278 | g               | ATIS    | 126.450 | NAT | OP | 33°33'00"N | 133°40'00"E |  |
| 279 | KOHNAN          |         |         |     |    |            |             |  |
| 280 | g               | FIS     | 130.750 | NAT | OP | 34°35'00"N | 133°56'00"E |  |
| 283 | KANAZAWAKOMATSU |         |         |     |    |            |             |  |
| 284 |                 | APP-SR  | 120.100 | NAT | OP | 36°24'00"N | 136°24'00"E |  |
| 285 |                 | APP-SR  | 121.250 | NAT | OP | 36°24'00"N | 136°24'00"E |  |
| 286 |                 | APP-L   | 127.950 | NAT | OP | 36°24'00"N | 136°24'00"E |  |
| 287 |                 | TWR     | 126.200 | NAT | OP | 36°24'00"N | 136°24'00"E |  |
| 288 |                 | TWR     | 118.250 | NAT | OP | 36°24'00"N | 136°24'00"E |  |
| 289 |                 | TWR     | 123.100 | NAT | OP | 36°24'00"N | 136°24'00"E |  |
| 290 |                 | SMC     | 121.700 | NAT | OP | 36°24'00"N | 136°24'00"E |  |
| 291 |                 | APP-PAR | 125.300 | NAT | OP | 36°24'00"N | 136°24'00"E |  |
| 292 |                 | APP-PAR | 134.100 | NAT | OP | 36°24'00"N | 136°24'00"E |  |

|               |         |     |    |         |          |    |           |
|---------------|---------|-----|----|---------|----------|----|-----------|
| TWR           | 123.100 | NAT | OP | 35°2' N | 139°5' E |    |           |
| TWR           | 126.200 | NAT | OP | 35°2' N | 139°5' E |    |           |
| KITADAITO     |         |     |    |         |          |    |           |
| FIS           | 126.200 | NAT | OP | 25°5' N | 131°2' E | FI |           |
| KITAKYUSHU    |         |     |    |         |          |    |           |
| TWR           | 118.850 | NAT | OP | 33°5' N | 131°0' E |    |           |
| TWR           | 126.200 | NAT | OP | 33°5' N | 131°0' E | FI |           |
| KOBE          |         |     |    |         |          |    |           |
| TWR           | 118.500 | NAT | OP | 34°3' N | 135°1' E | FI |           |
| TWR           | 126.200 | NAT | OP | 34°3' N | 135°1' E | FI | 30-Dec-13 |
| ATIS          | 128.075 | NAT | OP | 34°3' N | 135°1' E | FI | 30-Dec-13 |
| KOCHI         |         |     |    |         |          |    |           |
| TWR           | 118.750 | NAT | OP | 33°3' N | 133°4' E |    |           |
| TWR           | 126.200 | NAT | OP | 33°3' N | 133°4' E |    |           |
| APP-SR        | 124.800 | NAT | OP | 33°3' N | 133°4' E |    |           |
| APP-SR        | 125.000 | NAT | OP | 33°3' N | 133°4' E |    |           |
| ATIS          | 126.450 | NAT | OP | 33°3' N | 133°4' E |    |           |
| KOHNAN        |         |     |    |         |          |    |           |
| FIS           | 130.750 | NAT | OP | 34°3' N | 133°5' E | FI | 30-Dec-13 |
| KOKURA        |         |     |    |         |          |    |           |
| TWR           | 118.300 | NAT | OP | 33°5' N | 130°5' E |    |           |
| TWR           | 126.200 | NAT | OP | 33°5' N | 130°5' E |    |           |
| KOMATSU       |         |     |    |         |          |    |           |
| TWR           | 123.100 | NAT | OP | 36°2' N | 136°2' E |    |           |
| APP-PAR       | 125.300 | NAT | OP | 36°2' N | 136°2' E |    |           |
| CHK @ row#284 |         |     |    |         |          |    |           |
| KOMATSUJIMA   |         |     |    |         |          |    |           |

|               |       |            |         |       |         |           |              |   |     |                       |                            |        |
|---------------|-------|------------|---------|-------|---------|-----------|--------------|---|-----|-----------------------|----------------------------|--------|
| E             | 71589 | KISARAZU   | 123.100 | TWR   | 25/40   | 35024'00" | N 139055'00" | E | NAT |                       | 30/12/2<br>013<br>21:02:03 | PU     |
| E             | 71588 | KISARAZU   | 126.200 | TWR   | 25/40   | 35024'00" | N 139055'00" | E | NAT |                       | 01/01/1<br>999<br>21:02:03 | Expert |
| KITADAITO     |       |            |         |       |         |           |              |   |     |                       |                            |        |
| E             | 76014 | KITADAITO  | 126.200 | FIR-U | 260/450 | 25057'00" | N 131020'00" | E | NAT | FI                    | 30/12/2<br>013<br>21:02:03 | PU     |
| KITAKYUSHU    |       |            |         |       |         |           |              |   |     |                       |                            |        |
| E             | 71590 | KITAKYUSHU | 118.850 | TWR   | 25/40   | 33050'00" | N 131002'00" | E | NAT |                       | 30/12/2<br>013<br>21:02:03 | PU     |
| E             | 76015 | KITAKYUSHU | 126.200 | TWR   | 25/40   | 33050'00" | N 131002'00" | E | NAT | FI                    | 30/12/2<br>013<br>21:02:03 | PU     |
| KOBE          |       |            |         |       |         |           |              |   |     |                       |                            |        |
| E             | 76016 | KOBE       | 118.500 | TWR   | 25/40   | 34038'00" | N 135014'00" | E | NAT | FI                    | 30/12/2<br>013<br>21:02:03 | PU     |
| E             | 76017 | KOBE       | 126.200 | TWR   | 25/40   | 34038'00" | N 135014'00" | E | NAT | FI                    | 30Dec13                    | PU     |
| E             | 76018 | KOBE       | 128.075 | ATIS  | 260/450 | 34038'00" | N 135014'00" | E | NAT | FI                    | 30Dec13                    | PU     |
| KOCHI         |       |            |         |       |         |           |              |   |     |                       |                            |        |
| E             | 71591 | KOCHI      | 118.750 | TWR   | 25/40   | 33033'00" | N 133040'00" | E | NAT |                       | 01/01/1<br>999<br>21:02:03 | Expert |
| E             | 71593 | KOCHI      | 124.800 | APP-U | 150/450 | 33033'00" | N 133040'00" | E | NAT | Surveillance<br>radar | 30/12/2<br>013<br>21:02:03 | PU     |
| E             | 71592 | KOCHI      | 125.000 | APP-U | 150/450 | 33033'00" | N 133040'00" | E | NAT | Surveillance<br>radar | 30/12/2<br>013<br>21:02:03 | PU     |
| E             | 71594 | KOCHI      | 126.200 | TWR   | 25/40   | 33033'00" | N 133040'00" | E | NAT |                       | 01/01/1<br>999<br>21:02:03 | Expert |
| E             | 71595 | KOCHI      | 126.450 | ATIS  | 260/450 | 33033'00" | N 133040'00" | E | NAT |                       | 30/12/2<br>013<br>21:02:03 | PU     |
| KOHNAN        |       |            |         |       |         |           |              |   |     |                       |                            |        |
| E             | 76019 | KOHNAN     | 130.750 | FIR-U | 260/450 | 34035'00" | N 133056'00" | E | NAT | FI                    | 30Dec13                    | PU     |
| E             | 71596 | KOKURA     | 118.300 | TWR   | 25/40   | 33050'00" | N 130057'00" | E | NAT |                       | 01/01/1<br>999<br>21:02:03 | Expert |
| E             | 71597 | KOKURA     | 126.200 | TWR   | 25/40   | 33050'00" | N 130057'00" | E | NAT |                       | 01/01/1<br>999<br>21:02:03 | Expert |
| KOMATSU       |       |            |         |       |         |           |              |   |     |                       |                            |        |
| E             | 71602 | KOMATSU    | 123.100 | TWR   | 25/40   | 36024'00" | N 136024'00" | E | NAT |                       | 30/12/2<br>013<br>21:02:03 | PU     |
| E             | 71599 | KOMATSU    | 125.300 | APP-U | 150/450 | 36024'00" | N 136024'00" | E | NAT | Precision<br>radar    | 01/01/1<br>999<br>21:02:03 | Expert |
| E             | 71598 | KOMATSU    | 134.100 | APP-U | 150/450 | 36024'00" | N 136024'00" | E | NAT | Precision<br>radar    | 30/12/2<br>013<br>21:02:03 | PU     |
| CHK @ row#284 |       |            |         |       |         |           |              |   |     |                       |                            |        |



|              |         |         |     |    |            |             |
|--------------|---------|---------|-----|----|------------|-------------|
| 332          | TWR     | 126.200 | NAT | OP | 43°53'00"N | 144°10'00"E |
| 333 METABARU |         |         |     |    |            |             |
| 334 g        | TWR     | 126.200 | NAT | OP | 33°20'00"N | 130°25'00"E |
| 335 g        | TWR     | 123.100 | NAT | OP | 33°20'00"N | 130°25'00"E |
| 336 MIHO     |         |         |     |    |            |             |
| 337 g        | APP-SR  | 120.100 | NAT | OP | 35°30'00"N | 133°14'00"E |
| 338 g        | APP-SR  | 125.400 | NAT | OP | 35°30'00"N | 133°14'00"E |
| 339 g        | TWR     | 118.000 | NAT | OP | 35°30'00"N | 133°14'00"E |
| 340 g        | TWR     | 126.200 | NAT | OP | 35°30'00"N | 133°14'00"E |
| 341 g        | TWR     | 123.100 | NAT | OP | 35°30'00"N | 133°14'00"E |
| 342 g        | APP-PAR | 125.300 | NAT | OP | 35°30'00"N | 133°14'00"E |
| 343 g        | APP-PAR | 134.100 | NAT | OP | 35°30'00"N | 133°14'00"E |
| 344          | APP-PAR | 441.600 | NAT | OP | 36°30'00"N | 143°44'00"E |

METABARU

MIHO

MINAMITORISHIMA

MINAMIDAITO

MISAWA

|                      |        |         |     |    |            |                      |
|----------------------|--------|---------|-----|----|------------|----------------------|
| 346 MINAMI TORISHIMA |        |         |     |    |            |                      |
| 347 g                | FIS    | 126.200 | NAT | OP | 24°17'00"N | 153°59'00"E          |
| 348 MINAMIDAITO      |        |         |     |    |            |                      |
| 349 g                | FIS    | 126.200 | NAT | OP | 25°51'46"N | 131°15'22"E RAG_NAHA |
| 350 MISAWA           |        |         |     |    |            |                      |
| 351 g                | TWR    | 118.100 | NAT | OP | 40°42'00"N | 141°22'00"E          |
| 352 g                | TWR    | 126.200 | NAT | OP | 40°42'00"N | 141°22'00"E          |
| 353 g                | TWR    | 125.300 | NAT | OP | 40°42'00"N | 141°22'00"E          |
| 354 g                | TWR    | 123.100 | NAT | OP | 40°42'00"N | 141°22'00"E          |
| 355 g                | APP-SR | 120.700 | NAT | OP | 40°42'00"N | 141°22'00"E          |
| 356 g                | APP-L  | 124.050 | NAT | OP | 40°42'00"N | 141°22'00"E          |
| 357 g                | APP-SR | 134.100 | NAT | OP | 40°42'00"N | 141°22'00"E          |
| 358 g                | APP-SR | 120.100 | NAT | OP | 40°42'00"N | 141°22'00"E          |
| 359 g                | ATIS   | 128.400 | NAT | OP | 40°42'00"N | 141°22'00"E          |

|        |         |     |    |        |         |    |                  |         |               |           |              |       |                    |            |          |    |
|--------|---------|-----|----|--------|---------|----|------------------|---------|---------------|-----------|--------------|-------|--------------------|------------|----------|----|
| TWR    | 126.200 | NAT | OP | 43°5'N | 144°1'E | E  | 71624 MEMANBETSU | 126.200 | TWR 25/40     | 43D53'00" | N 144D10'00" | E NAT | 30/12/2013         | 21:02:03   | PU       |    |
| TWR    | 123.100 | NAT | OP | 33°2'N | 130°2'E | E  | 71626 METABARU   | 123.100 | TWR 25/40     | 33D20'00" | N 130D25'00" | E NAT | 30/12/2013         | 21:02:03   | PU       |    |
| TWR    | 126.200 | NAT | OP | 33°2'N | 130°2'E | E  | 71625 METABARU   | 126.200 | TWR 25/40     | 33D20'00" | N 130D25'00" | E NAT | 30/12/2013         | 21:02:03   | PU       |    |
| TWR    | 118.000 | NAT | OP | 35°3'N | 133°1'E | E  | 71627 MIHO       | 118.000 | TWR 25/40     | 35D30'00" | N 133D14'00" | E NAT | 30/12/2013         | 21:02:03   | PU       |    |
| TWR    | 123.100 | NAT | OP | 35°3'N | 133°1'E | E  | 71628 MIHO       | 123.100 | APP-U 150/450 | 35D30'00" | N 133D14'00" | E NAT | Surveillance radar | 30/12/2013 | 21:02:03 | PU |
| TWR    | 126.200 | NAT | OP | 35°3'N | 133°1'E | E  | 71630 MIHO       | 126.200 | TWR 25/40     | 35D30'00" | N 133D14'00" | E NAT | 30/12/2013         | 21:02:03   | PU       |    |
| APP-SR | 120.100 | NAT | OP | 35°3'N | 133°1'E | E  | 71632 MIHO       | 120.100 | APP-U 150/450 | 35D30'00" | N 133D14'00" | E NAT | Precision radar    | 30/12/2013 | 21:02:03 | PU |
| APP-SR | 125.400 | NAT | OP | 35°3'N | 133°1'E | FI | 76030 MIHO       | 125.400 | APP-U 150/450 | 35D30'00" | N 133D14'00" | E NAT | Surveillance radar | 30/12/2013 | 21:02:03 | PU |
| APP-PR | 125.300 | NAT | OP | 35°3'N | 133°1'E | E  | 71631 MIHO       | 125.300 | TWR 25/40     | 35D30'00" | N 133D14'00" | E NAT | 30/12/2013         | 21:02:03   | PU       |    |
| APP-PR | 134.100 | NAT | OP | 35°3'N | 133°1'E | E  | 71629 MIHO       | 134.100 | APP-U 150/450 | 35D30'00" | N 133D14'00" | E NAT | Precision radar    | 30/12/2013 | 21:02:03 | PU |

|        |         |     |    |        |         |          |                        |              |               |               |              |              |                    |                 |            |          |    |
|--------|---------|-----|----|--------|---------|----------|------------------------|--------------|---------------|---------------|--------------|--------------|--------------------|-----------------|------------|----------|----|
| FIS    | 126.200 | NAT | OP | 24°1'N | 153°5'E | E        | 71633 MINAMI TORISHIMA | 126.200      | FIR-U 260/450 | 24D17'00"     | N 153D59'00" | E NAT        | 30/12/2013         | 21:02:03        | PU         |          |    |
| FIS    | 126.200 | NAT | OP | 25°5'N | 131°1'E | RAG_NAHA | 71634 MINAMIDAITO      | 126.200      | FIR-U 260/450 | 25D51'46"     | N 131D15'22" | E NAT        | RAG_NAHA           | 30/12/2013      | 21:02:03   | PU       |    |
| APP-L  | 124.050 | NAT | OP | 40°4'N | 141°2'E | FI       | 30-Dec-13              | 71639 MISAWA | 118.100       | TWR 25/40     | 40D42'00"    | N 141D22'00" | E NAT              | 30/12/2013      | 21:02:03   | PU       |    |
| TWR    | 118.100 | NAT | OP | 40°4'N | 141°2'E | E        | 71641 MISAWA           | 120.100      | APP-U 150/450 | 40D42'00"     | N 141D22'00" | E NAT        | Precision radar    | 30/12/2013      | 21:02:03   | PU       |    |
| TWR    | 123.100 | NAT | OP | 40°4'N | 141°2'E | E        | 71635 MISAWA           | 120.700      | APP-U 150/450 | 40D42'00"     | N 141D22'00" | E NAT        | Surveillance radar | 30/12/2013      | 21:02:03   | PU       |    |
| TWR    | 125.300 | NAT | OP | 40°4'N | 141°2'E | E        | 71638 MISAWA           | 123.100      | TWR 25/40     | 40D42'00"     | N 141D22'00" | E NAT        | 30/12/2013         | 21:02:03        | PU         |          |    |
| TWR    | 126.200 | NAT | OP | 40°4'N | 141°2'E | E        | 76031 MISAWA           | 124.050      | APP-L 50/120  | 40D42'00"     | N 141D22'00" | E NAT        | FI 30Dec13         | 30/12/2013      | 21:02:03   | PU       |    |
| APP-SR | 120.700 | NAT | OP | 40°4'N | 141°2'E | E        | 71637 MISAWA           | 125.300      | TWR 25/40     | 40D42'00"     | N 141D22'00" | E NAT        | 30/12/2013         | 21:02:03        | PU         |          |    |
| APP-PR | 120.100 | NAT | OP | 40°4'N | 141°2'E | E        | 71640 MISAWA           | 126.200      | TWR 25/40     | 40D42'00"     | N 141D22'00" | E NAT        | 30/12/2013         | 21:02:03        | PU         |          |    |
| APP-PR | 134.100 | NAT | OP | 40°4'N | 141°2'E | E        | 76032 MISAWA           | 128.400      | ATIS 260/450  | 40D42'00"     | N 141D22'00" | E NAT        | FI 30Dec13         | 30/12/2013      | 21:02:03   | PU       |    |
| ATIS   | 128.400 | NAT | OP | 40°4'N | 141°2'E | FI       | 30-Dec-13              | 71636 MISAWA | 134.100       | APP-U 150/450 | 40D42'00"    | N 141D22'00" | E NAT              | Precision radar | 30/12/2013 | 21:02:03 | PU |

|                |        |         |     |    |            |                       |
|----------------|--------|---------|-----|----|------------|-----------------------|
| 360 MIYAKEJIMA |        |         |     |    |            |                       |
| 361            | FIS    | 118.050 | NAT | OP | 34°04'00"N | 139°34'00"E RAG_TOKYO |
| 362 MIYAKO     |        |         |     |    |            |                       |
| 363 g          | TWR    | 118.200 | NAT | OP | 24°47'00"N | 125°18'00"E           |
| 364 g          | TWR    | 126.200 | NAT | OP | 24°47'00"N | 125°18'00"E           |
| 365            | APP-SR | 426.900 | NAT | OP | 24°47'00"N | 125°18'00"E           |
| 366            | APP-SR | 424.900 | NAT | OP | 24°47'00"N | 125°18'00"E           |
| 367            | APP-SR | 428.900 | NAT | OP | 24°47'00"N | 125°18'00"E           |

MIYAKO

MIYAZAKI

|              |        |         |     |    |            |             |
|--------------|--------|---------|-----|----|------------|-------------|
| 368 MIYAZAKI |        |         |     |    |            |             |
| 369 g        | APP-SR | 120.900 | NAT | OP | 31°52'00"N | 131°27'00"E |
| 370 g        | APP-L  | 121.400 | NAT | OP | 31°52'00"N | 131°27'00"E |
| 371 g        | APP-L  | 120.100 | NAT | OP | 31°52'00"N | 131°27'00"E |
| 372 g        | TWR    | 118.300 | NAT | OP | 31°52'00"N | 131°27'00"E |

|        |         |     |    |        |         |           |                |                  |               |               |              |              |                    |            |            |          |    |
|--------|---------|-----|----|--------|---------|-----------|----------------|------------------|---------------|---------------|--------------|--------------|--------------------|------------|------------|----------|----|
| APP-SR | 118.050 | NAT | OP | 34°0'N | 129°3'E | RAG_Tokyo | E              | 71644 MIYAKOJIMA | 118.050       | FIR-U 260/450 | 34D04'00"    | N 129D34'00" | E NAT              | RAG_Tokyo  | 30/12/2013 | 21:02:03 | PU |
| SMC    | 121.900 | NAT | OP | 31°5'N | 131°2'E | E         | 71653 MIYAZAKI | 118.300          | TWR 25/40     | 31D52'00"     | N 131D27'00" | E NAT        | 30/12/2013         | 21:02:03   | PU         |          |    |
| APP-L  | 120.100 | NAT | OP | 31°5'N | 131°2'E | E         | 71650 MIYAZAKI | 120.100          | APP-L 50/120  | 31D52'00"     | N 131D27'00" | E NAT        | 30/12/2013         | 21:02:03   | PU         |          |    |
| APP-L  | 121.400 | NAT | OP | 31°5'N | 131°2'E | E         | 71654 MIYAZAKI | 120.900          | APP-U 150/450 | 31D52'00"     | N 131D27'00" | E NAT        | Surveillance radar | 30/12/2013 | 21:02:03   | PU       |    |
| TWR    | 118.300 | NAT | OP | 31°5'N | 131°2'E | E         | 76033 MIYAZAKI | 121.250          | TWR 25/40     | 31D52'00"     | N 131D27'00" | E NAT        | FI 30Dec13         | 30/12/2013 | 21:02:03   | PU       |    |

