

## Summary Propagation Tables for Angola (Luanda)

| SSN<br>Ultra High         | SSN<br>Very High          | SSN<br>High               | SSN<br>Medium             | SSN<br>Low                | SSN<br>Very Low           |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| <a href="#">January</a>   | <a href="#">January</a>   | <a href="#">January</a>   | <a href="#">January</a>   | <a href="#">January</a>   | <a href="#">January</a>   |
| <a href="#">February</a>  | <a href="#">February</a>  | <a href="#">February</a>  | <a href="#">February</a>  | <a href="#">February</a>  | <a href="#">February</a>  |
| <a href="#">March</a>     | <a href="#">March</a>     | <a href="#">March</a>     | <a href="#">March</a>     | <a href="#">March</a>     | <a href="#">March</a>     |
| <a href="#">April</a>     | <a href="#">April</a>     | <a href="#">April</a>     | <a href="#">April</a>     | <a href="#">April</a>     | <a href="#">April</a>     |
| <a href="#">May</a>       | <a href="#">May</a>       | <a href="#">May</a>       | <a href="#">May</a>       | <a href="#">May</a>       | <a href="#">May</a>       |
| <a href="#">June</a>      | <a href="#">June</a>      | <a href="#">June</a>      | <a href="#">June</a>      | <a href="#">June</a>      | <a href="#">June</a>      |
| <a href="#">July</a>      | <a href="#">July</a>      | <a href="#">July</a>      | <a href="#">July</a>      | <a href="#">July</a>      | <a href="#">July</a>      |
| <a href="#">August</a>    | <a href="#">August</a>    | <a href="#">August</a>    | <a href="#">August</a>    | <a href="#">August</a>    | <a href="#">August</a>    |
| <a href="#">September</a> | <a href="#">September</a> | <a href="#">September</a> | <a href="#">September</a> | <a href="#">September</a> | <a href="#">September</a> |
| <a href="#">October</a>   | <a href="#">October</a>   | <a href="#">October</a>   | <a href="#">October</a>   | <a href="#">October</a>   | <a href="#">October</a>   |
| <a href="#">November</a>  | <a href="#">November</a>  | <a href="#">November</a>  | <a href="#">November</a>  | <a href="#">November</a>  | <a href="#">November</a>  |
| <a href="#">December</a>  | <a href="#">December</a>  | <a href="#">December</a>  | <a href="#">December</a>  | <a href="#">December</a>  | <a href="#">December</a>  |

Each of the month names in the above table is a hyperlink to the corresponding page of this document. Click on the one you want to jump to.

Jan., Angola (Luanda), for SSN = Ultra High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |     |
| 0         | 8  | 5  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9  | 3         | 9  | 9+ | 0  | 0   |    |  |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 5  | 8  | 9+ | 5  | -         | 9  | 9  | 1  |     |    |  |  |     |
| 2         | 7  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 3  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9  | 9+ | 9+        | 9  | 9+ | 9+ | -  | 7  | 9+ | 4  | 3         | 9  | 6  | 2  |     |    |  |  |     |
| 3         | 8  | -  | 9  | 9+ | 8  | -  | 8  | 9+        | -  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 3  | 9         | 9+ | 9+ | 9+ | 9  | 8  | -  | 1  | 9         | 5  | 2  | 9  | -   | 3  |  |  |     |
| 4         | 9  | -  | 9  | 9+ | 3  | -  | 7  | 9+        | -  | 9+ | 9+ | 9  | 5  | 9  | 9  | 7         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | -  | 8         | 9+ | 9  | 9  | 9+ | 8  | -  | -  | 8         | 8  | 1  | 6  | -   | 4  |  |  |     |
| 5         | 6  | -  | 9  | 9  | -  | -  | 5  | 9         | -  | 9+ | 9+ | 6  | 5  | 8  | 9+ | 5         | 9+ | 9+ | 9+ | 9+ | 9+ | 1  | 9  | 9         | 5  | 9+ | 8  | 7  | -  | 1  | 1  | 5         | 4  | 2  | -  | 5   |    |  |  |     |
| 6         | 1  | -  | 3  | 6  | -  | -  | -  | 8         | -  | 9  | 9  | 1  | -  | 8  | 9+ | 3         | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9  | 9         | 5  | 9+ | 9  | 2  | 6  | 8  | -  | 9         | 9  | 8  | -  | 6   |    |  |  |     |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 2         | -  | 4  | 8  | -  | -  | 5  | 9+ | 2         | 9+ | 9+ | 9  | 7  | 8  | 9+ | 9  | 9+        | 9+ | 9+ | 9  | -  | 9+ | 9  | 6  | 8         | 9  | 8  | -  | 7   |    |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 2  | -  | -  | -  | 9  | -         | 9  | 9+ | 5  | 1* | 8  | 9+ | 9  | 9+        | 9+ | 9+ | 7  | -  | 9+ | 9  | 8  | 4         | 9  | 8  | -  | 8   |    |  |  |     |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | -         | 8  | 9  | 4  | -  | 6  | 9+ | 8  | 9         | 9+ | 9  | 5  | -  | 9  | 9  | 8  | 8         | 9  | 8  | -  | 9   |    |  |  |     |