MIYAKOJIMA < = MIYAKEJIMAの間違い

< = MIYAKEJIMAの間違い

|       |      |         |     |    |            |             |
|-------|------|---------|-----|----|------------|-------------|
| 373 g | TWR  | 123.600 | NAT | OP | 31°52'00"N | 131°27'00"E |
| 374 g | TWR  | 126.200 | NAT | OP | 31°52'00"N | 131°27'00"E |
| 377 g | TWR  | 121.250 | NAT | OP | 31°52'00"N | 131°27'00"E |
| 375 g | SMC  | 121.900 | NAT | OP | 31°52'00"N | 131°27'00"E |
| 376 g | ATIS | 126.800 | NAT | OP | 31°52'00"N | 131°27'00"E |

378 MONBETSU

|       |     |         |     |    |            |             |                |
|-------|-----|---------|-----|----|------------|-------------|----------------|
| 379 g | FIS | 118.150 | NAT | OP | 44°18'00"N | 143°24'00"E | RAG_NEWCHITOSE |
|-------|-----|---------|-----|----|------------|-------------|----------------|

382 NAGASAKI

|       |        |         |      |    |            |             |
|-------|--------|---------|------|----|------------|-------------|
| 383 g | APP-L  | 118.175 | ICAO | OP | 32°55'00"N | 129°54'00"E |
| 384 g | APP-SR | 121.025 | ICAO | OP | 32°55'00"N | 129°54'00"E |
| 385 g | APP-L  | 121.000 | ICAO | OP | 32°55'00"N | 129°54'00"E |
| 386 g | APP-L  | 121.175 | ICAO | OP | 32°55'00"N | 129°54'00"E |
| 387 g | TWR    | 118.500 | ICAO | OP | 32°55'00"N | 129°54'00"E |
| 388 g | TWR    | 122.700 | ICAO | OP | 32°55'00"N | 129°54'00"E |
| 389 g | TWR    | 126.200 | ICAO | OP | 32°55'00"N | 129°54'00"E |
| 390   | SMC    | 121.600 | ICAO | OP | 32°55'00"N | 129°54'00"E |
| 391 g | ATIS   | 126.850 | ICAO | OP | 32°55'00"N | 129°54'00"E |
| 395   | SMC    | 424.700 | ICAO | OP | 42°46'00"N | 429°44'00"E |

392 NAGOYA

|        |         |         |     |    |            |             |
|--------|---------|---------|-----|----|------------|-------------|
| 393    | APP-L   | 424.050 | NAT | OP | 36°46'00"N | 436°56'00"E |
| 394    | APP-L   | 118.175 | NAT | OP | 35°15'00"N | 136°55'00"E |
| 395    | APP-SR  | 426.550 | NAT | OP | 36°46'00"N | 436°56'00"E |
| 396    | APP-L   | 121.225 | NAT | OP | 35°15'00"N | 136°55'00"E |
| 397    | APP-L   | 448.250 | NAT | OP | 36°46'00"N | 436°56'00"E |
| 398 cg | APP-L   | 121.175 | NAT | OP | 35°15'00"N | 136°55'00"E |
| 399 cg | TWR     | 118.700 | NAT | OP | 35°15'00"N | 136°55'00"E |
| 400 cg | TWR     | 122.700 | NAT | OP | 35°15'00"N | 136°55'00"E |
| 401 cg | TWR     | 123.100 | NAT | OP | 35°15'00"N | 136°55'00"E |
| 402 cg | SMC     | 121.700 | NAT | OP | 35°15'00"N | 136°55'00"E |
| 403 cg | CD      | 121.750 | NAT | OP | 35°15'00"N | 136°55'00"E |
| 404 cg | APP-PAR | 120.300 | NAT | OP | 35°15'00"N | 136°55'00"E |
| 405 cg | APP-PAR | 119.900 | NAT | OP | 35°15'00"N | 136°55'00"E |
| 406 cg | APP-PAR | 134.100 | NAT | OP | 35°15'00"N | 136°55'00"E |

407 NAHA

|        |        |         |     |    |            |             |            |
|--------|--------|---------|-----|----|------------|-------------|------------|
| 408 g  | APP-L  | 118.100 | NAT | OP | 26°21'00"N | 127°46'00"E | RAG_KADENA |
| 409 cg | APP-L  | 126.500 | NAT | OP | 26°21'00"N | 127°46'00"E | RAG_KADENA |
| 410    | APP-L  | 118.850 | NAT | OP | 26°12'00"N | 127°38'00"E |            |
| 411    | APP-L  | 135.900 | NAT | OP | 26°21'00"N | 127°46'00"E | RAG_KADENA |
| 412 cg | APP-SR | 120.000 | NAT | OP | 26°12'00"N | 127°38'00"E |            |
| 413 cg | APP-SR | 121.100 | NAT | OP | 26°12'00"N | 127°38'00"E |            |
| 414 cg | APP-SR | 122.450 | NAT | OP | 26°12'00"N | 127°38'00"E |            |

|        |         |     |    |        |         |    |           |
|--------|---------|-----|----|--------|---------|----|-----------|
| TWR    | 121.250 | NAT | OP | 31°5'N | 131°2'E | FI | 30-Dec-13 |
| TWR    | 123.600 | NAT | OP | 31°5'N | 131°2'E |    |           |
| TWR    | 126.200 | NAT | OP | 31°5'N | 131°2'E |    |           |
| APP-SR | 120.900 | NAT | OP | 31°5'N | 131°2'E |    |           |
| ATIS   | 126.800 | NAT | OP | 31°5'N | 131°2'E |    |           |

MONBETSU

|     |         |     |    |        |         |    |             |
|-----|---------|-----|----|--------|---------|----|-------------|
| FIS | 118.150 | NAT | OP | 44°1'N | 143°2'E | FI | RAG CHITOSE |
|-----|---------|-----|----|--------|---------|----|-------------|

NAGASAKI

|        |         |      |    |        |         |    |
|--------|---------|------|----|--------|---------|----|
| APP-L  | 118.175 | NAT  | OP | 32°5'N | 129°5'E | FI |
| APP-L  | 121.000 | ICAO | OP | 32°5'N | 129°5'E |    |
| APP-L  | 121.175 | NAT  | OP | 32°5'N | 129°5'E | FI |
| TWR    | 118.500 | ICAO | OP | 32°5'N | 129°5'E |    |
| TWR    | 122.700 | NAT  | OP | 32°5'N | 129°5'E |    |
| TWR    | 126.200 | NAT  | OP | 32°5'N | 129°5'E |    |
| APP-SR | 121.025 | NAT  | OP | 32°5'N | 129°5'E | FI |
| ATIS   | 126.850 | NAT  | OP | 32°5'N | 129°5'E |    |

NAGOYA

|          |         |      |    |        |         |    |
|----------|---------|------|----|--------|---------|----|
| SMC      | 121.700 | ICAO | OP | 35°1'N | 136°5'E |    |
| APP-L    | 121.175 | NAT  | OP | 35°1'N | 136°5'E | FI |
| TWR      | 118.000 | NAT  | OP | 35°1'N | 136°5'E |    |
| TWR      | 118.700 | ICAO | OP | 35°1'N | 136°5'E |    |
| TWR      | 122.700 | NAT  | OP | 35°1'N | 136°5'E |    |
| TWR      | 123.100 | NAT  | OP | 35°1'N | 136°5'E | FI |
| TWR      | 126.200 | NAT  | OP | 35°1'N | 136°5'E |    |
| APP-U    | 125.000 | NAT  | OP | 35°1'N | 136°5'E |    |
| APP-SR-I | 119.200 | ICAO | OP | 35°1'N | 136°5'E |    |
| APP-SR-I | 120.000 | ICAO | OP | 35°1'N | 136°5'E |    |
| APP-SR-I | 120.700 | NAT  | OP | 35°1'N | 136°5'E |    |
| APP-SR-I | 121.000 | NAT  | OP | 35°1'N | 136°5'E |    |
| APP-SR-I | 121.200 | NAT  | OP | 35°1'N | 136°5'E |    |
| APP-PR   | 119.900 | ICAO | OP | 35°1'N | 136°5'E |    |
| APP-PR   | 120.300 | NAT  | OP | 35°1'N | 136°5'E |    |
| APP-PR   | 134.100 | ICAO | OP | 35°1'N | 136°5'E |    |
| ATIS     | 126.400 | NAT  | OP | 35°1'N | 136°5'E |    |
| ATIS     | 127.200 | NAT  | OP | 35°1'N | 136°5'E |    |
| CD       | 121.750 | NAT  | OP | 35°1'N | 136°5'E |    |

NAHA

|        |         |      |    |        |         |    |
|--------|---------|------|----|--------|---------|----|
| SMC    | 121.800 | ICAO | OP | 26°1'N | 127°3'E |    |
| APP-L  | 126.500 | NAT  | OP | 26°2'N | 127°4'E |    |
| TWR    | 118.100 | ICAO | OP | 26°1'N | 127°3'E |    |
| TWR    | 126.200 | NAT  | OP | 26°1'N | 127°3'E |    |
| APP-SR | 120.000 | NAT  | OP | 26°1'N | 127°3'E |    |
| APP-SR | 122.450 | NAT  | OP | 26°1'N | 127°3'E |    |
| APP-SR | 125.550 | NAT  | OP | 26°1'N | 127°3'E | FI |

|                  |         |           |           |              |              |     |            |            |    |
|------------------|---------|-----------|-----------|--------------|--------------|-----|------------|------------|----|
| E 71649 MIYAZAKI | 121.400 | APP-L     | 50/120    | 31052'00"    | N 131D27'00" | E   | NAT        | 30/12/2013 | PU |
| E 71652 MIYAZAKI | 121.900 | AS 5/1    | 31052'00" | N 131D27'00" | E            | NAT | 30/12/2013 | PU         |    |
| E 71648 MIYAZAKI | 123.600 | TWR 25/40 | 31052'00" | N 131D27'00" | E            | NAT | 30/12/2013 | PU         |    |
| E 71646 MIYAZAKI | 126.200 | TWR 25/40 | 31052'00" | N 131D27'00" | E            | NAT | 30/12/2013 | PU         |    |
| E 71651 MIYAZAKI | 126.800 | ATIS      | 260/450   | 31052'00"    | N 131D27'00" | E   | NAT        | 30/12/2013 | PU |
| E 71647 MIYAZAKI | 127.800 | APP-U     | 150/450   | 31052'00"    | N 131D26'00" | E   | NAT        | 30/12/2013 | PU |

|                  |         |           |           |              |              |      |            |            |    |
|------------------|---------|-----------|-----------|--------------|--------------|------|------------|------------|----|
| E 76034 MONBETSU | 118.150 | FIR-U     | 260/450   | 44D18'00"    | N 143D24'00" | E    | NAT        | 30/12/2013 | PU |
| E 76035 NAGASAKI | 118.175 | APP-L     | 50/120    | 32D55'00"    | N 129D54'00" | E    | NAT        | 30/12/2013 | PU |
| E 71657 NAGASAKI | 118.500 | TWR 25/40 | 32D55'00" | N 129D54'00" | E            | ICAO | 30/12/2013 | PU         |    |
| E 71658 NAGASAKI | 120.200 | APP-I     | 75/250    | 32D55'00"    | N 129D55'00" | E    | ICAO       | 30/12/2013 | PU |
| E 71656 NAGASAKI | 121.000 | APP-L     | 50/120    | 32D55'00"    | N 129D54'00" | E    | ICAO       | 30/12/2013 | PU |
| E 76036 NAGASAKI | 121.025 | APP-U     | 150/450   | 32D55'00"    | N 129D54'00" | E    | NAT        | 30/12/2013 | PU |
| E 76037 NAGASAKI | 121.175 | APP-L     | 50/120    | 32D55'00"    | N 129D54'00" | E    | NAT        | 30/12/2013 | PU |
| E 71661 NAGASAKI | 122.700 | TWR 25/40 | 32D55'00" | N 129D54'00" | E            | NAT  | 30/12/2013 | PU         |    |
| E 71659 NAGASAKI | 123.100 | N/A       | 32D55'00" | N 129D55'00" | E            | NAT  | 30/12/2013 | PU         |    |
| E 71660 NAGASAKI | 126.200 | TWR 25/40 | 32D55'00" | N 129D54'00" | E            | NAT  | 30/12/2013 | PU         |    |
| E 71655 NAGASAKI | 128.850 | ATIS      | 260/450   | 32D55'00"    | N 129D54'00" | E    | NAT        | 30/12/2013 | PU |

|                |         |           |           |              |              |      |            |            |        |
|----------------|---------|-----------|-----------|--------------|--------------|------|------------|------------|--------|
| E 71671 NAGOYA | 118.000 | TWR 25/40 | 35D15'00" | N 136D55'00" | E            | NAT  | 30/12/2013 | Expert     |        |
| E 71669 NAGOYA | 118.700 | TWR 25/40 | 35D15'00" | N 136D55'00" | E            | ICAO | 30/12/2013 | Expert     |        |
| E 71677 NAGOYA | 119.200 | APP-I     | 75/250    | 35D15'00"    | N 136D55'00" | E    | ICAO       | 30/12/2013 | Expert |
| E 71663 NAGOYA | 119.900 | APP-U     | 150/450   | 35D15'00"    | N 136D55'00" | E    | ICAO       | 30/12/2013 | Expert |
| E 71670 NAGOYA | 120.000 | APP-I     | 75/250    | 35D15'00"    | N 136D55'00" | E    | ICAO       | 30/12/2013 | Expert |
| E 71665 NAGOYA | 120.300 | APP-U     | 150/450   | 35D15'00"    | N 136D55'00" | E    | NAT        | 30/12/2013 | Expert |
| E 71668 NAGOYA | 120.700 | APP-I     | 75/250    | 35D15'00"    | N 136D55'00" | E    | NAT        | 30/12/2013 | Expert |
| E 71667 NAGOYA | 121.000 | APP-I     | 75/250    | 35D15'00"    | N 136D55'00" | E    | NAT        | 30/12/2013 | Expert |
| E 76038 NAGOYA | 121.175 | APP-L     | 50/120    | 35D15'00"    | N 136D55'00" | E    | NAT        | 30/12/2013 | PU     |
| E 71666 NAGOYA | 121.200 | APP-I     | 75/250    | 35D15'00"    | N 136D55'00" | E    | NAT        | 30/12/2013 | Expert |
| E 71674 NAGOYA | 121.700 | AS 5/1    | 35D15'00" | N 136D55'00" | E            | ICAO | 30/12/2013 | Expert     |        |
| E 76040 NAGOYA | 121.750 | APP-L     | 50/120    | 35D15'00"    | N 136D55'00" | E    | NAT        | 30/12/2013 | PU     |
| E 71672 NAGOYA | 122.700 | TWR 25/40 | 35D15'00" | N 136D55'00" | E            | NAT  | 30/12/2013 | Expert     |        |
| E 76039 NAGOYA | 123.100 | TWR 25/40 | 35D15'00" | N 136D55'00" | E            | NAT  | 30/12/2013 | PU         |        |
| E 71664 NAGOYA | 125.000 | APP-U     | 150/450   | 35D15'00"    | N 136D55'00" | E    | NAT        | 30/12/2013 | Expert |
| E 71673 NAGOYA | 126.200 | TWR 25/40 | 35D15'00" | N 136D55'00" | E            | NAT  | 30/12/2013 | Expert     |        |
| E 71675 NAGOYA | 126.400 | ATIS      | 260/450   | 35D15'00"    | N 136D55'00" | E    | NAT        | 30/12/2013 | Expert |
| E 71676 NAGOYA | 127.200 | ATIS      | 260/450   | 35D15'00"    | N 136D55'00" | E    | NAT        | 30/12/2013 | Expert |
| E 71662 NAGOYA | 134.100 | APP-U     | 150/450   | 35D15'00"    | N 136D55'00" | E    | ICAO       | 30/12/2013 | Expert |

|              |         |            |           |              |              |      |            |            |    |
|--------------|---------|------------|-----------|--------------|--------------|------|------------|------------|----|
| E 71696 NAHA | 118.100 | TWR 25/40  | 26D12'00" | N 127D38'00" | E            | ICAO | 30/12/2013 | PU         |    |
| E 71689 NAHA | 118.400 | AFIS 25/40 | 26D11'00" | N 127D40'00" | E            | NAT  | 30/12/2013 | PU         |    |
| E 71685 NAHA | 118.600 | APP-U      | 150/450   | 26D11'00"    | N 127D40'00" | E    | ICAO       | 30/12/2013 | PU |
| E 71688 NAHA | 119.000 | APP-I      | 75/250    | 26D11'00"    | N 127D40'00" | E    | NAT        | 30/12/2013 | PU |
| E 71681 NAHA | 119.100 | APP-L      | 50/120    | 26D20'00"    | N 127D40'00" | E    | NAT        | 30/12/2013 | PU |
| E 71684 NAHA | 119.500 | APP-U      | 150/450   | 26D12'00"    | N 127D38'00" | E    | ICAO       | 30/12/2013 | PU |
| E 71697 NAHA | 120.000 | APP-U      | 150/450   | 26D12'00"    | N 127D38'00" | E    | NAT        | 30/12/2013 | PU |

|     |    |         |         |      |    |            |                     |
|-----|----|---------|---------|------|----|------------|---------------------|
| 415 | og | APP-PR  | 125.550 | NAT  | OP | 26°12'00"N | 127°38'00"E         |
| 416 | og | TWR     | 118.100 | ICAO | OP | 26°12'00"N | 127°38'00"E         |
| 417 | og | TWR     | 126.200 | ICAO | OP | 26°12'00"N | 127°38'00"E         |
| 418 | og | SMC     | 121.800 | ICAO | OP | 26°12'00"N | 127°38'00"E         |
| 419 | og | FIS     | 122.075 | NAT  | OP | 26°12'00"N | 127°38'00"E         |
| 420 | og | APP-PAR | 119.500 | ICAO | OP | 26°12'00"N | 127°38'00"E         |
| 421 | og | APP-PAR | 124.700 | ICAO | OP | 26°12'00"N | 127°38'00"E         |
| 422 | og | ATIS    | 127.800 | ICAO | OP | 26°12'00"N | 127°39'00"E         |
| 423 | og | FIS     | 127.100 | ICAO | OP | 26°38'00"N | 127°56'00"E YAEDAKE |
| 424 | og | FIS     | 134.750 | ICAO | OP | 24°47'00"N | 125°18'00"E MIYAKO  |

|        |         |      |    |         |                    |
|--------|---------|------|----|---------|--------------------|
| APP-PR | 119.500 | ICAO | OP | 26°11'N | 127°3 E            |
| APP-PR | 121.100 | NAT  | OP | 26°11'N | 127°3 E            |
| APP-PR | 124.700 | NAT  | OP | 26°11'N | 127°3 E            |
| FIS    | 127.100 | NAT  | OP | 26°3'N  | 127°5 E FI YAEDAKE |
| FIS    | 134.750 | NAT  | OP | 24°4'N  | 125°1 E MIYAKO     |
| ATIS   | 127.800 | NAT  | OP | 26°11'N | 127°3 E            |
| CD     | 122.075 | NAT  | OP | 26°11'N | 127°3 E FI         |

|         |      |         |               |           |              |        |                       |             |    |
|---------|------|---------|---------------|-----------|--------------|--------|-----------------------|-------------|----|
| E 71695 | NAHA | 120.300 | TWR 25/40     | 26D11'00" | N 127D40'00" | E NAT  | Precision radar       | 30/12/2 013 | PU |
| E 71683 | NAHA | 121.100 | APP-U 150/450 | 26D12'00" | N 127D38'00" | E NAT  | Precision radar       | 30/12/2 013 | PU |
| E 71693 | NAHA | 121.800 | AS 5/1        | 26D12'00" | N 127D38'00" | E ICAO |                       | 30/12/2 013 | PU |
| E 76043 | NAHA | 122.075 | APP-L 50/120  | 26D12'00" | N 127D38'00" | E NAT  | FI Clearance delivery | 30/12/2 013 | PU |
| E 76041 | NAHA | 122.450 | APP-U 150/450 | 26D12'00" | N 127D38'00" | E NAT  | Surveillance radar    | 30/12/2 013 | PU |
| E 71687 | NAHA | 123.800 | APP-U 150/450 | 26D11'00" | N 127D40'00" | E NAT  | Surveillance radar    | 30/12/2 013 | PU |
| E 71690 | NAHA | 124.400 | APP-U 150/450 | 26D11'00" | N 127D40'00" | E NAT  | Surveillance radar    | 30/12/2 013 | PU |
| E 71679 | NAHA | 124.700 | APP-U 150/450 | 26D12'00" | N 127D38'00" | E NAT  | Precision radar       | 30/12/2 013 | PU |
| E 71678 | NAHA | 125.200 | APP-U 150/450 | 26D11'00" | N 127D39'00" | E NAT  | Precision radar       | 30/12/2 013 | PU |
| E 76042 | NAHA | 125.550 | APP-U 150/450 | 26D12'00" | N 127D38'00" | E NAT  | FI Surveillance       | 30/12/2 013 | PU |
| E 71694 | NAHA | 126.200 | TWR 25/40     | 26D12'00" | N 127D38'00" | E NAT  |                       | 30/12/2 013 | PU |
| E 71680 | NAHA | 126.500 | APP-L 50/120  | 26D21'00" | N 127D46'00" | E NAT  |                       | 30/12/2 013 | PU |
| E 71692 | NAHA | 126.900 | FIR-U 260/450 | 26D10'00" | N 127D46'00" | E ICAO |                       | 30/12/2 013 | PU |
| E 76044 | NAHA | 127.100 | FIR-U 260/450 | 26D38'00" | N 127D56'00" | E NAT  | FI YAEDAKE            | 30/12/2 013 | PU |
| E 71691 | NAHA | 127.800 | ATIS          | 26D12'00" | N 127D39'00" | E NAT  |                       | 30/12/2 013 | PU |
| E 71682 | NAHA | 134.100 | APP-U 150/450 | 26D11'00" | N 127D40'00" | E NAT  | Precision radar       | 30/12/2 013 | PU |
| E 71686 | NAHA | 134.750 | FIR-U 260/450 | 24D47'00" | N 125D18'00" | E NAT  | MIYAKO                | 30/12/2 013 | PU |