| 10        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | -         | 6  | 9  | 4  | -  | 4  | 9  | 8  | 9         | 9+ | 9  | 7  | 7  | 9  | 9  | 9  | 9+        | 9  | 8  | -  | 10  |    |  |  |     |
| 11        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | 1         | 3  | 9  | 5  | -  | 1  | 9  | 8  | 9         | 5  | 9  | 8  | 9  | 9  | 9  | 9  | 9+        | 9  | 9  | 7  | 11  |    |  |  |     |
| 12        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 2         | 1  | 6  | 7  | -  | -  | 9  | 9  | 8         | 7  | 9+ | 8  | 8  | 9  | 9  | 9  | 9+        | 9  | 9  | 9  | 12  |    |  |  |     |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 5         | -  | 7  | 9  | 2  | -  | 9+ | 9  | 8         | 9  | 9+ | 9  | 8  | 9+ | 9  | 9  | 9+        | 9  | 9  | 8  | 13  |    |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | 1  | -  | -  | 9  | 9         | -  | 9+ | 9+ | 9  | 1  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 8  | 14  |    |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 3         | 5  | -  | -  | 6  | -  | -  | 9+ | 9+        | 1  | 9+ | 9+ | 9  | 5  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9  | 9+        | 9+ | 9+ | 9  | 15  |    |  |  |     |
| 16        | -  | -  | -  | -  | 2  | -  | -  | 8         | 8  | -  | 2  | 9  | -  | -  | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 16  |    |  |  |     |
| 17        | 7  | 7  | -  | -  | 9  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 17 |  |  |     |
| 18        | 9  | 8  | -  | 9+ | 9  | 7  | -  | 9+        | 9  | 1  | 9+ | 9+ | 9  | 5  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 18 |  |  |     |
| 19        | 9+ | 9  | -  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 6  | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9  | 9  | 9+ | 19  |    |  |  |     |
| 20        | 9+ | 9  | 2  | 9+ | 9+ | 8  | 1  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 2  | 9  | 9+ | 9+        | 9+ | 9  | 9+ | 20  |    |  |  |     |
| 21        | 9+ | 9  | 6  | 9+ | 9  | 6  | 8  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 1  | 8  | 9+ | 9+        | 9+ | 9  | 9+ | 21  |    |  |  |     |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 8  | 9+ | 5  | 8  | 9+ | 4         | 9+ | 9  | 9+ | 22  |    |  |  |     |
| 23        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 8  | 9+ | 7  | 6  | 9+ | 9         | 8  | 9  | 9+ | 23  |    |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |  |  |     |

Feb., Angola (Luanda), for SSN = Ultra High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |    |   | UTC |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|----|---|-----|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |    |   |     |  |
| 0         | 9  | 5  | 8  | 9+ | 8  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 0   |    |    |   |     |  |
| 1         | 9  | -  | 8  | 9+ | 9  | -  | 8  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 1   |    |    |   |     |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 2  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9  | 9  | 9   | 2  |    |   |     |  |
| 3         | 9  | -  | 9  | 9+ | 7  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 3  |    |   |     |  |
| 4         | 9  | -  | 9  | 9  | 2  | -  | 7  | 9+        | -  | 9+ | 9+ | 8  | 1  | 9  | 9  | 5         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 4  |    |   |     |  |
| 5         | 6  | -  | 9  | 8  | -  | -  | 5  | 9         | -  | 9+ | 9+ | 5  | 4  | 9  | 9+ | 4         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 5  |    |   |     |  |
| 6         | -  | -  | 3  | 5  | -  | -  | -  | 8         | -  | 9  | 9  | -  | -  | 8  | 9+ | 1         | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 6  |    |   |     |  |
| 7         | -  | -  | -  | -  | -  | -  | -  | 2         | -  | 5  | 7  | -  | -  | 3  | 9+ | 1         | 9+ | 9+ | 8  | 8  | 9  | 9+ | 9  | 9+        | 9+ | 9+ | 9  | 9  | 9+ | 9  | 9+ | 9         | 9+ | 9  | 9+ | 9   | 9+ | 7  |   |     |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 8  | 1*        | 9  | 9  | 4  | 1  | 9  | 9+ | 9  | 9+        | 9+ | 9  | 8  | -  | 9+ | 9  | 9+ | 9+        | 9  | 9+ | 9  | 9+  | 9  | 9+ | 8 |     |  |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | -         | 7  | 9  | 2  | -  | 6  | 9  | 6  | 9+        | 9+ | 9  | 6  | 1  | 9+ | 9  | 9  | 9+        | 9  | 9  | 9  | 9   | 9  | 9  | 9 | 9   |  |