管制部は1017行目以降でチェック

|          |         |      |    |         |         |           |  |
|----------|---------|------|----|---------|---------|-----------|--|
| NAHA ACC |         |      |    |         |         |           |  |
| ACC-L    | 123.900 | NAT  | OP | 26°11'N | 127°3 E | NAHA+2    |  |
| ACC-L    | 124.500 | ICAO | OP | 26°3'N  | 127°5 E | YAEDAKE+3 |  |
| ACC-L    | 127.500 | NAT  | OP | 26°2'N  | 126°4 E | kumejima  |  |
| ACC-L    | 132.300 | ICAO | OP | 26°3'N  | 127°5 E | yaedake+2 |  |
| ACC-LU   | 132.100 | ICAO | OP | 26°3'N  | 127°5 E | RCAG      |  |

|         |          |         |               |           |              |        |                          |             |    |
|---------|----------|---------|---------------|-----------|--------------|--------|--------------------------|-------------|----|
| E 71704 | NAHA ACC | 119.300 | ACC-U 260/450 | 28D28'00" | N 129D41'00" | E ICAO | RCAG; Surveillance radar | 31/12/2 013 | PU |
| E 71701 | NAHA ACC | 123.900 | ACC-L 194/250 | 26D12'00" | N 127D38'00" | E NAT  | NAHA+2                   | 31/12/2 013 | PU |
| E 71703 | NAHA ACC | 124.500 | ACC-L 194/250 | 26D38'00" | N 127D56'00" | E ICAO | YAEDAKE+3                | 31/12/2 013 | PU |
| E 71707 | NAHA ACC | 127.100 | FIR-U 260/450 | 26D38'00" | N 127D56'00" | E NAT  | YAEDAKE                  | 31/12/2 013 | PU |
| E 71702 | NAHA ACC | 127.500 | ACC-L 194/250 | 26D22'00" | N 126D47'00" | E NAT  | kumejima                 | 31/12/2 013 | PU |
| E 71708 | NAHA ACC | 128.600 | FIR-U 260/450 | 27D26'00" | N 128D42'00" | E NAT  | OKINOERABU               | 31/12/2 013 | PU |
| E 71700 | NAHA ACC | 132.100 | ACC-U 260/450 | 26D38'00" | N 127D56'00" | E ICAO | RCAG; Also ACC-L         | 31/12/2 013 | PU |
| E 71699 | NAHA ACC | 132.300 | ACC-L 194/250 | 26D38'00" | N 127D56'00" | E ICAO | yaedake+2                | 31/12/2 013 | PU |
| E 71706 | NAHA ACC | 132.900 | ACC-I 194/250 | 28D28'00" | N 129D41'00" | E NAT  | Surveillance radar       | 31/12/2 013 | PU |
| E 71698 | NAHA ACC | 133.300 | ACC-I 194/250 | 26D11'00" | N 127D40'00" | E ICAO | Surveillance radar       | 31/12/2 013 | PU |
| E 71705 | NAHA ACC | 134.800 | FIR-U 260/450 | 28D28'00" | N 129D41'00" | E NAT  | AMAMI                    | 31/12/2 013 | PU |

|     |                |       |         |      |    |            |                            |
|-----|----------------|-------|---------|------|----|------------|----------------------------|
| 425 | NAKASHIBETSU   |       |         |      |    |            |                            |
| 426 | g              | FIS   | 122.700 | NAT  | OP | 43°34'00"N | 144°57'00"E RAG_NEWCHITOSE |
| 421 |                | FIS   | 126.200 | NAT  | OP | 43°34'00"N | 144°57'00"E                |
| 427 | NANKISHIRAHAMA |       |         |      |    |            |                            |
| 428 |                | FIS   | 118.550 | NAT  | OP | 33°40'00"N | 135°22'00"E                |
| 429 |                | FIS   | 126.200 | NAT  | OP | 33°40'00"N | 135°22'00"E                |
| 430 | NARITA/INTL    |       |         |      |    |            |                            |
| 431 | og             | APP-L | 124.400 | ICAO | OP | 35°45'00"N | 140°23'00"E                |
| 432 | og             | APP-L | 125.525 | ICAO | OP | 35°45'00"N | 140°23'00"E                |

|                |         |     |    |        |         |     |         |
|----------------|---------|-----|----|--------|---------|-----|---------|
| NAKASHIBETSU   |         |     |    |        |         |     |         |
| FIS            | 122.700 | NAT | OP | 43°3'N | 114°5 E | RAG | CHITOSE |
| NANKISHIRAHAMA |         |     |    |        |         |     |         |
| FIS            | 118.550 | NAT | OP | 33°4'N | 135°2 E |     |         |
| FIS-L          | 126.200 | NAT | OP | 33°4'N | 135°2 E |     |         |
| NARITA/INTL    |         |     |    |        |         |     |         |
| SMC            | 121.600 | NAT | OP | 35°4'N | 140°2 E |     |         |
| SMC            | 121.750 | NAT | OP | 35°4'N | 140°2 E | FI  |         |

|         |                |         |               |           |              |        |             |             |        |
|---------|----------------|---------|---------------|-----------|--------------|--------|-------------|-------------|--------|
| E 71709 | NAKASHIBETSU   | 122.700 | FIR-U 260/450 | 43D34'00" | N 114D57'00" | E NAT  | RAG CHITOSE | 30/12/2 013 | PU     |
| E 71710 | NAKASHIBETSU   | 126.200 | FIR-U 260/450 | 43D34'00" | N 114D58'00" | E NAT  |             | 30/12/2 013 | PU     |
| E 71712 | NANKISHIRAHAMA | 118.550 | FIR-U 260/450 | 33D40'00" | N 135D22'00" | E NAT  |             | 01/01/1 999 | Expert |
| E 71711 | NANKISHIRAHAMA | 126.200 | FIR-L 194/250 | 33D40'00" | N 135D22'00" | E NAT  |             | 01/01/1 999 | Expert |
| E 71910 | NARITA INTL    | 118.200 | TWR 25/40     | 35D45'00" | N 140D23'00" | E ICAO |             | 30/12/2 013 | PU     |
| E 76047 | NARITA INTL    | 118.350 | TWR 25/40     | 35D45'00" | N 140D23'00" | E NAT  | FI          | 30/12/2 013 | PU     |



|     |    |        |         |      |    |            |             |
|-----|----|--------|---------|------|----|------------|-------------|
| 433 | cg | APP-L  | 125.800 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 434 | cg | APP-L  | 127.700 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 435 | cg | APP-SR | 120.200 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 436 | cg | APP-L  | 124.200 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 437 | cg | APP-L  | 119.600 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 438 | cg | APP-L  | 120.600 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 439 | cg | APP-L  | 119.450 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 440 | cg | TWR    | 118.200 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 441 | cg | TWR    | 118.350 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 442 | cg | TWR    | 122.700 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 443 | cg | TWR    | 126.200 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 444 | cg | SMC    | 121.950 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 445 | cg | SMC    | 121.850 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 446 | cg | CD     | 121.900 | NAT  | OP | 35°45'00"N | 140°23'00"E |
| 447 | cg | FIS    | 121.850 | NAT  | OP | 35°45'00"N | 140°23'00"E |
| 448 | cg | ATIS   | 128.250 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 449 | cg | FIS    | 121.600 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 450 | cg | SMC    | 121.750 | ICAO | OP | 35°45'00"N | 140°23'00"E |
| 451 | cg | FIS    | 126.900 | NAT  | OP | 35°45'00"N | 140°23'00"E |

|     |    |                                   |         |      |    |            |                         |
|-----|----|-----------------------------------|---------|------|----|------------|-------------------------|
| 454 | cg | SAPPORO NEW CHITOSE ← CHK@row#711 |         |      |    |            |                         |
| 455 | cg | APP-L                             | 120.100 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 456 | cg | APP-L                             | 124.700 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 457 | cg | APP-SR                            | 119.100 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 458 | cg | APP-SR                            | 119.500 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 459 | cg | APP-SR                            | 124.000 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 460 | cg | APP-SR                            | 125.300 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 461 | cg | APP-SR                            | 134.100 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 462 | cg | APP-L                             | 127.700 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 463 | cg | TWR                               | 118.800 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 464 | cg | TWR                               | 126.200 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 465 | cg | SMC                               | 121.600 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 466 | cg | CD                                | 121.900 | NAT  | OP | 42°47'00"N | 141°42'00"E             |
| 467 | cg | ATIS                              | 128.500 | ICAO | OP | 42°46'00"N | 141°41'00"E             |
| 468 | cg | FIS                               | 135.100 | ICAO | OP | 43°02'00"N | 144°33'00"E KUSHIRO     |
| 469 | cg | FIS                               | 135.600 | ICAO | OP | 42°44'00"N | 143°13'00"E OBIHIRO     |
| 470 | cg | FIS                               | 134.750 | ICAO | OP | 43°06'00"N | 141°23'00"E OKADAMA     |
| 471 | cg | FIS                               | 127.100 | ICAO | OP | 41°56'00"N | 140°47'00"E YOKOTSUDAKE |
| 472 | cg | FIS                               | 124.150 | ICAO | OP | 43°40'00"N | 142°27'00"E ASAHKAWA    |
| 473 | cg | AFIS                              | 127.000 | NAT  | OP | 42°46'00"N | 141°41'00"E ISHKARI     |

|     |    |             |         |      |    |            |             |
|-----|----|-------------|---------|------|----|------------|-------------|
| 474 | cg | NEWISHIGAKI |         |      |    |            |             |
| 475 | g  | TWR         | 118.000 | NAT  | OP | 24°32'00"N | 124°15'00"E |
| 476 | g  | TWR         | 126.200 | NAT  | OP | 24°32'00"N | 124°15'00"E |
| 477 | g  | APP-SR      | 120.300 | NAT  | OP | 24°32'00"N | 124°15'00"E |
| 478 | g  | APP-SR      | 121.200 | NAT  | OP | 24°32'00"N | 124°15'00"E |
| 480 | g  | ATIS        | 128.675 | NAT  | OP | 24°32'00"N | 124°15'00"E |
| 481 | cg | NIIGATA     |         |      |    |            |             |
| 482 | g  | APP-L       | 121.400 | ICAO | OP | 37°57'00"N | 139°07'00"E |
| 483 | g  | APP-SR      | 424.600 | NAT  | OP | 37°57'00"N | 139°07'00"E |
| 483 | g  | APP-L       | 119.050 | ICAO | OP | 37°57'00"N | 139°07'00"E |
| 484 | g  | TWR         | 118.000 | ICAO | OP | 37°57'00"N | 139°07'00"E |
| 485 | g  | TWR         | 126.200 | ICAO | OP | 37°57'00"N | 139°07'00"E |
| 486 | g  | ATIS        | 128.450 | ICAO | OP | 37°57'00"N | 139°07'00"E |

|     |    |           |         |     |    |            |                       |
|-----|----|-----------|---------|-----|----|------------|-----------------------|
| 487 | cg | NIJIMA    |         |     |    |            |                       |
| 488 | g  | FIS       | 124.300 | NAT | OP | 34°21'00"N | 139°16'00"E RAG_TOKYO |
| 489 | cg | NOTO      |         |     |    |            |                       |
| 490 | g  | FIS       | 118.050 | NAT | OP | 37°18'00"N | 136°57'00"E           |
| 491 | g  | FIS       | 126.200 | NAT | OP | 37°18'00"N | 136°57'00"E           |
| 492 | cg | NYUTABARU |         |     |    |            |                       |
| 493 | g  | TWR       | 126.200 | NAT | OP | 32°05'00"N | 131°27'00"E           |

|        |         |      |        |         |         |
|--------|---------|------|--------|---------|---------|
| SMC    | 121.850 | NAT  | 35°4'N | 140°2'E | FI      |
| SMC    | 121.950 | NAT  | 35°4'N | 140°2'E | FI      |
| APP-L  | 119.450 | NAT  | 35°4'N | 140°2'E | FI      |
| APP-L  | 119.600 | ICAO | OP     | 35°4'N  | 140°2'E |
| APP-L  | 120.600 | ICAO | OP     | 35°4'N  | 140°2'E |
| APP-L  | 124.200 | ICAO | OP     | 35°4'N  | 140°2'E |
| APP-L  | 124.400 | ICAO | OP     | 35°4'N  | 140°2'E |
| APP-L  | 125.800 | ICAO | OP     | 35°4'N  | 140°2'E |
| APP-L  | 127.700 | NAT  | OP     | 35°4'N  | 140°2'E |
| TWR    | 118.200 | ICAO | OP     | 35°4'N  | 140°2'E |
| TWR    | 118.350 | NAT  | 35°4'N | 140°2'E | FI      |
| TWR    | 122.700 | NAT  | OP     | 35°4'N  | 140°2'E |
| TWR    | 126.200 | NAT  | OP     | 35°4'N  | 140°2'E |
| TWR    | 127.700 | NAT  | OP     | 35°4'N  | 140°2'E |
| TWR    | 128.200 | NAT  | OP     | 35°4'N  | 140°2'E |
| APP-SR | 120.200 | NAT  | OP     | 35°4'N  | 140°2'E |
| FIS    | 126.900 | ICAO | OP     | 35°4'N  | 140°2'E |
| ATIS   | 128.200 | NAT  | OP     | 35°4'N  | 140°2'E |
| CD     | 121.650 | NAT  | 35°4'N | 140°2'E | FI      |
| CD     | 121.900 | ICAO | OP     | 35°4'N  | 140°2'E |
| APP-L  | 125.525 | NAT  | 35°4'N | 140°2'E | FI      |

|        |         |      |        |         |         |
|--------|---------|------|--------|---------|---------|
| SMC    | 121.850 | NAT  | 35°4'N | 140°2'E | FI      |
| SMC    | 121.950 | NAT  | 35°4'N | 140°2'E | FI      |
| APP-L  | 119.450 | NAT  | 35°4'N | 140°2'E | FI      |
| APP-L  | 119.600 | ICAO | OP     | 35°4'N  | 140°2'E |
| APP-L  | 120.600 | ICAO | OP     | 35°4'N  | 140°2'E |
| APP-L  | 124.200 | ICAO | OP     | 35°4'N  | 140°2'E |
| APP-L  | 124.400 | ICAO | OP     | 35°4'N  | 140°2'E |
| APP-L  | 125.800 | ICAO | OP     | 35°4'N  | 140°2'E |
| APP-L  | 127.700 | NAT  | OP     | 35°4'N  | 140°2'E |
| TWR    | 118.200 | ICAO | OP     | 35°4'N  | 140°2'E |
| TWR    | 118.350 | NAT  | 35°4'N | 140°2'E | FI      |
| TWR    | 122.700 | NAT  | OP     | 35°4'N  | 140°2'E |
| TWR    | 126.200 | NAT  | OP     | 35°4'N  | 140°2'E |
| TWR    | 127.700 | NAT  | OP     | 35°4'N  | 140°2'E |
| TWR    | 128.200 | NAT  | OP     | 35°4'N  | 140°2'E |
| APP-SR | 120.200 | NAT  | OP     | 35°4'N  | 140°2'E |
| FIS    | 126.900 | ICAO | OP     | 35°4'N  | 140°2'E |
| ATIS   | 128.200 | NAT  | OP     | 35°4'N  | 140°2'E |
| CD     | 121.650 | NAT  | 35°4'N | 140°2'E | FI      |
| CD     | 121.900 | ICAO | OP     | 35°4'N  | 140°2'E |
| APP-L  | 125.525 | NAT  | 35°4'N | 140°2'E | FI      |

|             |         |      |    |        |         |    |
|-------------|---------|------|----|--------|---------|----|
| NEWISHIGAKI | 118.000 | NAT  | OP | 24°3'N | 124°1'E | FI |
| NEWISHIGAKI | 126.200 | NAT  | OP | 24°3'N | 124°1'E | FI |
| NEWISHIGAKI | 120.300 | NAT  | OP | 24°3'N | 124°1'E | FI |
| NEWISHIGAKI | 121.200 | NAT  | OP | 24°3'N | 124°1'E | FI |
| NEWISHIGAKI | 128.675 | NAT  | OP | 24°3'N | 124°1'E | FI |
| NIIGATA     | 119.050 | ICAO | OP | 37°5'N | 139°0'E | E  |
| NIIGATA     | 121.400 | ICAO | OP | 37°5'N | 139°0'E | E  |
| NIIGATA     | 118.000 | ICAO | OP | 37°5'N | 139°0'E | E  |
| NIIGATA     | 126.200 | NAT  | OP | 37°5'N | 139°0'E | E  |
| NIIGATA     | 128.450 | NAT  | OP | 37°5'N | 139°0'E | E  |

|           |         |     |    |        |         |    |           |
|-----------|---------|-----|----|--------|---------|----|-----------|
| NIJIMA    | 124.300 | NAT | OP | 34°2'N | 139°1'E | FI | RAG takyo |
| NOTO      | 118.050 | NAT | OP | 37°1'N | 136°5'E | FI |           |
| NOTO      | 126.200 | NAT | OP | 37°1'N | 136°5'E | FI |           |
| NYUTABARU | 120.100 | NAT | OP | 32°0'N | 131°2'E | E  |           |