| 10        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | -         | 4  | 9  | 2  | -  | 1  | 9  | 7  | 9         | 9+ | 9  | 6  | 8  | 9  | 9  | 9  | 4         | 8  | 8  | 1  | 10  |    |    |   |     |  |
| 11        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2  | 1         | 1  | 7  | 3  | -  | -  | 9  | 8  | 8         | 9+ | 9  | 8  | 8  | 9  | 9  | 9  | 4         | 9  | 8  | 9  | 11  |    |    |   |     |  |
| 12        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | 2         | -  | 5  | 6  | -  | -  | 9  | 9  | 7         | 9+ | 9  | 8  | 7  | 9  | 9  | 9  | 4         | 9  | 7  | 8  | 12  |    |    |   |     |  |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 7         | -  | 5  | 8  | 2  | -  | 9  | 9  | 6         | 9+ | 9+ | 9  | 6  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 8  | 13  |    |    |   |     |  |
| 14        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | 1  | -  | -  | 8  | 9         | -  | 9+ | 9  | 8  | -  | 9+ | 9+ | 8         | 9+ | 9+ | 9  | 7  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 8  | 14  |    |    |   |     |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 2         | 4  | -  | -  | 6  | -  | -  | 9+ | 9+        | -  | 9+ | 9+ | 9  | 3  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 4         | 9+ | 9+ | 9  | 15  |    |    |   |     |  |
| 16        | -  | -  | -  | -  | 1  | -  | -  | 7         | 8  | -  | 1  | 8  | -  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 4         | 9+ | 9+ | 9  | 16  |    |    |   |     |  |
| 17        | 5  | 7  | -  | -  | 6  | -  | -  | 9         | 8  | -  | 9+ | 9  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9   | 17 |    |   |     |  |
| 18        | 9  | 8  | -  | 9+ | 9  | 7  | -  | 9+        | 9+ | 1  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9   | 18 |    |   |     |  |
| 19        | 9  | 8  | -  | 9+ | 9+ | 7  | -  | 9+        | 9+ | 6  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9   | 19 |    |   |     |  |
| 20        | 9+ | 8  | 2  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 9   | 20 |    |   |     |  |
| 21        | 9+ | 8  | 6  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 8  | 9+ | 21  |    |    |   |     |  |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 8  | 9+        | 9+ | 9+ | 8  | 9+  | 22 |    |   |     |  |
| 23        | 9  | 6  | 8  | 9+ | 8  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 5  | 9+        | 5  | 9+ | 8  | 9+  | 23 |    |   |     |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |    |   |     |  |

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| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |   |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|---|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |   |  |  |     |
| 0         | 9  | 4  | 8  | 9+ | 8  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 1  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 5  | 9+        | 9+ | 9+ | 0  |     |   |  |  |     |
| 1         | 9  | -  | 8  | 9+ | 9  | -  | 8  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 5  | 8         | 9  | 9+ | 1  |     |   |  |  |     |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 2  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 9  | 9  | 9+ | 9  | 9         | 9+ | 2  |    |     |   |  |  |     |
| 3         | 9  | -  | 9  | 9+ | 7  | -  | 9  | 9+        | -  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 1  | 3  | 9+ | 8  | 6         | 9  | 9  | 3  |     |   |  |  |     |
| 4         | 9  | -  | 9  | 9  | 2  | -  | 8  | 9+        | -  | 9+ | 9+ | 8  | 1  | 9  | 9+ | 4         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9         | 9+ | 9+ | 9  | 9+ | 9+ | -  | 3  | 9+        | 5  | 2  | 7  | 9   | 4 |  |  |     |
| 5         | 6  | -  | 8  | 8  | -  | -  | 6  | 9         | -  | 9+ | 9+ | 5  | 3  | 9  | 9+ | 1         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 9+ | 5  | 9+ | 9+ | 9+ | 1  | 8  | 6         | 5  | 9  | 8  | 6   | 5 |  |  |     |
| 6         | -  | -  | 5  | 5  | -  | -  | -  | 7         | -  | 9  | 9  | -  | -  | 8  | 9+ | 1         | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 5*        | 5  | 9+ | 8  | 4*  | 6 |  |  |     |
| 7         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 5  | 7  | -  | -  | 3  | 9+ | 1*        | 9+ | 9+ | 8  | 8  | 9  | 9+ | 6  | 9+        | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9  | 5* | 7   |   |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 1  | -  | -  | -  | 8  | 1*        | 9  | 9  | 3  | 1  | 9  | 9+ | 9  | 9+        | 9+ | 9  | 9  | 8  | 9+ | 8  | 2* | 9+        | 9+ | 8  | 2* | 8   |   |  |  |     |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | -         | 8  | 9  | 2  | -  | 6  | 9  | 6* | 9+        | 9+ | 9  | 6  | 9  | 9+ | 9  | 9+ | 9         | 8  | -  | 9  |     |   |  |  |     |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | -         | 4  | 7  | 2  | -  | 1  | 9  | 7  | 9         | 9+ | 9  | 5  | 9  | 9  | 9  | 4  | 9         | 8  | 7  | 10 |     |   |  |  |     |
| 11        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2  | 1         | 1  | 6  | 3  | -  | -  | 9  | 7  | 8         | 9  | 9  | 6  | 8  | 9+ | 9  | 9  | 4         | 9  | 8  | 8  | 11  |   |  |  |     |
| 12        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | 2         | -  | 5  | 5  | -  | -  | 9  | 9  | 7         | 9+ | 9  | 8  | 7  | 9+ | 9+ | 9  | 4         | 9  | 9  | 8  | 12  |   |  |  |     |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 7         | -  | 5  | 8  | 3  | -  | 9  | 9  | 6         | 9+ | 9+ | 9  | 6  | 9  | 9+ | 9  | 4         | 9+ | 9  | 8  | 13  |   |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | -  | 6  | 9+ | 8  | -  | 9+ | 9+ | 7         | 9+ | 9+ | 9  | 6  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 8  | 14  |   |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 4  | -  | -  | 6  | -  | -  | 9  | 9         | 1  | 9+ | 9+ | 9  | 2  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 4         | 9+ | 9+ | 9  | 15  |   |  |  |     |
| 16        | -  | -  | -  | -  | 1  | -  | -  | 6         | 8  | -  | 1  | 8  | -  | -  | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9  | 4         | 9+ | 9+ | 9  | 16  |   |  |  |     |
| 17        | 4  | 7  | -  | -  | 6  | -  | -  | 9         | 8  | -  | 9+ | 9  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 17  |   |  |  |     |
| 18        | 9  | 8  | -  | 9+ | 9  | 7  | -  | 9+        | 9  | 1  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 18  |   |  |  |     |
| 19        | 9  | 8  | -  | 9+ | 9+ | 8  | -  | 9+        | 9  | 6  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 19  |   |  |  |     |
| 20        | 9+ | 8  | 2  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 20  |   |  |  |     |
| 21        | 9+ | 8  | 6  | 9+ | 9+ | 8  | 4  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9+        | 9+ | 6  | 9  | 21  |   |  |  |     |
| 22        | 9  | 7  | 8  | 9+ | 9  | 1  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9+ | 9  | 9  | 9+ | 9+        | 5  | 9+ | 22 |     |   |  |  |     |
| 23        | 9  | 6  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 5         | 9+ | 8  | 9+ | 23  |   |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |   |  |  |     |

Apr., Angola (Luanda), for SSN = Ultra High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |   |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|---|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |   |  |     |
| 0         | 9  | -  | 8  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 9+ | 9+  | 0  |   |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 5  | 9+ | 9   | 9+ | 1 |  |     |
| 2         | 9  | -  | 8  | 9+ | 9  | -  | 9  | 9+        | 2  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 8  | 9  | 9  | 9+ | 8         | 9  | 9  | 9+ | 2   |    |   |  |     |
| 3         | 8  | -  | 8  | 9+ | 6  | -  | 9  | 9+        | -  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 4  | 3  | 9+ | 5         | 7  | 9  | 9+ | 3   |    |   |  |     |
| 4         | 7  | -  | 8  | 9  | 1  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | -  | 9  | 9+ | 5         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8         | 9+ | 9  | 9+ | 9+ | 9+ | 1  | 2  | 9         | 5  | 4  | 1  | 9   | 4  |   |  |     |
| 5         | 2  | -  | 9  | 8  | -  | -  | 5  | 8         | -  | 9+ | 9+ | 4  | 4  | 8  | 9+ | -         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 9  | 5  | 9+ | 9  | 9+ | 6  | 8  | 2*        | 5  | 9+ | 8  | 3   | 5  |   |  |     |
| 6         | -  | -  | 6  | 4  | -  | -  | 1  | 6         | -  | 9  | 9  | -  | -  | 8  | 9+ | 1*        | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 5*        | 5  | 9+ | 9  | 7*  | 6  |   |  |     |