|         |             |         |           |           |              |   |      |                        |         |    |
|---------|-------------|---------|-----------|-----------|--------------|---|------|------------------------|---------|----|
| E 76046 | NARITA INTL | 119.450 | APP-L     | 35045'00" | N 140023'00" | E | NAT  | FI                     | 30/12/2 | PU |
| E 71914 | NARITA INTL | 119.600 | APP-L     | 35045'00" | N 140023'00" | E | ICAO |                        | 013     | PU |
| E 71893 | NARITA INTL | 120.200 | APP-U     | 35045'00" | N 140023'00" | E | NAT  | Surveillance radar     | 30/12/2 | PU |
| E 71899 | NARITA INTL | 120.600 | APP-L     | 35045'00" | N 140023'00" | E | ICAO |                        | 013     | PU |
| E 71904 | NARITA INTL | 121.600 | AS 5/1    | 35045'00" | N 140023'00" | E | NAT  |                        | 30/12/2 | PU |
| E 76050 | NARITA INTL | 121.650 | APP-L     | 35045'00" | N 140023'00" | E | NAT  | FI, Clearance delivery | 30/12/2 | PU |
| E 76051 | NARITA INTL | 121.750 | AS 5/1    | 35045'00" | N 140023'00" | E | NAT  | FI                     | 013     | PU |
| E 76049 | NARITA INTL | 121.850 | AS 5/1    | 35045'00" | N 140023'00" | E | NAT  | FI                     | 30/12/2 | PU |
| E 71901 | NARITA INTL | 121.900 | APP-L     | 35045'00" | N 140023'00" | E | ICAO |                        | 013     | PU |
| E 76048 | NARITA INTL | 121.950 | AS 5/1    | 35045'00" | N 140023'00" | E | NAT  | FI                     | 30/12/2 | PU |
| E 71909 | NARITA INTL | 122.700 | TWR 25/40 | 35045'00" | N 140023'00" | E | NAT  |                        | 013     | PU |
| E 71907 | NARITA INTL | 124.200 | APP-L     | 35045'00" | N 140023'00" | E | ICAO |                        | 30/12/2 | PU |
| E 71897 | NARITA INTL | 124.400 | APP-L     | 35045'00" | N 140023'00" | E | ICAO |                        | 013     | PU |
| E 71896 | NARITA INTL | 125.800 | APP-L     | 35045'00" | N 140023'00" | E | ICAO |                        | 30/12/2 | PU |
| E 71906 | NARITA INTL | 126.200 | TWR 25/40 | 35045'00" | N 140023'00" | E | NAT  |                        | 013     | PU |
| E 71911 | NARITA INTL | 126.900 | FIR-U     | 35045'00" | N 140023'00" | E | ICAO |                        | 30/12/2 | PU |
| E 71898 | NARITA INTL | 127.700 | APP-L     | 35045'00" | N 140023'00" | E | NAT  |                        | 013     | PU |
| E 71913 | NARITA INTL | 128.200 | ATIS      | 35045'00" | N 140023'00" | E | NAT  |                        | 30/12/2 | PU |
| E 76045 | NARITA INTL | 125.525 | APP-L     | 35045'00" | N 140023'00" | E | NAT  | FI                     | 013     | PU |

|         |             |         |           |           |              |   |      |                    |         |        |
|---------|-------------|---------|-----------|-----------|--------------|---|------|--------------------|---------|--------|
| E 76062 | NEWISHIGAKI | 118.000 | TWR 25/40 | 24032'00" | N 124015'00" | E | NAT  | FI                 | 30/12/2 | PU     |
| E 76064 | NEWISHIGAKI | 120.300 | APP-U     | 24032'00" | N 124015'00" | E | NAT  | Surveillance radar | 013     | PU     |
| E 76065 | NEWISHIGAKI | 121.200 | APP-U     | 24032'00" | N 124015'00" | E | NAT  | Surveillance radar | 013     | PU     |
| E 76063 | NEWISHIGAKI | 126.200 | TWR 25/40 | 24032'00" | N 124015'00" | E | NAT  | FI                 | 30/12/2 | PU     |
| E 76066 | NEWISHIGAKI | 128.675 | ATIS      | 24032'00" | N 124015'00" | E | NAT  | FI                 | 013     | PU     |
| E 71713 | NIIGATA     | 118.000 | TWR 25/40 | 37057'00" | N 139007'00" | E | ICAO |                    | 013     | Expert |
| E 71715 | NIIGATA     | 119.050 | APP-L     | 37057'00" | N 139007'00" | E | ICAO |                    | 013     | PU     |
| E 71714 | NIIGATA     | 121.400 | APP-L     | 37057'00" | N 139007'00" | E | ICAO |                    | 013     | PU     |
| E 71718 | NIIGATA     | 121.700 | AS 5/1    | 37057'00" | N 139000'00" | E | NAT  |                    | 013     | PU     |
| E 71716 | NIIGATA     | 125.400 | APP-U     | 37057'00" | N 139007'00" | E | NAT  |                    | 30/12/2 | PU     |
| E 71717 | NIIGATA     | 126.200 | TWR 25/40 | 37057'00" | N 139007'00" | E | NAT  |                    | 013     | Expert |
| E 76067 | NIIGATA     | 128.450 | ATIS      | 37057'00" | N 139007'00" | E | NAT  |                    | 013     | PU     |

|         |           |         |           |           |              |   |     |    |         |    |
|---------|-----------|---------|-----------|-----------|--------------|---|-----|----|---------|----|
| E 76068 | NIJIMA    | 124.300 | FIR-U     | 34021'00" | N 139016'00" | E | NAT | FI | 30/12/2 | PU |
| E 76069 | NOTO      | 118.050 | FIR-U     | 37018'00" | N 136057'00" | E | NAT | FI | 013     | PU |
| E 76070 | NOTO      | 126.200 | FIR-U     | 37018'00" | N 136057'00" | E | NAT | FI | 013     | PU |
| E 71719 | NYUTABARU | 120.100 | TWR 25/40 | 32005'00" | N 131027'00" | E | NAT |    | 30/12/2 | PU |



530 g APP-PR 133.400 NAT OP 41°14'00"N 141°08'00"E

APP-PR 133.400 NAT OP 41°1'N 141°0'E

531 OMIURA SMC 136.300 NAT OP 32°56'00"N 129°58'00"E

OSAKA/INTL

534 g APP-PR 121.100 NAT OP 34°48'00"N 135°26'00"E RAG\_KANSAI
535 g APP-PR 124.700 NAT OP 34°48'00"N 135°26'00"E RAG\_KANSAI
536 g APP-L 119.500 NAT OP 34°48'00"N 135°26'00"E RAG\_KANSAI
537 g APP-L 125.300 NAT OP 34°48'00"N 135°26'00"E RAG\_KANSAI
538 g TWR 118.100 ICAO OP 34°48'00"N 135°26'00"E
539 g TWR 126.200 ICAO OP 34°48'00"N 135°26'00"E
540 g SMC 121.700 ICAO OP 34°48'00"N 135°26'00"E
541 g CD 118.800 NAT OP 34°48'00"N 135°26'00"E
542 g ATIS 128.600 ICAO OP 34°47'00"N 135°26'00"E
543 g FIS 135.600 ICAO OP 34°22'00"N 135°29'00"E MIKUNISAN
544 g FIS 126.750 ICAO OP 33°27'00"N 135°47'00"E KUSHIMOTO
545 g FIS 134.750 ICAO OP 35°32'00"N 133°06'00"E MIHO

SMC 121.700 ICAO OP 34°4'N 135°2'E E
APP-L 119.500 ICAO OP 34°4'N 135°2'E E RAG KANSAI
APP-L 125.300 ICAO OP 34°4'N 135°2'E E RAG KANSAI
TWR 118.100 ICAO OP 34°4'N 135°2'E E
TWR 126.200 NAT OP 34°4'N 135°2'E E FI
APP-SR 121.100 ICAO OP 34°4'N 135°2'E E RAG KANSAI
APP-SR 124.700 ICAO OP 34°4'N 135°2'E E RAG KANSAI
FIS 126.750 NAT OP 33°2'N 135°4'E E FI KUSHIMOTO
FIS 134.750 NAT OP 35°3'N 133°0'E E FI MIHO
FIS 135.600 NAT OP 34°2'N 135°2'E E FI MIKUNISAN
ATIS 128.600 NAT OP 34°4'N 135°2'E E FI
CD 118.800 ICAO OP 34°4'N 135°2'E E

E 71738 OMINATO 133.400 APP-U 150/450 41D14'00" N 141D08'00" E NAT Precision radar 01/01/1999 Expert
E 71736 OMINATO 133.960 TWR 25/40 41D14'00" N 141D08'00" E NAT 30/12/2013 PU

E 71753 OSAKA INTL 118.100 TWR 25/40 34D48'00" N 135D26'00" E ICAO 30/12/2013 PU
E 71754 OSAKA INTL 118.800 APP-L 30/120 34D48'00" N 135D26'00" E ICAO Clearance delivery 30/12/2013 PU
E 71742 OSAKA INTL 119.500 APP-L 50/120 34D48'00" N 135D26'00" E ICAO RAG KANSAI 30/12/2013 PU
E 71739 OSAKA INTL 121.100 APP-U 150/450 34D48'00" N 135D26'00" E ICAO RAG KANSAI; Surveillance 30/12/2013 PU
E 71744 OSAKA INTL 121.300 APP-U 150/450 34D47'00" N 135D27'00" E NAT 30/12/2013 PU
E 71752 OSAKA INTL 121.700 AS 5/1 34D48'00" N 135D26'00" E ICAO 30/12/2013 PU
E 71746 OSAKA INTL 124.700 APP-U 150/450 34D48'00" N 135D26'00" E ICAO RAG KANSAI; Surveillance 30/12/2013 PU
E 71745 OSAKA INTL 125.100 APP-U 150/450 34D47'00" N 135D27'00" E ICAO Surveillance radar 30/12/2013 PU
E 71741 OSAKA INTL 125.300 APP-L 50/120 34D48'00" N 135D26'00" E ICAO RAG KANSAI 30/12/2013 PU
E 71743 OSAKA INTL 125.600 APP-U 150/450 34D47'00" N 135D27'00" E ICAO 30/12/2013 PU
E 76080 OSAKA INTL 126.200 TWR 25/40 34D48'00" N 135D26'00" E NAT FI 30/12/2013 PU
E 76083 OSAKA INTL 126.750 FIR-U 260/450 33D27'00" N 135D47'00" E NAT FI 30/12/2013 PU
E 71748 OSAKA INTL 127.500 APP-L 50/120 34D47'00" N 135D27'00" E NAT N; Also TWR 30/12/2013 PU
E 76081 OSAKA INTL 128.600 ATIS 260/450 34D47'00" N 135D26'00" E NAT FI 30/12/2013 PU
E 71751 OSAKA INTL 131.450 U 0/0 34D48'00" N 135D26'00" E NAT 30/12/2013 PU
E 71750 OSAKA INTL 131.500 U 0/0 34D48'00" N 135D26'00" E NAT 30/12/2013 PU
E 71749 OSAKA INTL 131.650 U 0/0 34D48'00" N 135D26'00" E NAT 30/12/2013 PU
E 71740 OSAKA INTL 131.850 U 0/0 34D48'00" N 135D26'00" E NAT 30/12/2013 PU
E 71747 OSAKA INTL 131.900 U 0/0 34D48'00" N 135D26'00" E NAT 30/12/2013 PU
E 71755 OSAKA INTL 134.600 FIR-U 260/450 34D47'00" N 135D27'00" E ICAO 30/12/2013 PU
E 76084 OSAKA INTL 134.750 FIR-U 260/450 35D32'00" N 133D06'00" E NAT FI MIHO 30/12/2013 PU
E 76082 OSAKA INTL 135.600 FIR-U 260/450 34D22'00" N 135D29'00" E NAT FI MIKUNISAN 30/12/2013 PU

OSAKA/YAO <- Copy frm #732-735

OSAKA/YAO

g TWR 124.350 NAT OP 34°36'00"N 135°36'00"E
g TWR 126.200 NAT OP 34°36'00"N 135°36'00"E
g SMC 121.800 NAT OP 34°36'00"N 135°36'00"E

TWR 124.350 NAT OP 34°3'N 135°3'E E
SMC 121.800 NAT OP 34°3'N 135°3'E E
TWR 126.200 NAT OP 34°3'N 135°3'E E

546 OSHIMA
547 g FIS 118.600 NAT OP 34°47'00"N 139°22'00"E
548 g FIS 126.200 NAT OP 34°47'00"N 139°22'00"E
549 OZUKI
550 g TWR 126.200 NAT OP 34°03'00"N 131°03'00"E
551 g TWR 122.000 NAT OP 34°03'00"N 131°03'00"E

OSHIMA
FIS 118.600 NAT OP 34°4'N 139°2'E E
FIS 126.200 NAT OP 34°4'N 139°2'E E
OZUKI
TWR 122.000 NAT OP 34°0'N 131°0'E E FI
TWR 126.200 NAT OP 34°0'N 131°0'E E

E 71942 OSAKA\YAO 124.350 TWR 25/40 34D36'00" N 135D36'00" E NAT 31/12/2013 PU
E 71943 OSAKA\YAO 121.800 AS 5/1 34D36'00" N 135D36'00" E NAT 31/12/2013 PU
E 71941 OSAKA\YAO 126.200 TWR 25/40 34D36'00" N 135D36'00" E NAT 31/12/2013 PU
E 71757 OSHIMA 118.600 FIR-U 260/450 34D47'00" N 139D22'00" E NAT 01/01/1999 Expert
E 71756 OSHIMA 126.200 FIR-U 260/450 34D47'00" N 139D22'00" E NAT 30/12/2013 PU
E 76085 OZUKI 122.000 TWR 25/40 34D03'00" N 131D03'00" E NAT FI 30/12/2013 PU
E 71758 OZUKI 126.200 TWR 25/40 34D03'00" N 131D03'00" E NAT 30/12/2013 PU

539 REBUN
540
552 RISHIRI

RANKIN

TWR 122.500 NAT OP 35°3'N 139°2'E E

E 71759 OZUKI 133.960 TWR 25/40 34D04'00" N 131D03'00" E NAT 30/12/2013 PU
E 71760 RANKIN 122.500 TWR 25/40 35D30'00" N 139D24'00" E NAT 01/01/1999 Expert
E 71761 REBUN 122.700 FIR-U 260/450 45D26'00" N 141D02'00" E NAT N 30/12/2013 PU

|          |     |         |     |    |             |              |                |
|----------|-----|---------|-----|----|-------------|--------------|----------------|
| 553 g    | FIS | 122.700 | NAT | OP | 45°15'00" N | 141°11'00" E | RAG_NEWCHITOSE |
| 554 SADO |     |         |     |    |             |              |                |
| 555 g    | FIS | 118.150 | NAT | OP | 38°04'00" N | 138°25'00" E | RAG_SENDAI     |
| 556 SAGA |     |         |     |    |             |              |                |
| 557 g    | FIS | 118.025 | NAT | OP | 33°09'00" N | 130°18'00" E | RAG_FUKUOGA    |
| 558 g    | FIS | 126.200 | NAT | OP | 33°09'00" N | 130°18'00" E | RAG_FUKUOGA    |

|      |         |     |    |          |          |                |
|------|---------|-----|----|----------|----------|----------------|
| FIS  | 122.700 | NAT | OP | 45°15' N | 141°1' E | RAG_NEWCHITOSE |
| SADO |         |     |    |          |          |                |
| FIS  | 118.150 | NAT | OP | 38°0' N  | 138°2' E | RAG_SENDAI     |
| SAGA |         |     |    |          |          |                |
| FIS  | 118.025 | NAT | OP | 33°0' N  | 130°1' E | RAG_FUKUOGA    |
| FIS  | 126.200 | NAT | OP | 33°0' N  | 130°1' E | RAG_FUKUOGA    |

|   |       |         |         |                  |           |              |   |     |                   |                            |    |
|---|-------|---------|---------|------------------|-----------|--------------|---|-----|-------------------|----------------------------|----|
| E | 71762 | RISHIRI | 122.700 | FIR-U<br>260/450 | 45D15'00" | N 141D11'00" | E | NAT | RAG<br>NEWCHITOSE | 30/12/2<br>013<br>21:02:03 | PU |
| E | 76086 | SADO    | 118.150 | FIR-U<br>260/450 | 38D04'00" | N 138D25'00" | E | NAT | FI RAG<br>SENDAI  | 30/12/2<br>013<br>21:02:03 | PU |
| E | 76087 | SAGA    | 118.025 | FIR-U<br>260/450 | 33D09'00" | N 130D18'00" | E | NAT | FI RAG<br>FUKUOGA | 30/12/2<br>013<br>21:02:03 | PU |
| E | 76088 | SAGA    | 126.200 | FIR-U<br>260/450 | 33D09'00" | N 130D18'00" | E | NAT | FI RAG<br>FUKUOGA | 30/12/2<br>013<br>21:02:03 | PU |

SAPPORO

|     |         |     |    |         |          |           |                 |
|-----|---------|-----|----|---------|----------|-----------|-----------------|
| FIS | 124.150 | NAT | OP | 40°4' N | 140°2' E | ASAHIKAWA | <=>New Chitose? |
| FIS | 134.600 | NAT | OP | 40°4' N | 140°2' E | AKITA     | <=>Sapporo ACC? |
| FIS | 134.750 | NAT | OP | 40°4' N | 141°2' E | OKADAMA   | <=>New Chitose? |
| FIS | 135.100 | NAT | OP | 40°4' N | 141°2' E | KUSHIRO   | <=>New Chitose? |

|   |       |         |         |                  |           |              |   |     |           |                            |            |
|---|-------|---------|---------|------------------|-----------|--------------|---|-----|-----------|----------------------------|------------|
| E | 71765 | SAPPORA | 124.150 | FIR-U<br>260/450 | 40D41'00" | N 140D23'00" | E | NAT | ASAHIKAWA | 03/02/1<br>999<br>21:02:03 | EXPER<br>T |
| E | 71763 | SAPPORA | 134.600 | FIR-U<br>260/450 | 40D41'00" | N 140D23'00" | E | NAT | AKITA     | 03/02/1<br>999<br>21:02:03 | EXPER<br>T |
| E | 71764 | SAPPORA | 134.750 | FIR-U<br>260/450 | 40D41'00" | N 141D23'00" | E | NAT | OKADAMA   | 03/02/1<br>999<br>21:02:03 | EXPER<br>T |
| E | 71766 | SAPPORA | 135.100 | FIR-U<br>260/450 | 40D41'00" | N 141D23'00" | E | NAT | KUSHIRO   | 03/02/1<br>999<br>21:02:03 | EXPER<br>T |

|   |       |         |         |                  |           |              |   |     |                    |                            |    |                   |
|---|-------|---------|---------|------------------|-----------|--------------|---|-----|--------------------|----------------------------|----|-------------------|
| E | 71767 | SAPPORO | 125.300 | APP-U<br>150/450 | 43D10'00" | N 141D20'00" | E | NAT | Precision<br>radar | 30/12/2<br>013<br>21:02:03 | PU | SAPPORO/NEWとダブリ   |
| E | 71772 | SAPPORO | 127.000 | FIR-U<br>260/450 | 43D12'00" | N 141D20'00" | E | NAT | ISHIKARI BCST      | 30/12/2<br>013<br>21:02:03 | PU | SAPPORO/NEWの間違い?? |
| E | 71771 | SAPPORO | 127.100 | FIR-U<br>260/450 | 41D56'00" | N 140D47'00" | E | NAT | YOKOFUSUDAK<br>E   | 30/12/2<br>013<br>21:02:03 | PU | SAPPORO/NEWとダブリ   |
| E | 71770 | SAPPORO | 135.600 | FIR-U<br>260/450 | 42D35'00" | N 143D00'00" | E | NAT | OBHIRO             | 30/12/2<br>013<br>21:02:03 | PU | SAPPORO/NEWとダブリ   |

SAPPORO ACC

|          |         |      |    |         |          |    |                   |
|----------|---------|------|----|---------|----------|----|-------------------|
| ACC-L    | 128.325 | NAT  | OP | 43°0' N | 144°3' E | FI | KUSHIRO           |
| ACC-L    | 134.250 | NAT  | OP | 43°0' N | 141°2' E | FI | Sapporo           |
| ACC-U    | 124.500 | ICAC | OP | 41°5' N | 140°4' E |    | Yokotsudake       |
| ACC-SR-I | 119.300 | ICAC | OP | 41°5' N | 140°4' E |    | Yokotsudake plus1 |
| ACC-SR-I | 127.500 | ICAC | OP | 41°5' N | 140°4' E |    | Kushiro-Mimane    |
| ACC-SR-I | 133.300 | ICAC | OP | 41°5' N | 140°4' E |    | RAG Yokotsudake   |

|   |       |             |         |                  |           |              |   |      |  |                            |    |
|---|-------|-------------|---------|------------------|-----------|--------------|---|------|--|----------------------------|----|
| E | 71780 | SAPPORO ACC | 119.300 | ACC-I<br>194/250 | 41D56'00" | N 140D47'00" | E | ICAO | Yokotsudake<br>plus1;<br>Surveillance<br>radar | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71776 | SAPPORO ACC | 123.900 | ACC-U<br>260/450 | 40D41'00" | N 141D23'00" | E | NAT  | RCAG   | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71779 | SAPPORO ACC | 124.500 | ACC-U<br>260/450 | 41D56'00" | N 140D47'00" | E | ICAO | Yokotsudake<br>3 loc                           | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71778 | SAPPORO ACC | 127.500 | ACC-I<br>194/250 | 41D56'00" | N 140D47'00" | E | ICAO | Kushiro -<br>Mimane;<br>Surveillance<br>radar  | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76145 | SAPPORO ACC | 128.325 | ACC-L<br>194/250 | 43D02'00" | N 144D33'00" | E | NAT  | FI KUSHIRO<br>3loc                             | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71775 | SAPPORO ACC | 132.100 | ACC-U<br>260/450 | 41D56'00" | N 140D47'00" | E | NAT  | RCAG; Also<br>ACC-L                            | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71777 | SAPPORO ACC | 133.300 | ACC-I<br>194/250 | 41D56'00" | N 140D47'00" | E | ICAO | RAG<br>Yokotsudake;<br>Surveillance<br>radar   | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76146 | SAPPORO ACC | 134.250 | ACC-L<br>194/250 | 43D06'00" | N 141D23'00" | E | NAT  | FI Sapporo<br>5loc                             | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71781 | SAPPORO ACC | 135.900 | ACC-U<br>260/450 | 43D06'00" | N 141D23'00" | E | NAT  |  | 31/12/2<br>013<br>21:02:03 | PU |

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|   |       |                    |         |                 |           |              |   |      |                       |                |    |             |
|---|-------|--------------------|---------|-----------------|-----------|--------------|---|------|-----------------------|----------------|----|-------------|
| E | 71791 | SAPPORO<br>CHITOSE | 118.200 | TWR 25/40       | 42D48'00" | N 141D44'00" | E | ICAO |                       | 30/12/2<br>013 | PU | CHITOSEとダブリ |
| E | 71789 | SAPPORO<br>CHITOSE | 121.700 | AS 5/1          | 42D48'00" | N 141D40'00" | E | ICAO |                       | 30/12/2<br>013 | PU | CHITOSEとダブリ |
| E | 71788 | SAPPORO<br>CHITOSE | 123.100 | N/A             | 42D48'00" | N 141D40'00" | E | NAT  |                       | 30/12/2<br>013 | PU | CHITOSEとダブリ |
| E | 71785 | SAPPORO<br>CHITOSE | 124.800 | APP-I<br>75/250 | 42D48'00" | N 141D40'00" | E | ICAO | Surveillance<br>radar | 30/12/2<br>013 | PU | 不明          |

494 SAPPORONEWCHITOSE **Ce copy frm #484**

|     |    |        |         |      |    |            |                         |
|-----|----|--------|---------|------|----|------------|-------------------------|
| 495 | cg | APP-L  | 120.100 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 496 |    | APP-L  | 124.700 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 497 | cg | APP-SR | 119.100 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 498 | cg | APP-SR | 119.500 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 499 | cg | APP-SR | 124.000 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 499 | cg | APP-SR | 125.300 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 499 | cg | APP-SR | 134.100 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 499 | cg | APP-L  | 127.700 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 499 | cg | TWR    | 118.800 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 499 | cg | TWR    | 126.200 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 499 | cg | SMC    | 121.600 | ICAO | OP | 42°47'00"N | 141°42'00"E             |
| 499 | cg | CD     | 121.900 | NAT  | OP | 42°47'00"N | 141°42'00"E             |
| 499 | cg | ATIS   | 128.600 | ICAO | OP | 42°46'00"N | 141°41'00"E             |
| 499 | cg | FIS    | 135.100 | ICAO | OP | 43°02'00"N | 144°33'00"E KUSHIRO     |
| 499 | cg | FIS    | 135.600 | ICAO | OP | 42°44'00"N | 143°13'00"E OBIHIRO     |
| 499 | cg | FIS    | 134.750 | ICAO | OP | 43°06'00"N | 141°23'00"E OKADAMA     |
| 499 | cg | FIS    | 127.100 | ICAO | OP | 41°56'00"N | 140°47'00"E YOKOTSUDAKE |
| 499 | cg | FIS    | 124.150 | ICAO | OP | 43°40'00"N | 142°27'00"E ASAHIKAWA   |
| 499 | cg | AFIS   | 127.000 | NAT  | OP | 42°46'00"N | 141°41'00"E ISHKARI     |

599 SAPPORO,OKADAMA

|     |    |        |         |     |    |            |             |
|-----|----|--------|---------|-----|----|------------|-------------|
| 599 | cg | APP-SR | 119.225 | NAT | OP | 43°07'00"N | 141°23'00"E |
| 599 | cg | APP-SR | 424.600 | NAT | OP | 43°07'00"N | 141°23'00"E |
| 599 | cg | APP-L  | 121.075 | NAT | OP | 43°07'00"N | 141°23'00"E |
| 599 | cg | TWR    | 118.100 | NAT | OP | 43°07'00"N | 141°23'00"E |
| 599 | cg | TWR    | 126.200 | NAT | OP | 43°07'00"N | 141°23'00"E |
| 599 | c  | TWR    | 123.100 | NAT | OP | 43°07'00"N | 141°23'00"E |
| 599 | cg | APP-PR | 120.300 | NAT | OP | 43°07'00"N | 141°23'00"E |
| 599 | cg | APP-PR | 133.000 | NAT | OP | 43°07'00"N | 141°23'00"E |
| 599 | cg | APP-PR | 122.350 | NAT | OP | 43°07'00"N | 141°23'00"E |
| 599 | cg | APP-PR | 121.800 | NAT | OP | 43°07'00"N | 141°23'00"E |

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599 SENDAI

|     |   |        |         |      |    |            |                             |
|-----|---|--------|---------|------|----|------------|-----------------------------|
| 599 | g | APP-L  | 120.400 | ICAO | OP | 38°09'00"N | 140°55'00"E                 |
| 599 | g | APP-SR | 121.200 | ICAO | OP | 38°09'00"N | 140°55'00"E                 |
| 599 | g | APP-L  | 120.000 | ICAO | OP | 38°09'00"N | 140°55'00"E                 |
| 599 | g | APP-L  | 121.025 | ICAO | OP | 38°09'00"N | 140°55'00"E                 |
| 599 | g | TWR    | 118.700 | ICAO | OP | 38°09'00"N | 140°55'00"E                 |
| 599 | g | TWR    | 126.200 | ICAO | OP | 38°09'00"N | 140°55'00"E                 |
| 599 | g | SMC    | 121.700 | ICAO | OP | 38°09'00"N | 140°55'00"E                 |
| 599 | g | ATIS   | 126.450 | ICAO | OP | 38°09'00"N | 140°55'00"E                 |
| 599 | g | FIS    | 134.600 | ICAO | OP | 39°37'00"N | 140°13'00"E AKITA           |
| 599 | g | FIS    | 135.800 | ICAO | OP | 38°30'00"N | 141°22'00"E JOBONZAN        |
| 599 | g | FIS    | 135.300 | ICAO | OP | 37°57'00"N | 139°07'00"E NIIGATA         |
| 599 | g | AFIS   | 126.800 | ICAO | OP | 38°09'00"N | 140°55'00"E SENDAI          |
| 599 | g | AFIS   | 135.800 | ICAO | OP | 37°07'00"N | 140°48'00"E IWAKI           |
| 599 | g | AFIS   | 135.800 | ICAO | OP | 37°35'00"N | 140°26'00"E NIHONMATSU      |
| 599 | g | AFIS   | 135.800 | ICAO | OP | 38°00'00"N | 140°37'00"E SENNANSHIROISHI |

599 SHIMOFUSA

|     |   |     |         |     |    |            |             |
|-----|---|-----|---------|-----|----|------------|-------------|
| 599 | g | TWR | 126.200 | NAT | OP | 35°48'00"N | 140°01'00"E |
|-----|---|-----|---------|-----|----|------------|-------------|

SAPPORONEW CHITOSE

|          |         |      |    |        |         |                |
|----------|---------|------|----|--------|---------|----------------|
| SMC      | 121.600 | NAT  | OP | 42°4'N | 141°4'E | FI             |
| APP-L    | 127.700 | NAT  | OP | 42°4'N | 141°4'E | FI             |
| TWR      | 118.800 | NAT  | OP | 42°4'N | 141°4'E | FI             |
| TWR      | 126.200 | NAT  | OP | 42°4'N | 141°4'E | FI             |
| APP-SR   | 119.100 | ICAO | OP | 42°4'N | 141°4'E | FI             |
| APP-SR   | 119.500 | ICAO | OP | 42°4'N | 141°4'E | FI             |
| APP-SR   | 124.700 | ICAO | OP | 42°4'N | 141°4'E | FI             |
| APP-SR   | 125.300 | ICAO | OP | 42°4'N | 141°4'E | FI             |
| APP-SR   | 134.100 | NAT  | OP | 42°4'N | 141°4'E | FI             |
| APP-SR-1 | 120.100 | ICAO | OP | 42°4'N | 141°4'E | FI             |
| FIS      | 124.150 | NAT  | OP | 43°4'N | 142°2'E | FI ASAHIKAWA   |
| FIS      | 127.100 | NAT  | OP | 41°5'N | 140°4'E | FI YOKOTSUDAKE |
| FIS      | 134.750 | NAT  | OP | 43°0'N | 141°2'E | FI OKADAMA     |
| FIS      | 135.100 | NAT  | OP | 43°0'N | 144°3'E | FI KUSHIRO     |
| FIS      | 135.600 | NAT  | OP | 42°4'N | 143°1'E | FI OBIHIRO     |
| ATIS     | 128.600 | ICAO | OP | 42°4'N | 141°4'E | FI             |
| CD       | 121.900 | NAT  | OP | 42°4'N | 141°4'E | FI             |

SAPPORO,OKADAMA

|        |         |     |    |        |         |    |
|--------|---------|-----|----|--------|---------|----|
| SMC    | 121.800 | NAT | OP | 43°0'N | 141°2'E | FI |
| APP-L  | 121.075 | NAT | OP | 43°0'N | 141°2'E | FI |
| TWR    | 118.100 | NAT | OP | 43°0'N | 141°2'E | FI |
| TWR    | 123.100 | NAT | OP | 43°0'N | 141°2'E | FI |
| TWR    | 126.200 | NAT | OP | 43°0'N | 141°2'E | FI |
| APP-SR | 119.225 | NAT | OP | 43°0'N | 141°2'E | FI |
| APP-PR | 120.300 | NAT | OP | 43°0'N | 141°2'E | FI |
| APP-PR | 122.350 | NAT | OP | 43°0'N | 141°2'E | FI |
| APP-PR | 133.000 | NAT | OP | 43°0'N | 141°2'E | FI |

SAPPORO ACC

|          |         |     |    |        |         |    |
|----------|---------|-----|----|--------|---------|----|
| ACC-SR-1 | 132.600 | NAT | OP | 43°0'N | 141°2'E | FI |
|----------|---------|-----|----|--------|---------|----|

SENDAI

|        |         |      |    |        |         |             |
|--------|---------|------|----|--------|---------|-------------|
| SMC    | 121.700 | ICAO | OP | 38°0'N | 140°5'E | FI          |
| APP-L  | 120.000 | NAT  | OP | 38°0'N | 140°5'E | FI          |
| APP-L  | 120.400 | ICAO | OP | 38°0'N | 140°5'E | FI          |
| APP-L  | 121.025 | NAT  | OP | 38°0'N | 140°5'E | FI          |
| TWR    | 118.700 | ICAO | OP | 38°0'N | 140°5'E | FI          |
| TWR    | 126.200 | NAT  | OP | 38°0'N | 140°5'E | FI          |
| APP-SR | 121.200 | NAT  | OP | 38°0'N | 140°5'E | FI          |
| FIS    | 134.600 | NAT  | OP | 38°0'N | 140°5'E | FI AKITA    |
| FIS    | 135.300 | NAT  | OP | 37°5'N | 139°0'E | FI NIIGATA  |
| FIS    | 135.800 | NAT  | OP | 38°3'N | 140°2'E | FI JOBONZAN |
| ATIS   | 126.450 | NAT  | OP | 38°0'N | 140°5'E | FI          |
| AFIS   | 126.800 | NAT  | OP | 38°0'N | 140°5'E | FI SENDAI   |

SHIMOFUSA

|     |         |     |    |        |         |    |
|-----|---------|-----|----|--------|---------|----|
| TWR | 126.200 | NAT | OP | 35°4'N | 140°0'E | FI |
|-----|---------|-----|----|--------|---------|----|

|         |                     |         |               |           |              |        |                    |             |    |
|---------|---------------------|---------|---------------|-----------|--------------|--------|--------------------|-------------|----|
| E 76053 | SAPPORO NEW CHITOSE | 118.800 | TWR 25/40     | 42D47'00" | N 141D42'00" | E NAT  | FI                 | 30/12/2     | PU |
| E 71787 | SAPPORO NEW CHITOSE | 119.100 | APP-U 150/450 | 42D47'00" | N 141D42'00" | E ICAO | Surveillance radar | 013 30/12/2 | PU |
| E 71792 | SAPPORO NEW CHITOSE | 119.500 | APP-U 150/450 | 42D47'00" | N 141D42'00" | E ICAO | radar              | 013 30/12/2 | PU |
| E 71782 | SAPPORO NEW CHITOSE | 120.100 | APP-L 75/250  | 42D47'00" | N 141D42'00" | E ICAO | Surveillance radar | 013 30/12/2 | PU |
| E 76054 | SAPPORO NEW CHITOSE | 121.600 | AS 5/1        | 42D47'00" | N 141D42'00" | E NAT  | FI                 | 013 30/12/2 | PU |
| E 76055 | SAPPORO NEW CHITOSE | 121.900 | APP-L 50/120  | 42D47'00" | N 141D42'00" | E NAT  | FI                 | 013 30/12/2 | PU |
| E 76061 | SAPPORO NEW CHITOSE | 124.150 | APP-U 260/450 | 43D40'00" | N 142D27'00" | E NAT  | FI ASAHIKAWA       | 013 30/12/2 | PU |
| E 71786 | SAPPORO NEW CHITOSE | 124.700 | APP-U 150/450 | 42D47'00" | N 141D42'00" | E ICAO | radar              | 013 30/12/2 | PU |
| E 71784 | SAPPORO NEW CHITOSE | 125.300 | APP-U 150/450 | 42D47'00" | N 141D42'00" | E ICAO | radar              | 013 30/12/2 | PU |
| E 71790 | SAPPORO NEW CHITOSE | 126.200 | TWR 25/40     | 42D47'00" | N 141D42'00" | E NAT  | FI                 | 013 30/12/2 | PU |
| E 76060 | SAPPORO NEW CHITOSE | 127.100 | APP-L 50/120  | 41D56'00" | N 140D47'00" | E NAT  | FI                 | 013 30/12/2 | PU |
| E 76052 | SAPPORO NEW CHITOSE | 127.700 | APP-L 50/120  | 42D47'00" | N 141D42'00" | E NAT  | FI                 | 013 30/12/2 | PU |
| E 76056 | SAPPORO NEW CHITOSE | 128.600 | ATIS 260/450  | 42D47'00" | N 141D42'00" | E ICAO | FI                 | 013 30/12/2 | PU |
| E 71783 | SAPPORO NEW CHITOSE | 134.100 | APP-U 150/450 | 42D47'00" | N 141D42'00" | E NAT  | Surveillance radar | 013 30/12/2 | PU |
| E 76059 | SAPPORO NEW CHITOSE | 134.750 | APP-U 260/450 | 43D06'00" | N 141D23'00" | E NAT  | FI OKADAMA         | 013 30/12/2 | PU |
| E 76057 | SAPPORO NEW CHITOSE | 135.100 | APP-U 75/250  | 43D02'00" | N 144D33'00" | E NAT  | FI KUSHIRO         | 013 30/12/2 | PU |
| E 76058 | SAPPORO NEW CHITOSE | 135.600 | APP-U 260/450 | 42D44'00" | N 143D13'00" | E NAT  | FI OBIHIRO         | 013 30/12/2 | PU |

|         |                 |         |               |           |              |       |                    |             |    |
|---------|-----------------|---------|---------------|-----------|--------------|-------|--------------------|-------------|----|
| E 71768 | SAPPORO OKADAMA | 118.100 | TWR 25/40     | 43D07'00" | N 141D23'00" | E NAT | FI                 | 013 30/12/2 | PU |
| E 76089 | SAPPORO OKADAMA | 119.225 | APP-U 150/450 | 43D07'00" | N 141D23'00" | E NAT | Surveillance radar | 013 30/12/2 | PU |
| E 71769 | SAPPORO OKADAMA | 120.300 | APP-U 150/450 | 43D07'00" | N 141D23'00" | E NAT | Precision radar    | 013 30/12/2 | PU |
| E 76090 | SAPPORO OKADAMA | 121.075 | APP-L 50/120  | 43D07'00" | N 141D23'00" | E NAT | FI                 | 013 30/12/2 | PU |
| E 76093 | SAPPORO OKADAMA | 121.800 | AS 5/1        | 43D07'00" | N 141D23'00" | E NAT | FI                 | 013 30/12/2 | PU |
| E 76092 | SAPPORO OKADAMA | 122.350 | APP-U 150/450 | 43D07'00" | N 141D23'00" | E NAT | FI Precision radar | 013 30/12/2 | PU |
| E 71774 | SAPPORO OKADAMA | 123.100 | TWR 25/40     | 43D07'00" | N 141D23'00" | E NAT | FI                 | 013 30/12/2 | PU |
| E 71773 | SAPPORO OKADAMA | 126.200 | TWR 25/40     | 43D07'00" | N 141D23'00" | E NAT | FI                 | 013 30/12/2 | PU |
| E 76091 | SAPPORO OKADAMA | 133.000 | APP-U 150/450 | 43D07'00" | N 141D23'00" | E NAT | FI Precision radar | 013 30/12/2 | PU |

|         |             |         |               |           |              |       |                       |              |    |
|---------|-------------|---------|---------------|-----------|--------------|-------|-----------------------|--------------|----|
| E 76144 | SAPPORO ACC | 132.600 | ACC-1 194/250 | 43D06'00" | N 141D23'00" | E NAT | FI Surveillance radar | 013 21:02:03 | PU |
|---------|-------------|---------|---------------|-----------|--------------|-------|-----------------------|--------------|----|