| 7         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 6  | 6  | -  | -  | 2  | 9  | -         | 9+ | 9+ | 8  | 8  | 9+ | 9+ | 7  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9  | 7   | 7  |   |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | -  | -  | -  | -  | 7  | -         | 9+ | 9  | 4  | 2* | 9  | 9+ | 9  | 9+        | 9+ | 8  | 9  | 9  | 9+ | 8  | 3  | 9+        | 9+ | 8  | 6  | 8   |    |   |  |     |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2  | -         | 8  | 7  | 1  | -  | 7  | 9  | 7  | 9+        | 9+ | 8  | 7  | 9  | 9  | 9  | 9+ | 9         | 8  | 1* | 9  |     |    |   |  |     |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | -         | 5  | 7  | 1  | -  | 1  | 9  | 8  | 9         | 9+ | 7  | 7  | 9  | 9  | 9  | 9+ | 4         | 9  | 8  | 7  | 10  |    |   |  |     |
| 11        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | 1         | 2  | 7  | 1  | -  | -  | 9  | 8  | 8         | 9  | 8  | 8  | 8  | 9+ | 9  | 9  | 4         | 9  | 9  | 8  | 11  |    |   |  |     |
| 12        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 2         | 1  | 5  | 6  | 1  | -  | 9  | 9  | 7         | 9  | 9  | 9  | 7  | 9  | 9  | 9  | 4         | 9  | 9  | 8  | 12  |    |   |  |     |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 8         | -  | 5  | 9  | 4  | -  | 9  | 9  | 7         | 9+ | 9+ | 9  | 7  | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 8  | 13  |    |   |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | -  | 7  | 9+ | 9  | 1* | 9+ | 9+ | 7         | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 8  | 14  |    |   |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 5  | -  | -  | 6  | -  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9  | 2* | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 4         | 9+ | 9+ | 8  | 15  |    |   |  |     |
| 16        | -  | 1  | -  | -  | 1  | -  | -  | 5         | 8  | -  | 1  | 8  | 7  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 4         | 9+ | 9+ | 9  | 16  |    |   |  |     |
| 17        | 4  | 7  | -  | -  | 7  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 17  |    |   |  |     |
| 18        | 8  | 8  | -  | 9+ | 9  | 8  | -  | 9+        | 9  | 2  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 18  |    |   |  |     |
| 19        | 9  | 8  | -  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 19  |    |   |  |     |
| 20        | 9+ | 8  | 3  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 20  |    |   |  |     |
| 21        | 9+ | 8  | 7  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 21  |    |   |  |     |
| 22        | 9+ | 7  | 8  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 8  | 9+ | 22 |     |    |   |  |     |
| 23        | 9  | 6  | 8  | 9+ | 8  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 9  | 9+  | 23 |   |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |   |  |     |

May, Angola (Luanda), for SSN = Ultra High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |     |
| 0         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 0  | 0  |     |  |  |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 5  | 9+ | 9+ | 9+ | 1  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9         | 8  | 9+ | 1  |     |  |  |  |     |
| 2         | 8  | -  | 8  | 9+ | 9  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 9+ | 9  | 7  | 9+ | 8  | 9         | 9  | 9+ | 2  |     |  |  |  |     |
| 3         | 5  | -  | 9  | 9+ | 5  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | -  | 9  | 9+ | 8         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 8  | 9+        | 9  | 9+ | 9+ | 2  | 1  | 9+ | 7  | 2         | 8  | 9+ | 3  |     |  |  |  |     |
| 4         | 5  | -  | 8  | 9  | 1  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | -  | 9  | 9+ | 3         | 9+ | 9+ | 9+ | 9  | 9+ | 8  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | -  | 3  | 5  | 5         | 5  | 4  | 7  | 4   |  |  |  |     |
| 5         | 1  | -  | 9  | 9  | -  | -  | 5  | 8         | -  | 9+ | 9+ | 3  | 1  | 8  | 9+ | -         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9         | 5  | 9+ | 9  | 9+ | 7  | 8  | 4* | 5         | 9+ | 8  | 3  | 5   |  |  |  |     |
| 6         | -  | -  | 4  | 3  | -  | -  | -  | 5         | -  | 9  | 9  | -  | -  | 7  | 9+ | -         | 9+ | 9+ | 8  | 9  | 9+ | 9+ | 8  | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 4* | 5  | 9+        | 9  | 6  | 6  |     |  |  |  |     |