|         |        |         |               |           |              |        |                    |             |    |
|---------|--------|---------|---------------|-----------|--------------|--------|--------------------|-------------|----|
| E 71793 | SENDAI | 118.700 | TWR 25/40     | 38D09'00" | N 140D55'00" | E ICAO | FI                 | 013 30/12/2 | PU |
| E 76098 | SENDAI | 120.000 | APP-L 50/120  | 38D09'00" | N 140D55'00" | E NAT  | FI                 | 013 30/12/2 | PU |
| E 71798 | SENDAI | 120.400 | APP-L 50/120  | 38D09'00" | N 140D55'00" | E ICAO | FI                 | 013 30/12/2 | PU |
| E 76099 | SENDAI | 121.025 | APP-L 50/120  | 38D09'00" | N 140D55'00" | E NAT  | FI                 | 013 30/12/2 | PU |
| E 71796 | SENDAI | 121.200 | APP-U 150/450 | 38D09'00" | N 140D55'00" | E ICAO | Surveillance radar | 013 30/12/2 | PU |
| E 71795 | SENDAI | 121.700 | AS 5/1        | 38D09'00" | N 140D55'00" | E ICAO | FI                 | 013 30/12/2 | PU |
| E 71794 | SENDAI | 126.200 | TWR 25/40     | 38D09'00" | N 140D55'00" | E NAT  | FI                 | 013 30/12/2 | PU |
| E 71797 | SENDAI | 126.450 | ATIS 260/450  | 38D09'00" | N 140D55'00" | E NAT  | FI                 | 013 30/12/2 | PU |
| E 76097 | SENDAI | 126.800 | AFIS 25/40    | 38D09'00" | N 140D55'00" | E NAT  | FI SENDAI          | 013 30/12/2 | PU |
| E 76094 | SENDAI | 134.600 | APP-U 260/450 | 38D09'00" | N 140D55'00" | E NAT  | FI AKITA           | 013 30/12/2 | PU |
| E 76096 | SENDAI | 135.300 | APP-U 260/450 | 37D57'00" | N 139D07'00" | E NAT  | FI NIIGATA         | 013 30/12/2 | PU |
| E 76095 | SENDAI | 135.800 | APP-U 260/450 | 38D30'00" | N 140D22'00" | E NAT  | FI JOBONZAN        | 013 30/12/2 | PU |

|         |           |         |               |           |              |       |                 |                      |        |
|---------|-----------|---------|---------------|-----------|--------------|-------|-----------------|----------------------|--------|
| E 71800 | SHIMOFUSA | 122.000 | APP-U 150/450 | 35D48'00" | N 140D01'00" | E NAT | Precision radar | 01/01/1 999 21:02:03 | Expert |
|---------|-----------|---------|---------------|-----------|--------------|-------|-----------------|----------------------|--------|

|                |    |         |         |     |    |            |                       |
|----------------|----|---------|---------|-----|----|------------|-----------------------|
| 586            | g  | APP-PAR | 122.000 | NAT | OP | 35°48'00"N | 140°01'00"E           |
| 587            | g  | APP-PAR | 122.350 | NAT | OP | 35°48'00"N | 140°01'00"E           |
| 588            | g  | APP-PAR | 133.400 | NAT | OP | 35°48'00"N | 140°01'00"E           |
| SHIMOJISHIMA   |    |         |         |     |    |            |                       |
| 589            | cg | APP-SR  | 125.000 | NAT | OP | 24°50'00"N | 125°08'00"E           |
| 591            | cg | APP-SR  | 120.300 | NAT | OP | 24°50'00"N | 125°08'00"E           |
| 592            | cg | APP-SR  | 121.200 | NAT | OP | 24°50'00"N | 125°08'00"E           |
| 581            |    | APP-L   | 424-600 | NAT | OP | 24°50'00"E | 125°08'00"E           |
| 593            | cg | TWR     | 118.300 | NAT | OP | 24°50'00"N | 125°08'00"E           |
| 594            | cg | TWR     | 126.200 | NAT | OP | 24°50'00"N | 125°08'00"E           |
| 595            | cg | ISD     | 121.700 | NAT | OP | 24°50'00"N | 125°08'00"E           |
| YAZUISHIZUHAMA |    |         |         |     |    |            |                       |
| 599            |    | TWR     | 126.200 | NAT | OP | 34°49'00"N | 138°18'00"E           |
| 600            |    | TWR     | 120.100 | NAT | OP | 34°49'00"N | 138°18'00"E           |
| 601            |    | TWR     | 123.100 | NAT | OP | 34°49'00"N | 138°18'00"E           |
| 602            |    | TWR     | 133.400 | NAT | OP | 34°49'00"N | 138°18'00"E           |
| 603            |    | TWR     | 122.000 | NAT | OP | 34°49'00"N | 138°18'00"E           |
| SHIZUOKA       |    |         |         |     |    |            |                       |
| 605            | g  | ISD     | 118.000 | NAT | OP | 34°48'00"N | 138°11'00"E           |
| 606            | g  | ISD     | 126.200 | NAT | OP | 34°48'00"N | 138°11'00"E           |
| SHONAI         |    |         |         |     |    |            |                       |
| 608            | g  | ISD     | 118.800 | NAT | OP | 38°49'00"N | 139°47'00"E           |
| 609            | g  | ISD     | 126.200 | NAT | OP | 38°49'00"N | 139°47'00"E           |
| TACHIKAWA      |    |         |         |     |    |            |                       |
| 611            | g  | TWR     | 126.200 | NAT | OP | 35°43'00"N | 139°24'00"E           |
| 612            | g  | TWR     | 118.850 | NAT | OP | 35°43'00"N | 139°24'00"E           |
| 613            | g  | TWR     | 123.100 | NAT | OP | 35°43'00"N | 139°24'00"E           |
| 614            | g  | APP-PAR | 121.300 | NAT | OP | 35°43'00"N | 139°24'00"E           |
| 615            | g  | APP-PAR | 134.100 | NAT | OP | 35°43'00"N | 139°24'00"E           |
| 616            | g  | APP-PAR | 125.300 | NAT | OP | 35°43'00"N | 139°24'00"E           |
| TAJIMA         |    |         |         |     |    |            |                       |
| 618            | g  | ISD     | 118.400 | NAT | OP | 35°31'00"N | 134°47'00"E RAG_OSAKA |
| 619            | g  | ISD     | 130.800 | NAT | OP | 35°31'00"N | 134°47'00"E           |
| TAKAMATSU      |    |         |         |     |    |            |                       |

|              |  |        |         |     |    |         |                      |
|--------------|--|--------|---------|-----|----|---------|----------------------|
|              |  | APP-PR | 122.000 | NAT | OP | 35°41'N | 140°0'E              |
|              |  | APP-PR | 122.350 | NAT | OP | 35°41'N | 140°0'E              |
|              |  | APP-PR | 133.400 | NAT | OP | 35°41'N | 140°0'E              |
| SHIMOJISHIMA |  |        |         |     |    |         |                      |
|              |  | SMC    | 121.700 | NAT | OP | 24°51'N | 125°0'E              |
|              |  | APP    | 125.000 | NAT | OP | 24°51'N | 125°0'E              |
|              |  | TWR    | 118.300 | NAT | OP | 24°51'N | 125°0'E              |
|              |  | TWR    | 126.200 | NAT | OP | 24°51'N | 125°0'E              |
|              |  | APP-SR | 120.300 | NAT | OP | 24°51'N | 125°0'E              |
|              |  | APP-SR | 121.200 | NAT | OP | 24°51'N | 125°0'E              |
| SHIZUOKA     |  |        |         |     |    |         |                      |
|              |  | FIS    | 118.000 | NAT | OP | 34°41'N | 138°1'E FI 30-Dec-13 |
|              |  | FIS    | 126.200 | NAT | OP | 34°41'N | 138°1'E FI 30-Dec-13 |
| SHONAI       |  |        |         |     |    |         |                      |
|              |  | FIS    | 118.800 | NAT | OP | 38°41'N | 139°4'E FI 30-Dec-13 |
|              |  | FIS    | 126.200 | NAT | OP | 38°41'N | 139°4'E FI 30-Dec-13 |
| TACHIKAWA    |  |        |         |     |    |         |                      |
|              |  | TWR    | 118.850 | NAT | OP | 35°4'N  | 139°2'E FI 30-Dec-13 |
|              |  | TWR    | 123.100 | NAT | OP | 35°4'N  | 139°2'E FI 30-Dec-13 |
|              |  | TWR    | 126.200 | NAT | OP | 35°4'N  | 139°2'E FI 30-Dec-13 |
|              |  | APP-PR | 121.300 | NAT | OP | 35°4'N  | 139°2'E FI 30-Dec-13 |
|              |  | APP-PR | 125.300 | NAT | OP | 35°4'N  | 139°2'E FI 30-Dec-13 |
|              |  | APP-PR | 134.100 | NAT | OP | 35°4'N  | 139°2'E FI 30-Dec-13 |
| TAJIMA       |  |        |         |     |    |         |                      |
|              |  | FIS    | 118.400 | NAT | OP | 35°3'N  | 134°4'E FI RAG_OSAKA |
|              |  | FIS    | 130.800 | NAT | OP | 35°3'N  | 134°4'E FI           |
| TAKAMATSU    |  |        |         |     |    |         |                      |

|              |       |              |         |               |           |              |       |                             |            |        |
|--------------|-------|--------------|---------|---------------|-----------|--------------|-------|-----------------------------|------------|--------|
| E            | 71801 | SHIMOFUSA    | 122.350 | APP-U 150/450 | 35048'00" | N 140001'00" | E NAT | Precision radar             | 01/01/1999 | Expert |
| E            | 71802 | SHIMOFUSA    | 126.200 | TWR 25/40     | 35048'00" | N 140001'00" | E NAT |                             | 01/01/1999 | Expert |
| E            | 71799 | SHIMOFUSA    | 133.400 | APP-U 150/450 | 35048'00" | N 140001'00" | E NAT | Precision radar             | 01/01/1999 | Expert |
| SHIMOJISHIMA |       |              |         |               |           |              |       |                             |            |        |
| E            | 71807 | SHIMOJISHIMA | 118.300 | TWR 25/40     | 24050'00" | N 125008'00" | E NAT |                             | 31/12/2013 | PU     |
| E            | 71803 | SHIMOJISHIMA | 120.300 | APP-U 150/450 | 24050'00" | N 125008'00" | E NAT | Surveillance radar          | 31/12/2013 | PU     |
| E            | 71804 | SHIMOJISHIMA | 121.200 | APP-U 150/450 | 24050'00" | N 125008'00" | E NAT | Surveillance radar          | 31/12/2013 | PU     |
| E            | 71806 | SHIMOJISHIMA | 121.700 | AS 5/1        | 24050'00" | N 125008'00" | E NAT |                             | 31/12/2013 | PU     |
| E            | 71805 | SHIMOJISHIMA | 125.000 | APP-U 150/450 | 24050'00" | N 125008'00" | E NAT |                             | 31/12/2013 | PU     |
| E            | 71808 | SHIMOJISHIMA | 126.200 | TWR 25/40     | 24050'00" | N 125008'00" | E NAT |                             | 31/12/2013 | PU     |
| SHIZUOKA     |       |              |         |               |           |              |       |                             |            |        |
| E            | 71811 | SHIZUOKA     | 132.570 | TWR 25/40     | 34048'00" | N 138018'00" | E NAT |                             | 31/12/2013 | PU     |
| E            | 71812 | SHIZUOKA     | 133.950 | TWR 25/40     | 34048'00" | N 138018'00" | E NAT |                             | 31/12/2013 | PU     |
| SHONAI       |       |              |         |               |           |              |       |                             |            |        |
| E            | 76103 | SHIZUOKA     | 118.000 | FIR-U 260/450 | 34048'00" | N 138011'00" | E NAT | FI 30Dec13                  | 31/12/2013 | PU     |
| E            | 76104 | SHIZUOKA     | 126.200 | FIR-U 260/450 | 34048'00" | N 138011'00" | E NAT | FI 30Dec13                  | 31/12/2013 | PU     |
| E            | 76105 | SHONAI       | 118.800 | FIR-U 260/450 | 38049'00" | N 139047'00" | E NAT | FI 30Dec13                  | 31/12/2013 | PU     |
| E            | 76106 | SHONAI       | 126.200 | FIR-U 260/450 | 38049'00" | N 139047'00" | E NAT | FI 30Dec13                  | 31/12/2013 | PU     |
| TACHIKAWA    |       |              |         |               |           |              |       |                             |            |        |
| E            | 76108 | TACHIKAWA    | 118.850 | TWR 25/40     | 35043'00" | N 139024'00" | E NAT | FI 30Dec13                  | 31/12/2013 | PU     |
| E            | 76110 | TACHIKAWA    | 121.300 | APP-U 150/450 | 35043'00" | N 139024'00" | E NAT | FI 30Dec13; Precision radar | 31/12/2013 | PU     |
| E            | 76109 | TACHIKAWA    | 123.100 | TWR 25/40     | 35043'00" | N 139024'00" | E NAT | FI 30Dec13                  | 31/12/2013 | PU     |
| E            | 76112 | TACHIKAWA    | 125.300 | APP-U 150/450 | 35043'00" | N 139024'00" | E NAT | FI 30Dec13; Precision radar | 31/12/2013 | PU     |
| E            | 76107 | TACHIKAWA    | 126.200 | TWR 25/40     | 35043'00" | N 139024'00" | E NAT | FI 30Dec13                  | 31/12/2013 | PU     |
| E            | 76111 | TACHIKAWA    | 134.100 | APP-U 150/450 | 35043'00" | N 139024'00" | E NAT | FI 30Dec13; Precision radar | 31/12/2013 | PU     |
| TAJIMA       |       |              |         |               |           |              |       |                             |            |        |
| E            | 76113 | TAJIMA       | 118.400 | FIR-U 260/450 | 35031'00" | N 134047'00" | E NAT | FI RAG_OSAKA                | 31/12/2013 | PU     |
| E            | 76114 | TAJIMA       | 130.800 | FIR-U 260/450 | 35031'00" | N 134047'00" | E NAT | FI                          | 31/12/2013 | PU     |
| TAKAMATSU    |       |              |         |               |           |              |       |                             |            |        |

|       |       |         |      |    |            |             |
|-------|-------|---------|------|----|------------|-------------|
| 621 g | APP-L | 121.200 | ICAO | OP | 34°13'00"N | 134°01'00"E |
| 622 g | APP-L | 120.400 | ICAO | OP | 34°13'00"N | 134°01'00"E |
| 623 g | APP-L | 119.025 | ICAO | OP | 34°13'00"N | 134°01'00"E |
| 624 g | TWR   | 118.300 | ICAO | OP | 34°13'00"N | 134°01'00"E |
| 625 g | TWR   | 126.200 | ICAO | OP | 34°13'00"N | 134°01'00"E |
| 626 g | TWR   | 135.900 | ICAO | OP | 34°13'00"N | 134°01'00"E |
| 627 g | ATIS  | 127.450 | ICAO | OP | 34°13'00"N | 134°01'00"E |

628 g AFIS 135.600 NAT OP 34°20'00"N 133°57'00"E OSAKA

629 TANEGASHIMA

|       |     |         |     |    |            |             |
|-------|-----|---------|-----|----|------------|-------------|
| 630 g | FIS | 118.750 | NAT | OP | 30°37'00"N | 130°59'00"E |
| 631 g | FIS | 126.200 | NAT | OP | 30°37'00"N | 130°59'00"E |

632 TARAMA FIS 118.600 NAT OP 24°38'00"N 124°40'00"E RAG NAHA

634 TATEYAMA

|       |         |         |     |    |            |             |
|-------|---------|---------|-----|----|------------|-------------|
| 635 g | TWR     | 126.200 | NAT | OP | 34°59'00"N | 139°50'00"E |
| 636 g | TWR     | 122.000 | NAT | OP | 34°59'00"N | 139°50'00"E |
| 637 g | TWR     | 123.100 | NAT | OP | 34°59'00"N | 139°50'00"E |
| 638 g | APP-PAR | 133.000 | NAT | OP | 34°59'00"N | 139°50'00"E |

639 TOKACHI

|       |         |         |     |    |            |             |
|-------|---------|---------|-----|----|------------|-------------|
| 640 g | TWR     | 122.200 | NAT | OP | 42°53'00"N | 143°10'00"E |
| 641 g | TWR     | 126.200 | NAT | OP | 42°53'00"N | 143°10'00"E |
| 642 g | APP-PAR | 133.000 | NAT | OP | 42°53'00"N | 143°10'00"E |
| 643 g | APP-PAR | 125.300 | NAT | OP | 42°53'00"N | 143°10'00"E |
| 644 g | APP-PAR | 134.100 | NAT | OP | 42°53'00"N | 143°10'00"E |

645 TOKUNOSHIMA

646 g FIS 122.700 NAT OP 27°50'00"N 128°53'00"E RAG\_KAGOSHIMA

647 TOKUSHIMA

|        |         |         |     |    |            |             |
|--------|---------|---------|-----|----|------------|-------------|
| 648 c  | TWR     | 126.200 | NAT | OP | 34°08'00"N | 134°37'00"E |
| 649 cg | TWR     | 118.000 | NAT | OP | 34°08'00"N | 134°37'00"E |
| 650 cg | TWR     | 123.100 | NAT | OP | 34°08'00"N | 134°37'00"E |
| 651 cg | APP     | 120.100 | NAT | OP | 34°08'00"N | 134°37'00"E |
| 652    | APP     | 122.450 | NAT | OP | 34°08'00"N | 134°37'00"E |
| 653 cg | APP     | 126.200 | NAT | OP | 34°08'00"N | 134°37'00"E |
| 654 cg | APP-L   | 124.000 | NAT | OP | 34°08'00"N | 134°37'00"E |
| 655 cg | APP-PAR | 134.100 | NAT | OP | 34°08'00"N | 134°37'00"E |

|       |         |     |    |         |         |    |           |
|-------|---------|-----|----|---------|---------|----|-----------|
| APP-L | 119.025 | NAT | OP | 34°11'N | 134°0'E | FI | 30-Dec-13 |
| APP-L | 120.400 | NAT | OP | 34°11'N | 134°0'E |    |           |
| APP-L | 121.200 | NAT | OP | 34°11'N | 134°0'E |    |           |
| TWR   | 118.300 | NAT | OP | 34°11'N | 134°0'E |    |           |
| TWR   | 126.200 | NAT | OP | 34°11'N | 134°0'E |    |           |
| TWR   | 135.900 | NAT | OP | 34°11'N | 134°0'E |    |           |
| ATIS  | 127.450 | NAT | OP | 34°11'N | 134°0'E | FI | 30-Dec-13 |

AFIS 135.600 NAT OP 34°21'N 133°5'E FI OSAKA

TANEGASHIMA

|     |         |     |    |        |         |  |  |
|-----|---------|-----|----|--------|---------|--|--|
| FIS | 118.750 | NAT | OP | 30°3'N | 130°5'E |  |  |
| FIS | 126.200 | NAT | OP | 30°3'N | 130°5'E |  |  |

TATEYAMA

|        |         |     |    |        |         |  |  |
|--------|---------|-----|----|--------|---------|--|--|
| TWR    | 122.000 | NAT | OP | 34°5'N | 139°5'E |  |  |
| TWR    | 123.100 | NAT | OP | 34°5'N | 139°5'E |  |  |
| TWR    | 126.200 | NAT | OP | 34°5'N | 139°5'E |  |  |
| APP-PR | 133.000 | NAT | OP | 34°5'N | 139°5'E |  |  |

TOKACHI

|        |         |     |    |        |         |    |  |
|--------|---------|-----|----|--------|---------|----|--|
| TWR    | 122.200 | NAT | OP | 42°5'N | 143°1'E | FI |  |
| TWR    | 126.200 | NAT | OP | 42°5'N | 143°1'E |    |  |
| APP-PR | 125.300 | NAT | OP | 42°5'N | 143°1'E | FI |  |
| APP-PR | 133.000 | NAT | OP | 42°5'N | 143°1'E | FI |  |
| APP-PR | 134.100 | NAT | OP | 42°5'N | 143°1'E | FI |  |

TOKUNOSHIMA

FIS 122.700 NAT OP 27°5'N 128°5'E RAG KAGOSHIMA

TOKUSHIMA

|         |         |     |    |        |         |  |  |
|---------|---------|-----|----|--------|---------|--|--|
| TWR+APP | 126.200 | NAT | OP | 34°0'N | 134°3'E |  |  |
| APP     | 120.100 | NAT | OP | 34°0'N | 134°3'E |  |  |
| APP-L   | 124.000 | NAT | OP | 34°0'N | 134°3'E |  |  |
| TWR     | 118.000 | NAT | OP | 34°0'N | 134°3'E |  |  |
| TWR     | 123.100 | NAT | OP | 34°0'N | 134°3'E |  |  |
| APP-PR  | 125.300 | NAT | OP | 34°0'N | 134°3'E |  |  |
| APP-PR  | 134.100 | NAT | OP | 34°0'N | 134°3'E |  |  |
| APP-PR  | 134.100 | NAT | OP | 34°0'N | 134°3'E |  |  |