| 7         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 7  | 5  | -  | -  | 1  | 9  | -         | 9+ | 9+ | 7  | 8  | 9  | 9+ | 7  | 9+        | 9+ | 9  | 9  | 9+ | 9  | 8  | 9  | 5         | 9  | 9  | 8  | 7   |  |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | -  | -  | -  | -  | 6  | -         | 9+ | 9  | 3  | 1  | 8  | 9+ | 9  | 9+        | 9+ | 9  | 9  | 9  | 8  | 9  | 8  | 9+        | 9  | 8  | 8  | 8   |  |  |  |     |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | -         | 9  | 7  | 1  | -  | 6  | 9  | 7  | 9+        | 9+ | 7  | 7  | 9  | 9+ | 9  | 9+ | 9         | 8  | -  | 9  |     |  |  |  |     |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 1  | -         | 6  | 5  | 1  | -  | 1  | 9  | 8  | 9         | 9+ | 7  | 8  | 9  | 9  | 9  | 9+ | 9         | 8  | -  | 10 |     |  |  |  |     |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2  | 1         | 2  | 6  | 2  | 1  | -  | 9  | 8  | 8         | 9+ | 8  | 8  | 8  | 8  | 9  | 9  | 4         | 9  | 9  | 3  | 11  |  |  |  |     |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | 2         | -  | 5  | 2  | 2  | -  | 9  | 9  | 7         | 9  | 9  | 9  | 7  | 8  | 9+ | 9  | 4         | 9  | 9  | 6  | 12  |  |  |  |     |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 8         | -  | 5  | 8  | 7  | -  | 9  | 9  | 6         | 9+ | 9  | 9  | 7  | 8  | 9+ | 9  | 4         | 9+ | 9  | 7  | 13  |  |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | -  | 6  | 9  | 9  | 1* | 9+ | 9+ | 8         | 9+ | 9+ | 9  | 6  | 9  | 9+ | 9  | 4         | 9+ | 9  | 8  | 14  |  |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 5  | -  | -  | 3  | -  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9  | 2* | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 4         | 9+ | 9+ | 8  | 15  |  |  |  |     |
| 16        | -  | -  | -  | -  | 1  | -  | -  | 5         | 8  | -  | 1  | 8  | 8  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 4  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 8  | 9  | 9+ | 9+ | 4         | 9+ | 9+ | 8  | 16  |  |  |  |     |
| 17        | 2  | 7  | -  | -  | 6  | -  | -  | 9         | 9  | -  | 7  | 9  | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 5  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9  | 9+ | 9+ | 5         | 9  | 9+ | 9  | 17  |  |  |  |     |
| 18        | 8  | 8  | -  | 5  | 9  | 7  | -  | 9+        | 9  | 2  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9  | 9+ | 9+ | 5         | 9+ | 9+ | 9  | 18  |  |  |  |     |
| 19        | 9  | 8  | -  | 9+ | 9+ | 7  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 5         | 9+ | 9+ | 9  | 19  |  |  |  |     |
| 20        | 9+ | 8  | 2  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 5  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 20  |  |  |  |     |
| 21        | 9+ | 8  | 5  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+ | 9+        | 9  | 9  | 9  | 21  |  |  |  |     |
| 22        | 9+ | 7  | 8  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9+ | 5  | 9+ | 8         | 9+ | 22 |    |     |  |  |  |     |
| 23        | 9  | 5  | 8  | 9+ | 9  | -  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9+ | 5  | 9+ | 9         | 9+ | 23 |    |     |  |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |     |

Jun., Angola (Luanda), for SSN = Ultra High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 8  | -  | 8  | 9+ | 9  | -  | 7  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 9+ | 2  | 9  | 9+ | 9         | 7  | 9  | 9  | 0   |  |  |  |  |
| 1         | 7  | -  | 8  | 9+ | 9  | -  | 8  | 9+        | 4  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 9  | 9+ | 9+        | 5  | 9+ | 9  | 9+ | 3  | 9  | 9+ | 8         | 6  | 4  | 9+ | 1   |  |  |  |  |
| 2         | 6  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 1  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 1  | 9+ | 9  | 8  | 9+        | 9  | 8  | 9+ | 1  | 3  | 9+ | 7  | 4         | 4  | 9  | 2  |     |  |  |  |  |
| 3         | 5  | -  | 8  | 9+ | 3  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | -  | 9  | 9+ | 7         | 9+ | 9+ | 9+ | 9  | 9+ | 5  | 5  | 9+        | 7  | 8  | 7  | 9+ | -  | -  | 8  | 5         | 1  | 1  | 9  | 3   |  |  |  |  |
| 4         | 4  | -  | 8  | 9  | -  | -  | 7  | 9         | -  | 9+ | 9+ | 7  | -  | 9  | 9+ | 2         | 9+ | 9+ | 9+ | 9  | 9+ | 5  | 8  | 9+        | 9  | 9  | 5  | 9+ | -  | 5  | 2  | 5         | 6  | 2  | 4  | 4   |  |  |  |  |
| 5         | -  | -  | 9  | 8  | -  | -  | 4  | 7         | -  | 9  | 9+ | 2  | 4  | 8  | 9+ | 1         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 8         | 5  | 9+ | 9  | 9  | 2  | 8  | 1* | 5         | 9+ | 8  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 5  | 2  | -  | -  | -  | 3         | -  | 9  | 9  | -  | -  | 7  | 9+ | -         | 9+ | 9+ | 8  | 9  | 9+ | 9+ | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 8  | 2* | 5         | 9  | 9  | 1  | 6   |  |  |  |  |