※アプリ

|                   |         |              |           |              |       |            |            |    |
|-------------------|---------|--------------|-----------|--------------|-------|------------|------------|----|
| E 71813 TAKAMATSU | 118.300 | TWR 25/40    | 34D13'00" | N 134D01'00" | E NAT |            | 31/12/2013 | PU |
| E 76115 TAKAMATSU | 119.025 | APP-L 50/120 | 34D13'00" | N 134D01'00" | E NAT | FI 30Dec13 | 31/12/2013 | PU |
| E 71814 TAKAMATSU | 120.400 | APP-L 50/120 | 34D13'00" | N 134D01'00" | E NAT |            | 31/12/2013 | PU |
| E 71816 TAKAMATSU | 121.200 | APP-L 50/120 | 34D13'00" | N 134D01'00" | E NAT |            | 31/12/2013 | PU |
| E 71815 TAKAMATSU | 126.200 | TWR 25/40    | 34D13'00" | N 134D01'00" | E NAT |            | 31/12/2013 | PU |
| E 76116 TAKAMATSU | 127.450 | ATIS 260/450 | 34D13'00" | N 134D01'00" | E NAT | FI 30Dec13 | 31/12/2013 | PU |
| E 76117 TAKAMATSU | 135.600 | AFIS 25/40   | 34D20'00" | N 133D57'00" | E NAT | FI OSAKA   | 31/12/2013 | PU |
| E 71817 TAKAMATSU | 135.900 | TWR 25/40    | 34D13'00" | N 134D01'00" | E NAT |            | 31/12/2013 | PU |

E 71818 TANEGASHIMA 118.750 FIR-U 260/450 30D37'00" N 130D59'00" E NAT 31/12/2013 PU

E 71819 TANEGASHIMA 126.200 FIR-U 260/450 30D37'00" N 130D59'00" E NAT 31/12/2013 PU

E 71820 TATEYAMA 122.000 TWR 25/40 34D59'00" N 139D50'00" E NAT 31/12/2013 PU

E 71821 TATEYAMA 123.100 TWR 25/40 34D59'00" N 139D50'00" E NAT 31/12/2013 PU

E 71823 TATEYAMA 126.200 TWR 25/40 34D59'00" N 139D50'00" E NAT 01/01/1999 Expert 21:02:03

E 71822 TATEYAMA 133.000 APP-U 150/450 34D59'00" N 139D50'00" E NAT Precision radar 31/12/2013 PU 21:02:03

E 76118 TOKACHI 122.200 TWR 25/40 42D53'00" N 143D10'00" E NAT FI 31/12/2013 PU 21:02:03

E 76120 TOKACHI 125.300 APP-U 150/450 42D53'00" N 143D10'00" E NAT FI Precision radar 31/12/2013 PU 21:02:03

E 71824 TOKACHI 126.200 TWR 25/40 42D53'00" N 143D10'00" E NAT 31/12/2013 PU 21:02:03

E 76119 TOKACHI 133.000 APP-U 150/450 42D53'00" N 143D10'00" E NAT FI Precision radar 31/12/2013 PU 21:02:03

E 76121 TOKACHI 134.100 APP-U 150/450 42D53'00" N 143D10'00" E NAT FI Precision radar 31/12/2013 PU 21:02:03

E 71825 TOKUNOSHIMA 122.700 FIR-U 260/450 27D50'00" N 128D53'00" E NAT RAG KAGOSHIMA 31/12/2013 PU 21:02:03

E 71826 TOKUNOSHIMA 126.200 FIR-L 194/250 27D50'00" N 128D53'00" E NAT 31/12/2013 PU 21:02:03

E 71833 TOKUSHIMA 118.000 TWR 25/40 34D08'00" N 134D37'00" E NAT 31/12/2013 PU 21:02:03

E 71828 TOKUSHIMA 120.100 APP-U 150/450 34D08'00" N 134D37'00" E NAT 31/12/2013 PU 21:02:03

E 71832 TOKUSHIMA 123.100 TWR 25/40 34D08'00" N 134D37'00" E NAT 31/12/2013 PU 21:02:03

E 71829 TOKUSHIMA 124.000 APP-L 50/120 34D08'00" N 134D37'00" E NAT 31/12/2013 PU 21:02:03

E 71831 TOKUSHIMA 125.300 APP-U 150/450 34D08'00" N 134D37'00" E NAT Precision radar 31/12/2013 PU 21:02:03

E 71834 TOKUSHIMA 126.200 APP-L 50/120 34D08'00" N 134D37'00" E NAT Also TWR 01/01/1999 Expert 21:02:03

E 71827 TOKUSHIMA 134.100 APP-U 150/450 34D08'00" N 134D36'00" E NAT Precision radar 31/12/2013 PU 21:02:03

E 71830 TOKUSHIMA 134.100 APP-U 150/450 34D08'00" N 134D37'00" E NAT Precision radar 31/12/2013 PU 21:02:03

※Also TWRでーしている

←重複

APP-PAR 125.300 NAT OP 34°08'00" N 134°37'00" E



管制部は1017行目以降でチェック

| TOKYO ACC |         |         |          |          |    |                 |
|-----------|---------|---------|----------|----------|----|-----------------|
| ACC-L     | 125.700 | ICAC OP | 34°5' N  | 137°1' E | FI | MIGAWA+1LOC     |
| ACC-L     | 128.125 | ICAC OP | 35°4' N  | 139°2' E | FI | TOKORAZAWA+1LOC |
| ACC-L     | 132.100 | ICAC OP | 35°4' N  | 139°2' E | FI | TOKOROZAWA+1LOC |
| ACC-L     | 132.450 | ICAC OP | 36°11' N | 137°5' E | FI | matsumoto+3LOC  |
| ACC-L     | 132.700 | ICAC OP | 34°4' N  | 135°2' E | FI | OSAKA+1LOC      |
| ACC-L     | 133.500 | ICAC OP | 34°2' N  | 135°2' E | FI | MIKUNIYAMA+2LOC |
| ACC-L     | 133.550 | ICAC OP | 34°4' N  | 135°2' E | FI | OSAKA+2LOC      |
| ACC-L     | 133.700 | ICAC OP | 35°4' N  | 139°2' E | FI | TOKORAZAWA+1LOC |
| ACC-L     | 133.800 | ICAC OP | 34°2' N  | 135°2' E | FI | MIKUNIYAMA+1LOC |
| ACC-U     | 118.900 | NAT OP  | 38°3' N  | 141°2' E | FI | JOBONSAN        |
| ACC-U     | 123.700 | ICAC OP | 34°5' N  | 137°1' E | FI | MIGAWA+1LOC     |
| ACC-U     | 123.900 | ICAC OP | 34°5' N  | 137°1' E | FI | MIKAWA+1LOC     |
| ACC-U     | 124.550 | ICAC OP | 35°1' N  | 139°0' E | FI | HAKONE+2LOC     |
| ACC-U     | 125.900 | ICAC OP | 35°4' N  | 139°2' E | FI | TOKOROZAWA+3LOC |
| ACC-U     | 132.300 | ICAC OP | 37°5' N  | 139°0' E | FI | NIGATA+2LOC     |
| ACC-U     | 133.025 | ICAC OP | 36°2' N  | 136°2' E | FI | komatsu+1LOC    |
| ACC-SR-I  | 123.775 | ICAC OP | 37°0' N  | 140°4' E | FI | IWAKI+1LOC      |
| ACC-SR-I  | 125.000 | ICAC OP | 35°4' N  | 139°2' E | FI | TOKOROZAWA+2LOC |
| ACC-SR-I  | 132.250 | ICAC OP | 36°4' N  | 140°2' E | FI | DAIGO+1LOC      |
| ACC-SR-U  | 120.975 | ICAC OP | 37°0' N  | 140°4' E | FI | IWAKI+1LOC      |
| ACC-SR-U  | 124.100 | ICAC OP | 38°0' N  | 140°5' E | FI | SENDAI          |
| ACC-SR-U  | 133.600 | ICAC OP | 38°3' N  | 141°2' E | FI | JOBONSAN+2LOC   |

|   |       |           |         |                  |           |              |        |  |                            |    |
|---|-------|-----------|---------|------------------|-----------|--------------|--------|--|----------------------------|----|
| E | 76148 | TOKYO ACC | 118.900 | ACC-U<br>260/450 | 38D30'00" | N 141D22'00" | E NAT  | FI JOBONSAN<br>+1LOC                             | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76151 | TOKYO ACC | 120.975 | ACC-U<br>260/450 | 37D07'00" | N 140D48'00" | E ICAO | FI IWAKI+1LOC;<br>Surveillance<br>radar          | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76154 | TOKYO ACC | 123.700 | ACC-U<br>260/450 | 34D52'00" | N 137D13'00" | E ICAO | FI MIGAWA+1LO<br>C                               | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76153 | TOKYO ACC | 123.775 | ACC-I<br>194/250 | 37D07'00" | N 140D48'00" | E ICAO | FI IWAKI+1LOC;<br>Surveillance<br>radar          | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76166 | TOKYO ACC | 123.900 | ACC-U<br>260/450 | 34D52'00" | N 137D13'00" | E ICAO | FI MIKAWA+1LO<br>C                               | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76149 | TOKYO ACC | 124.100 | ACC-U<br>260/450 | 38D09'00" | N 140D55'00" | E ICAO | FI SENDAI<br>+1LOC;<br>Surveillance<br>radar     | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76156 | TOKYO ACC | 124.550 | ACC-U<br>260/450 | 35D11'00" | N 139D03'00" | E ICAO | FI HAKONE+2LO<br>C                               | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76157 | TOKYO ACC | 125.000 | ACC-I<br>194/250 | 35D48'00" | N 139D29'00" | E ICAO | FI TOKOROZAW<br>A+2LOC;<br>Surveillance<br>radar | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76165 | TOKYO ACC | 125.700 | ACC-L<br>194/250 | 34D52'00" | N 137D13'00" | E ICAO | FI MIGAWA+1LO<br>C                               | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76155 | TOKYO ACC | 125.900 | ACC-U<br>260/450 | 35D48'00" | N 139D29'00" | E ICAO | FI TOKOROZAW<br>A+3LOC                           | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71839 | TOKYO ACC | 126.600 | FIR-U<br>260/450 | 34D45'00" | N 136D56'00" | E NAT  | KOWA   | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71838 | TOKYO ACC | 126.800 | FIR-U<br>260/450 | 38D08'00" | N 140D56'00" | E NAT  | SENDAI   | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76160 | TOKYO ACC | 128.125 | ACC-L<br>194/250 | 35D48'00" | N 139D29'00" | E ICAO | FI TOKORAZAW<br>A+1LOC                           | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76158 | TOKYO ACC | 132.100 | ACC-L<br>194/250 | 35D48'00" | N 139D29'00" | E ICAO | FI TOKOROZAW<br>A+1LOC                           | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76152 | TOKYO ACC | 132.250 | ACC-I<br>194/250 | 36D45'00" | N 140D21'00" | E ICAO | FI DAIGO+1LOC;<br>Surveillance<br>radar          | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76147 | TOKYO ACC | 132.300 | ACC-U<br>260/450 | 37D57'00" | N 139D07'00" | E ICAO | FI NIGATA+2LOC                                   | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76167 | TOKYO ACC | 132.450 | ACC-L<br>194/250 | 36D10'00" | N 137D56'00" | E ICAO | FI matsumoto+3<br>LOC                            | 31/12/2<br>013<br>21:02:03 | PU |
| E | 71840 | TOKYO ACC | 132.700 | ACC-U<br>260/450 | 34D22'00" | N 135D29'00" | E NAT  |  | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76164 | TOKYO ACC | 132.700 | ACC-L<br>194/250 | 34D48'00" | N 135D26'00" | E ICAO | FI OSAKA+1LOC                                    | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76168 | TOKYO ACC | 133.025 | ACC-U<br>260/450 | 36D24'00" | N 136D25'00" | E ICAO | FI komatsu+1LO<br>C                              | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76161 | TOKYO ACC | 133.500 | ACC-L<br>194/250 | 34D22'00" | N 135D29'00" | E ICAO | FI MIKUNIYAMA<br>+2LOC                           | 31/12/2<br>013<br>21:02:03 | PU |
| E | 76163 | TOKYO ACC | 133.550 | ACC-L<br>194/250 | 34D48'00" | N 135D26'00" | E ICAO | FI OSAKA+2LOC                                    | 31/12/2<br>013<br>21:02:03 | PU |





|          |         |      |    |         |          |             |  |
|----------|---------|------|----|---------|----------|-------------|--|
| ACC-SR-U | 125.700 | ICAC | OP | 34°4' N | 136°5' E | RCAG        |  |
| ACC-SR-U | 125.900 | ICAC | OP | 35°1' N | 139°0' E | RCAG        |  |
| ACC-SR-U | 132.300 | ICAC | OP | 37°5' N | 139°0' E | RCAG        |  |
| ACC-SR-U | 133.500 | ICAC | OP | 34°2' N | 135°2' E | RCAG        |  |
| ACC-SR-U | 133.600 | ICAC | OP | 38°3' N | 141°2' E | RCAG        |  |
| ACC-SR-U | 133.800 | ICAC | OP | 34°2' N | 135°2' E | RCAG        |  |
| ACC-SR-U | 134.000 | ICAO | OP | 34°2' N | 135°2' E |             |  |
| FIS      | 134.700 | NAT  | OP | 35°1' N | 139°0' E | HAKONE      |  |
| FIS      | 134.750 | NAT  | OP | 35°2' N | 133°1' E | MIHO        |  |
| FIS      | 134.800 | NAT  | OP | 35°4' N | 140°2' E | NARITA      |  |
| FIS      | 135.050 | NAT  | OP | 35°2' N | 135°3' E | KOMATSU     |  |
| FIS      | 135.300 | NAT  | OP | 37°5' N | 139°0' E | NIEGITA     |  |
| FIS      | 135.500 | NAT  | OP | 34°4' N | 136°5' E | MIKAWA      |  |
| FIS      | 135.600 | NAT  | OP | 34°2' N | 135°2' E | MIKUNISAN   |  |
| FIS      | 135.800 | NAT  | OP | 38°3' N | 141°2' E | JOHONZAN    |  |
| FIS-U    | 126.900 | NAT  | OP | 35°3' N | 139°4' E | ER          |  |
| ATIS     | 128.800 | NAT  | OP | 35°3' N | 139°4' E |             |  |
| AFIS     | 134.850 | NAT  | OP | 36°3' N | 138°1' E | FI MINAGANO |  |
| CD       | 121.825 | NAT  | OP | 35°3' N | 139°4' E | FI          |  |
| CD       | 121.875 | NAT  | OP | 35°3' N | 139°4' E | FI          |  |
| OP-CTL   | 130.900 | NAT  | OP | 35°3' N | 139°4' E |             |  |
| OP-CTL   | 131.100 | NAT  | OP | 35°3' N | 139°4' E |             |  |
| OP-CTL   | 131.200 | NAT  | OP | 35°3' N | 139°4' E |             |  |
| OP-CTL   | 131.700 | NAT  | OP | 35°3' N | 139°4' E |             |  |
| OP-CTL   | 131.750 | NAT  | OP | 35°3' N | 139°4' E |             |  |
| OP-CTL   | 131.800 | NAT  | OP | 35°3' N | 139°4' E |             |  |
| OP-CTL   | 131.900 | NAT  | OP | 35°3' N | 139°4' E |             |  |
| OP-CTL   | 131.950 | NAT  | OP | 35°3' N | 139°4' E |             |  |

|         |            |         |               |           |              |        |          |                               |
|---------|------------|---------|---------------|-----------|--------------|--------|----------|-------------------------------|
| E 71864 | TOKYO INTL | 131.200 | U 0/0         | 35033'00" | N 139046'00" | E NAT  | 31/12/22 | Expert                        |
| E 71874 | TOKYO INTL | 131.700 | U 0/0         | 35033'00" | N 139046'00" | E NAT  | 31/12/22 | Expert                        |
| E 71882 | TOKYO INTL | 131.750 | U 0/0         | 35033'00" | N 139046'00" | E NAT  | 31/12/22 | Expert                        |
| E 71875 | TOKYO INTL | 131.800 | U 0/0         | 35033'00" | N 139046'00" | E NAT  | 31/12/22 | Expert                        |
| E 71863 | TOKYO INTL | 131.900 | U 0/0         | 35033'00" | N 139046'00" | E NAT  | 31/12/22 | Expert                        |
| E 71876 | TOKYO INTL | 131.950 | U 0/0         | 35033'00" | N 139046'00" | E NAT  | 31/12/22 | Expert                        |
| E 71853 | TOKYO INTL | 132.100 | ACC-I 194/250 | 35011'00" | N 139003'00" | E NAT  | 31/12/22 | Surveillance radar 999 Expert |
| E 71850 | TOKYO INTL | 132.300 | ACC-U 260/450 | 37057'00" | N 139003'00" | E ICAO | 31/12/22 | Surveillance 999 Expert       |
| E 71859 | TOKYO INTL | 132.400 | ACC-U 260/450 | 34022'00" | N 135029'00" | E ICAO | 31/12/22 | RCAG; Also ACC-I 999 Expert   |
| E 71851 | TOKYO INTL | 133.500 | ACC-U 260/450 | 34022'00" | N 135029'00" | E ICAO | 31/12/22 | Surveillance 999 Expert       |
| E 71862 | TOKYO INTL | 133.600 | ACC-U 260/450 | 38030'00" | N 141022'00" | E ICAO | 31/12/22 | Surveillance 999 Expert       |
| E 71852 | TOKYO INTL | 133.800 | ACC-U 260/450 | 34022'00" | N 135029'00" | E ICAO | 31/12/22 | Surveillance 999 Expert       |
| E 71842 | TOKYO INTL | 134.000 | ACC-U 260/450 | 34022'00" | N 135029'00" | E ICAO | 31/12/22 | Surveillance radar 999 Expert |
| E 71855 | TOKYO INTL | 134.300 | ACC-I 194/250 | 34022'00" | N 135029'00" | E NAT  | 31/12/22 | Surveillance radar 999 Expert |
| E 71858 | TOKYO INTL | 134.400 | ACC-U 260/450 | 34052'00" | N 137013'00" | E NAT  | 31/12/22 | RCAG 999 Expert               |
| E 71877 | TOKYO INTL | 134.700 | FIR-U 260/450 | 35011'00" | N 139003'00" | E NAT  | 31/12/22 | HAKONE 013 PU                 |
| E 71867 | TOKYO INTL | 134.750 | FIR-U 260/450 | 35029'00" | N 133015'00" | E NAT  | 31/12/22 | MIHO 999 EXPERT               |
| E 71884 | TOKYO INTL | 134.800 | FIR-U 260/450 | 35045'00" | N 140023'00" | E NAT  | 31/12/22 | NARITA 999 Expert             |
| E 76134 | TOKYO INTL | 134.850 | AFIS 25/40    | 36037'00" | N 138011'00" | E NAT  | 31/12/22 | FI MINAGANO 013 PU            |
| E 71891 | TOKYO INTL | 135.050 | FIR-U 260/450 | 35029'00" | N 135031'00" | E NAT  | 31/12/22 | KOMATSU 999 EXPERT            |
| E 71890 | TOKYO INTL | 135.300 | FIR-U 260/450 | 37057'00" | N 139007'00" | E NAT  | 31/12/22 | NIEGITA 999 Expert            |
| E 71889 | TOKYO INTL | 135.500 | FIR-U 260/450 | 34045'00" | N 136056'00" | E NAT  | 31/12/22 | MIKAWA 999 Expert             |
| E 71888 | TOKYO INTL | 135.600 | FIR-U 260/450 | 34022'00" | N 135029'00" | E NAT  | 31/12/22 | MIKUNISAN 999 Expert          |
| E 71841 | TOKYO INTL | 135.650 | FIR-U 260/450 | 36047'00" | N 140002'00" | E NAT  | 31/12/22 | NASU 013 PU                   |
| E 71887 | TOKYO INTL | 135.800 | FIR-U 260/450 | 38030'00" | N 141022'00" | E NAT  | 31/12/22 | JOHONZAN 999 Expert           |
| E 71860 | TOKYO INTL | 135.900 | ACC-I 194/250 | 34022'00" | N 135029'00" | E NAT  | 31/12/22 | 999 Expert                    |

|         |           |         |               |           |              |        |          |                  |
|---------|-----------|---------|---------------|-----------|--------------|--------|----------|------------------|
| E 71900 | TOKYO NEW | 118.400 | TWR 25/40     | 35045'00" | N 140023'00" | E NAT  | 31/12/22 | 013 PU           |
| E 71908 | TOKYO NEW | 121.800 | AS 5/1        | 35045'00" | N 140023'00" | E ICAO | 31/12/22 | 013 PU           |
| E 71894 | TOKYO NEW | 126.700 | FIR-U 260/450 | 37059'00" | N 140051'00" | E ICAO | 31/12/22 | 013 PU           |
| E 71895 | TOKYO NEW | 126.750 | AFIS 25/40    | 33026'00" | N 135047'00" | E NAT  | 31/12/22 | 013 KUSHIMOTO PU |
| E 71905 | TOKYO NEW | 127.300 | FIR-U 260/450 | 35011'00" | N 139003'00" | E ICAO | 31/12/22 | 013 ER PU        |
| E 71912 | TOKYO NEW | 127.400 | FIR-U 260/450 | 34042'00" | N 139027'00" | E ICAO | 31/12/22 | 013 ER PU        |
| E 71902 | TOKYO NEW | 131.850 | U 0/0         | 35045'00" | N 140023'00" | E NAT  | 31/12/22 | 013 PU           |
| E 71903 | TOKYO NEW | 131.900 | U 0/0         | 35045'00" | N 140023'00" | E NAT  | 31/12/22 | 013 PU           |

|         |         |         |               |           |              |       |          |            |
|---------|---------|---------|---------------|-----------|--------------|-------|----------|------------|
| E 71915 | TOTTORI | 118.150 | FIR-U 260/450 | 35032'00" | N 134010'00" | E NAT | 01/01/21 | 999 Expert |
| E 71916 | TOTTORI | 126.200 | FIR-U 260/450 | 35032'00" | N 134010'00" | E NAT | 31/12/22 | 013 PU     |
| E 71917 | TOYAMA  | 124.300 | TWR 25/40     | 36039'00" | N 137011'00" | E NAT | 31/12/22 | 013 PU     |
| E 71918 | TOYAMA  | 126.200 | TWR 25/40     | 36039'00" | N 137011'00" | E NAT | 31/12/22 | 013 PU     |

|     |         |     |         |     |    |             |              |  |
|-----|---------|-----|---------|-----|----|-------------|--------------|--|
| 694 | TOTTORI |     |         |     |    |             |              |  |
| 695 | g       | FIS | 118.150 | NAT | OP | 35°32'00" N | 134°10'00" E |  |
| 696 | g       | FIS | 126.200 | NAT | OP | 35°32'00" N | 134°10'00" E |  |
| 697 | TOYAMA  |     |         |     |    |             |              |  |
| 698 | g       | TWR | 124.300 | NAT | OP | 36°39'00" N | 137°11'00" E |  |
| 699 | g       | TWR | 126.200 | NAT | OP | 36°39'00" N | 137°11'00" E |  |
| 700 | TSUKI   |     |         |     |    |             |              |  |

|         |         |     |    |         |          |  |  |  |
|---------|---------|-----|----|---------|----------|--|--|--|
| TOTTORI |         |     |    |         |          |  |  |  |
| FIS     | 118.150 | NAT | OP | 35°3' N | 134°1' E |  |  |  |
| FIS     | 126.200 | NAT | OP | 35°3' N | 134°1' E |  |  |  |
| TOYAMA  |         |     |    |         |          |  |  |  |
| TWR     | 124.300 | NAT | OP | 36°3' N | 137°1' E |  |  |  |
| TWR     | 126.200 | NAT | OP | 36°3' N | 137°1' E |  |  |  |
| TSUKI   |         |     |    |         |          |  |  |  |

|        |         |         |     |    |            |             |
|--------|---------|---------|-----|----|------------|-------------|
| 701 g  | APP-SR  | 119.225 | NAT | OP | 33°41'00"N | 131°02'00"E |
| 702    | APP-SR  | 120.100 | NAT | OP | 33°41'00"N | 131°02'00"E |
| 703 Cg | APP-SR  | 121.075 | NAT | OP | 33°41'00"N | 131°02'00"E |
| 704 g  | APP-L   | 120.100 | NAT | OP | 33°41'00"N | 131°02'00"E |
| 705 Cg | APP-L   | 127.950 | NAT | OP | 33°41'00"N | 131°02'00"E |
| 706 Cg | TWR     | 126.200 | NAT | OP | 33°41'00"N | 131°02'00"E |
| 707 Cg | TWR     | 123.100 | NAT | OP | 33°41'00"N | 131°02'00"E |
| 708 Cg | APP-PAR | 134.100 | NAT | OP | 33°41'00"N | 131°02'00"E |
| 709 Cg | APP-PAR | 125.300 | NAT | OP | 33°41'00"N | 131°02'00"E |

|                |         |         |     |    |            |             |
|----------------|---------|---------|-----|----|------------|-------------|
| 710 TSUSHIMA   |         |         |     |    |            |             |
| 711 g          | FIS     | 124.300 | NAT | OP | 34°17'00"N | 129°19'00"E |
| 712 g          | FIS     | 126.200 | NAT | OP | 34°17'00"N | 129°19'00"E |
| 713 UTSUNOMIYA |         |         |     |    |            |             |
| 714 Cg         | APP-L   | 120.100 | NAT | OP | 36°31'00"N | 139°52'00"E |
| 715 Cg         | APP-L   | 122.450 | NAT | OP | 36°31'00"N | 139°52'00"E |
| 716 Cg         | TWR     | 126.200 | NAT | OP | 36°31'00"N | 139°52'00"E |
| 717 Cg         | TWR     | 123.100 | NAT | OP | 36°31'00"N | 139°52'00"E |
| 718 Cg         | APP-PAR | 125.300 | NAT | OP | 36°31'00"N | 139°52'00"E |
| 719 Cg         | APP-PAR | 134.100 | NAT | OP | 36°29'00"N | 139°52'00"E |
| 720 Cg         | APP-PAR | 122.150 | NAT | OP | 36°29'00"N | 139°52'00"E |

|              |     |         |     |    |            |             |
|--------------|-----|---------|-----|----|------------|-------------|
| 721 WAKKANAI |     |         |     |    |            |             |
| 722 g        | FIS | 118.300 | NAT | OP | 45°24'00"N | 141°48'00"E |
| 723 g        | FIS | 126.200 | NAT | OP | 45°24'00"N | 141°48'00"E |

|               |     |         |     |    |            |                           |
|---------------|-----|---------|-----|----|------------|---------------------------|
| 724 YAKUSHIMA |     |         |     |    |            |                           |
| 725 g         | FIS | 118.650 | NAT | OP | 30°30'23"N | 130°40'00"E RAG_KAGOSHIMA |
| 726 YAMAGATA  |     |         |     |    |            |                           |
| 727 g         | FIS | 122.700 | NAT | OP | 38°25'00"N | 140°22'00"E               |

|        |         |     |    |         |          |    |
|--------|---------|-----|----|---------|----------|----|
| APP-L  | 127.950 | NAT | OP | 33°4' N | 131°0' E | FI |
| TWR    | 123.100 | NAT | OP | 33°4' N | 131°0' E | FI |
| TWR    | 126.200 | NAT | OP | 33°4' N | 131°0' E |    |
| APP-SR | 121.750 | NAT | OP | 33°4' N | 131°0' E | FI |
| APP-PR | 125.300 | NAT | OP | 33°4' N | 131°0' E |    |
| APP-PR | 134.100 | NAT | OP | 33°4' N | 131°0' E |    |

|            |        |         |     |    |         |          |     |
|------------|--------|---------|-----|----|---------|----------|-----|
| TSUKI      |        |         |     |    |         |          |     |
| TSUSHIMA   | APP-SR | 119.225 | NAT | OP | 33°4' N | 131°0' E | FI  |
|            | FIS    | 124.300 | NAT | OP | 34°1' N | 129°1' E |     |
|            | FIS    | 126.200 | NAT | OP | 34°1' N | 129°1' E |     |
| UTSUNOMIYA |        |         |     |    |         |          |     |
|            | APP-L  | 120.100 | NAT | OP | 36°3' N | 139°5' E |     |
|            | APP-L  | 122.450 | NAT | OP | 36°3' N | 139°5' E |     |
|            | TWR    | 123.100 | NAT | OP | 36°3' N | 139°5' E |     |
|            | TWR    | 126.200 | NAT | OP | 36°3' N | 139°5' E |     |
|            | APP-PR | 122.150 | NAT | OP | 36°3' N | 139°5' E | FI  |
|            | APP-PR | 125.300 | NAT | OP | 36°3' N | 139°5' E | NCG |
|            | APP-PR | 134.100 | NAT | OP | 36°2' N | 139°5' E | NCG |

|          |     |         |     |    |         |          |  |
|----------|-----|---------|-----|----|---------|----------|--|
| WAKKANAI |     |         |     |    |         |          |  |
|          | FIS | 118.300 | NAT | OP | 45°2' N | 141°4' E |  |
|          | FIS | 126.200 | NAT | OP | 45°2' N | 141°4' E |  |

|               |     |         |     |    |         |          |              |
|---------------|-----|---------|-----|----|---------|----------|--------------|
| YAZUSHIZUHAMA |     |         |     |    |         |          |              |
|               | TWR | 120.100 | NAT | OP | 34°4' N | 138°1' E |              |
|               | TWR | 122.000 | NAT | OP | 34°4' N | 138°1' E | FI 30-Dec-13 |
|               | TWR | 126.200 | NAT | OP | 34°4' N | 138°1' E |              |
|               | TWR | 133.400 | NAT | OP | 34°4' N | 138°1' E | FI 30-Dec-13 |

|           |     |         |     |    |         |          |                  |
|-----------|-----|---------|-----|----|---------|----------|------------------|
| YAKUSHIMA |     |         |     |    |         |          |                  |
|           | FIS | 118.650 | NAT | OP | 30°3' N | 130°4' E | FI RAG KAGOSHIMA |
| YAMAGATA  |     |         |     |    |         |          |                  |
|           | FIS | 126.200 | NAT | OP | 38°2' N | 140°2' E |                  |

|               |         |       |         |           |              |   |     |                    |            |        |
|---------------|---------|-------|---------|-----------|--------------|---|-----|--------------------|------------|--------|
| E 71921 TSUKI | 120.100 | APP-L | 50/120  | 33041'00" | N 131002'00" | E | NAT | Surveillance Radar | 31/12/2013 | PU     |
| E 76136 TSUKI | 121.750 | APP-U | 150/450 | 33041'00" | N 131002'00" | E | NAT | Surveillance radar | 31/12/2013 | PU     |
| E 76138 TSUKI | 123.100 | TWR   | 25/40   | 33041'00" | N 131002'00" | E | NAT | FI                 | 31/12/2013 | PU     |
| E 71919 TSUKI | 125.300 | APP-U | 150/450 | 33041'00" | N 131002'00" | E | NAT | Precision radar    | 31/12/2013 | Expert |
| E 71922 TSUKI | 126.200 | TWR   | 25/40   | 33041'00" | N 131002'00" | E | NAT |                    | 31/12/2013 | Expert |
| E 76137 TSUKI | 127.950 | APP-L | 50/120  | 33041'00" | N 131002'00" | E | NAT | FI                 | 31/12/2013 | PU     |
| E 71920 TSUKI | 134.100 | APP-U | 150/450 | 33041'00" | N 131002'00" | E | NAT | Precision radar    | 31/12/2013 | Expert |
| E 76135 TSUKI | 119.225 | APP-U | 150/450 | 33041'00" | N 131002'00" | E | NAT | Surveillance radar | 31/12/2013 | PU     |

|                    |         |       |         |           |              |   |     |                     |            |        |
|--------------------|---------|-------|---------|-----------|--------------|---|-----|---------------------|------------|--------|
| E 71924 TSUSHIMA   | 124.300 | FIR-U | 260/450 | 34017'00" | N 129019'00" | E | NAT |                     | 31/12/2013 | PU     |
| E 71923 TSUSHIMA   | 126.200 | FIR-U | 260/450 | 34017'00" | N 129019'00" | E | NAT |                     | 31/12/2013 | PU     |
| E 71928 UTSUNOMIYA | 120.100 | APP-L | 50/120  | 36031'00" | N 139052'00" | E | NAT |                     | 31/12/2013 | PU     |
| E 71926 UTSUNOMIYA | 120.900 | APP-U | 150/450 | 36031'00" | N 139052'00" | E | NAT | Precision radar     | 31/12/2013 | PU     |
| E 76140 UTSUNOMIYA | 122.150 | APP-U | 150/450 | 36031'00" | N 139052'00" | E | NAT | FI; Precision radar | 31/12/2013 | PU     |
| E 76139 UTSUNOMIYA | 122.450 | APP-L | 50/120  | 36031'00" | N 139052'00" | E | NAT |                     | 31/12/2013 | PU     |
| E 71929 UTSUNOMIYA | 123.100 | TWR   | 25/40   | 36029'00" | N 139052'00" | E | NAT |                     | 31/12/2013 | PU     |
| E 71933 UTSUNOMIYA | 125.300 | APP-U | 150/450 | 36031'00" | N 139052'00" | E | NAT | Precision radar     | 31/12/2013 | PU     |
| E 71925 UTSUNOMIYA | 125.500 | APP-L | 50/120  | 36029'00" | N 139052'00" | E | NAT | Also TWR            | 31/12/2013 | PU     |
| E 71927 UTSUNOMIYA | 126.200 | TWR   | 25/40   | 36031'00" | N 139052'00" | E | NAT |                     | 31/12/2013 | Expert |
| E 71932 UTSUNOMIYA | 127.800 | APP-U | 150/450 | 36029'00" | N 139052'00" | E | NAT | Precision radar     | 31/12/2013 | PU     |
| E 71931 UTSUNOMIYA | 132.570 | APP-U | 150/450 | 36029'00" | N 139052'00" | E | NAT | Precision radar     | 31/12/2013 | PU     |
| E 71930 UTSUNOMIYA | 134.100 | APP-U | 150/450 | 36029'00" | N 139052'00" | E | NAT | Precision radar     | 31/12/2013 | PU     |

|                  |         |       |         |           |              |   |     |            |            |        |
|------------------|---------|-------|---------|-----------|--------------|---|-----|------------|------------|--------|
| E 71934 WAKKANAI | 118.300 | FIR-U | 260/450 | 45024'00" | N 141D48'00" | E | NAT |            | 01/01/1999 | Expert |
| E 71936 WAKKANAI | 124.300 | FIR-U | 260/450 | 45024'00" | N 141D48'00" | E | NAT | REBUN RCAG | 31/12/2013 | PU     |
| E 71935 WAKKANAI | 126.200 | FIR-U | 260/450 | 45024'00" | N 141D48'00" | E | NAT |            | 31/12/2013 | PU     |

|                        |         |     |       |           |              |   |     |            |            |    |
|------------------------|---------|-----|-------|-----------|--------------|---|-----|------------|------------|----|
| E 71809 YAZU SHIZUHAMA | 120.100 | TWR | 25/40 | 34049'00" | N 138D18'00" | E | NAT |            | 31/12/2013 | PU |
| E 76102 YAZU SHIZUHAMA | 122.000 | TWR | 25/40 | 34049'00" | N 138D18'00" | E | NAT | FI 30Dec13 | 31/12/2013 | PU |
| E 71810 YAZU SHIZUHAMA | 126.200 | TWR | 25/40 | 34049'00" | N 138D18'00" | E | NAT |            | 31/12/2013 | PU |
| E 76101 YAZU SHIZUHAMA | 133.400 | TWR | 25/40 | 34049'00" | N 138D18'00" | E | NAT | FI 30Dec13 | 31/12/2013 | PU |

|                   |         |       |         |           |              |   |     |                  |            |    |
|-------------------|---------|-------|---------|-----------|--------------|---|-----|------------------|------------|----|
| E 76141 YAKUSHIMA | 118.650 | FIR-U | 260/450 | 30030'23" | N 130D40'00" | E | NAT | FI RAG KOGOSHIMA | 31/12/2013 | PU |
| E 71938 YAMAGATA  | 122.700 | FIR-L | 194/250 | 38D25'00" | N 140D22'00" | E | NAT |                  | 31/12/2013 | PU |





|        |       |         |      |    |            |             |                              |
|--------|-------|---------|------|----|------------|-------------|------------------------------|
| 894    | ACC-L | 132.350 | ICAO | OP | 26°12'00"N | 127°38'00"E | (OkinoMinami)RCAG_Naha       |
| 895    | ACC-L | 118.300 | ICAO | OP | 26°38'00"N | 127°56'00"E | (Backup)RCAG_Yaedske         |
| 896 g  | ACC-L | 119.300 | ICAO | OP | 26°28'00"N | 129°41'00"E | (Backup)RCAG_Yaedske         |
| 897 cg | ACC-L | 123.900 | ICAO | OP | 26°12'00"N | 127°38'00"E | (MyakoNishi)RCAG_Naha        |
| 898    | ACC-L | 123.900 | ICAO | OP | 24°47'00"N | 125°18'00"E | (MyakoNishi)RCAG_Miyako      |
| 899    | ACC-L | 123.900 | ICAO | OP | 24°23'00"N | 124°10'00"E | (MyakoNishi)RCAG_Ishigaki    |
| 900 cg | ACC-L | 124.500 | ICAO | OP | 26°38'00"N | 127°56'00"E | (MyakoNishi)RCAG_Yaedske     |
| 901    | ACC-L | 124.500 | ICAO | OP | 26°12'00"N | 127°38'00"E | (MyakoNishi)RCAG_Naha        |
| 902    | ACC-L | 124.500 | ICAO | OP | 24°47'00"N | 125°18'00"E | (MyakoNishi)RCAG_Miyako      |
| 903    | ACC-L | 124.500 | ICAO | OP | 25°52'00"N | 131°15'00"E | (MyakoNishi)RCAG_Minamidaito |
| 904    | ATMC  |         |      |    |            |             |                              |
| 905 cg | ACC-U | 126.700 | ICAO | OP | 37°59'00"N | 140°50'00"E | TROPO_Senda                  |
| 906 cg | ACC-U | 127.300 | ICAO | OP | 35°11'00"N | 139°03'00"E | TROPO_Hakone                 |
| 907 cg | ACC-U | 127.400 | ICAO | OP | 34°42'00"N | 139°26'00"E | TROPO_Oshima                 |
| 908    | ACC-L | 127.500 | ICAO | OP | 26°22'00"N | 126°47'00"E | (OkinoNishi)RCAG_Kumejima    |
| 909    | ACC-L | 132.600 | ICAO | OP | 26°22'00"N | 126°47'00"E | (Backup)RCAG_Kumejima        |

|       |             |         |       |       |           |   |            |   |          |    |
|-------|-------------|---------|-------|-------|-----------|---|------------|---|----------|----|
| 76174 | FUKUOKA ATM | 126.700 | ACC-U | 260/4 | 37059°00" | N | 140050°00" | E | 31/12/20 | PU |
|-------|-------------|---------|-------|-------|-----------|---|------------|---|----------|----|

<<-132.35

|       |             |         |       |       |           |   |            |   |          |    |
|-------|-------------|---------|-------|-------|-----------|---|------------|---|----------|----|
| 76174 | FUKUOKA ATM | 126.700 | ACC-U | 260/4 | 37059°00" | N | 140050°00" | E | 31/12/20 | PU |
| 76175 | FUKUOKA ATM | 127.300 | ACC-U | 260/4 | 35011°00" | N | 139003°00" | E | 31/12/20 | PU |
| 76176 | FUKUOKA ATM | 127.400 | ACC-U | 260/4 | 34042°00" | N | 139026°00" | E | 31/12/20 | PU |

|       |             |         |       |       |           |   |            |   |          |    |
|-------|-------------|---------|-------|-------|-----------|---|------------|---|----------|----|
| 76174 | FUKUOKA ATM | 126.700 | ACC-U | 260/4 | 37059°00" | N | 140050°00" | E | 31/12/20 | PU |
| 76175 | FUKUOKA ATM | 127.300 | ACC-U | 260/4 | 35011°00" | N | 139003°00" | E | 31/12/20 | PU |
| 76176 | FUKUOKA ATM | 127.400 | ACC-U | 260/4 | 34042°00" | N | 139026°00" | E | 31/12/20 | PU |

<<-127.500

<<-132.600