| 7         | -  | -  | 1  | -  | -  | -  | -  | -         | -  | 8  | 4  | -  | -  | 1  | 8  | -         | 9+ | 9+ | 6  | 8  | 9  | 9+ | 8  | 9+        | 9+ | 8  | 9  | 9+ | 8  | 8  | 9  | 5         | 8  | 9  | 8  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 2  | -  | -  | -  | -  | 6  | -         | 9+ | 9  | 3  | 3  | 8  | 9  | 9  | 9+        | 9+ | 9  | 9  | 9  | 7  | 8  | 6  | 9+        | 8  | 9  | 6  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | -         | 9  | 6  | 1  | 1  | 5  | 9  | 8  | 9+        | 9+ | 7  | 8  | 9  | 8  | 8  | 9+ | 9+        | 8  | 9  | 2  | 9   |  |  |  |  |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 1  | 1         | 7  | 9  | 1  | 1  | 1  | 8  | 8  | 9+        | 9+ | 7  | 8  | 8  | 8  | 9  | 9+ | 4         | 9  | 9  | 4  | 10  |  |  |  |  |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2  | 1         | 3  | 9  | 2  | 1  | -  | 9  | 8  | 9         | 4  | 8  | 8  | 8  | 8  | 9  | 9  | 4         | 8  | 9  | 2  | 11  |  |  |  |  |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | 2         | -  | 9  | 4  | 4  | -  | 9  | 9  | 9         | 4  | 9  | 9  | 7  | 9  | 9  | 9  | 4         | 9  | 9  | 1  | 12  |  |  |  |  |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 7         | 1  | 9  | 7  | 8  | -  | 9  | 9  | 8         | 4  | 9  | 9  | 6  | 9  | 9  | 9  | 4         | 9  | 9  | 5  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 9         | 1  | 6  | 8  | 9  | 1* | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 4         | 9+ | 9  | 6  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | -         | 5  | -  | -  | 3  | -  | -  | 9  | 9+        | 3  | 9+ | 9  | 9  | 3* | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 4         | 9+ | 9  | 7  | 15  |  |  |  |  |
| 16        | -  | -  | -  | -  | 1  | -  | -  | 3         | 8  | -  | -  | 8  | 8  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 4* | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+ | 9+        | 9  | 9  | 7  | 16  |  |  |  |  |
| 17        | 1  | 7  | -  | -  | 8  | 1  | -  | 8         | 9  | 1  | 7  | 9  | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 3  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+ | 9+        | 9  | 9  | 8  | 17  |  |  |  |  |
| 18        | 7  | 8  | -  | 5  | 9  | 7  | -  | 9         | 9  | 4  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 8  | 9  | 8  | 18  |  |  |  |  |
| 19        | 9  | 8  | 1  | 9+ | 9+ | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 6  | 9+ | 9+ | 9  | 8  | 9  | 9+ | 9+        | 9  | 9  | 8  | 19  |  |  |  |  |
| 20        | 9  | 8  | 2  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 3  | 8  | 9+ | 5         | 9  | 8  | 9  | 20  |  |  |  |  |
| 21        | 9+ | 8  | 5  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 3  | 8  | 9+ | 5         | 8  | 6  | 9  | 21  |  |  |  |  |
| 22        | 9  | 8  | 7  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 6  | 6  | 9+ | 5         | 7  | 3  | 9  | 22  |  |  |  |  |
| 23        | 8  | 5  | 8  | 9+ | 9+ | 4  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 5  | 7  | 9+ | 5         | 7  | 8  | 9  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

Jul., Angola (Luanda), for SSN = Ultra High, Sigs in S-Units. By N6BV, ARRL.

|     | 80 Meters |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |
|-----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|
| UTC | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |
| 0   | 9         | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 9  | 9+ | 7  | 6  | 7  | 9+ | 0   |
| 1   | 9         | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | 1  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 8         | 8  | 9+ | 5  | 5  | 6  | 9+ | 1   |
| 2   | 6         | -  | 8  | 9+ | 9  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9+ | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 1  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 4         | 2  | 9+ | 5  | 5  | 8  | 9+ | 2   |
| 3   | 5         | -  | 9  | 9+ | 4  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9+ | 9  | 9+ | 8         | 5  | 9+ | 9  | 8  | 9  | 9+ | -         | -  | 8  | 5  | -  | 6  | 9  | 3   |
| 4   | 5         | -  | 9  | 9  | 1  | -  | 8  | 9         | -  | 9+ | 9+ | 7  | -  | 9  | 9+        | 2  | 9+ | 9+ | 9+ | 9  | 9+ | 7         | 7  | 9  | 9  | 9  | 8  | 9  | -         | 2  | 1  | 5  | 3  | -  | 1  | 4   |
| 5   | 1         | -  | 9  | 8  | -  | -  | 4  | 8         | -  | 9  | 9+ | 2  | 3  | 8  | 9+        | 1  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 8  | 3  | 5  | 9+ | 8  | 9  | 3         | 8  | -  | 5  | 9  | 7  | -  | 5   |
| 6   | -         | -  | 4  | 2  | -  | -  | -  | 4         | -  | 9  | 9  | -  | -  | 7  | 9+        | -  | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 8  | 7  | 9+ | 9  | 9+ | 9+ | 6         | 8  | 4* | 5  | 9  | 9  | 4* | 6   |
| 7   | -         | -  | -  | -  | -  | -  | -  | -         | -  | 7  | 4  | -  | -  | 1  | 9         | -  | 9+ | 9+ | 5  | 8  | 9  | 9+        | 7  | 9+ | 9+ | 8  | 9  | 9+ | 6         | 8  | 6  | 5  | 8  | 9  | 7  | 7   |
| 8   | -         | -  | -  | -  | -  | -  | -  | -         | -  | 1  | -  | -  | -  | -  | 6         | -  | 9+ | 8  | 2  | 2* | 8  | 9         | 9  | 9+ | 9+ | 9  | 9  | 9  | 7         | 8  | 6  | 9+ | 8  | 9  | 3  | 8   |
| 9   | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3         | -  | 9  | 9  | 1  | -  | 5  | 9         | 8  | 9+ | 9+ | 8  | 7  | 8  | 8         | 8  | 9  | 9+ | 8  | 9  | 4  | 9   |
| 10  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 1         | 1  | 5  | 9  | 1  | -  | 1  | 8         | 8  | 9  | 9+ | 7  | 7  | 8  | 8         | 9  | 9  | 4  | 9  | 9  | 6  | 10  |
| 11  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2         | 1  | 1  | 9  | 2  | 1  | -  | 9         | 8  | 8  | 4  | 8  | 8  | 7  | 8         | 9  | 9  | 4  | 9  | 9  | 3  | 11  |
| 12  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3         | 2  | -  | 9  | 5  | 3  | -  | 9         | 8  | 7  | 4  | 9  | 8  | 6  | 8         | 9  | 9  | 4  | 9  | 9  | 3  | 12  |
| 13  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5         | 7  | -  | 9  | 8  | 7  | -  | 9         | 9  | 8  | 9+ | 9+ | 9  | 6  | 9         | 9  | 9  | 4  | 9  | 9  | 4  | 13  |
| 14  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 9  | -  | 6  | 9  | 8  | 1* | 9+        | 9+ | 8  | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 9  | 4  | 9  | 9  | 6  | 14  |
| 15  | -         | -  | -  | -  | -  | -  | -  | 1         | 5  | -  | -  | 3  | -  | -  | 9         | 9+ | 2  | 9+ | 9+ | 9  | 3* | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 9  | 4  | 9+ | 9  | 7  | 15  |
| 16  | -         | -  | -  | -  | 1  | -  | -  | 5         | 8  | -  | -  | 8  | 8  | -  | 9+        | 9+ | 6  | 9+ | 9+ | 9+ | 4* | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9         | 9+ | 9+ | 9+ | 9  | 9  | 8  | 16  |
| 17  | 2         | 7  | -  | -  | 8  | 1  | -  | 9         | 9  | -  | 9+ | 9+ | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 5  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 17  |
| 18  | 8         | 8  | -  | 5  | 9  | 7  | -  | 9+        | 9  | 2  | 9+ | 9+ | 9  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 18  |
| 19  | 9         | 8  | -  | 9+ | 9+ | 8  | -  | 9+        | 9  | 6  | 9+ | 9+ | 9  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9  | 9+ | 9+ | 9  | 9+ | 9  | 19  |
| 20  | 9         | 8  | 1  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 2  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9  | 9+ | 9+ | 9  | 9  | 9  | 20  |
| 21  | 9+        | 8  | 5  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 8  | 9+ | 9+ | 9  | 7  | 9  | 21  |
| 22  | 9         | 7  | 7  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 7  | 9+ | 5  | 8  | 7  | 9  | 22  |
| 23  | 8         | 5  | 8  | 9+ | 9  | -  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 9  | 9+ | 8  | 6  | 7  | 9  | 23  |
|     | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |

Aug., Angola (Luanda), for SSN = Ultra High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |   |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|---|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |   |  |  |  |
| 0         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 8         | 8  | 8  | 9+ | 0   |   |  |  |  |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 9+ | 7  | 9  | 9+ | 5         | 2  | 8  | 9+ | 1   |   |  |  |  |
| 2         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 5  | 9+ | 9+ | 8  | 9+        | 9+ | 9  | 9+ | 9+ | 7  | 6  | 9+ | 5         | 7  | 9  | 9+ | 2   |   |  |  |  |
| 3         | 7  | -  | 9  | 9+ | 6  | -  | 9  | 9+        | -  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 5  | 9+        | 9  | 8  | 9+ | 9+ | -  | 1  | 8  | 5         | 1  | 7  | 9  | 3   |   |  |  |  |
| 4         | 6  | -  | 9  | 9  | 1  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | -  | 9  | 9+ | 2         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 6  | 8         | 9+ | 8  | 9  | 5  | 9+ | -  | 4  | 2         | 5  | 4  | 1  | 2   | 4 |  |  |  |
| 5         | 1  | -  | 9  | 8  | -  | -  | 5  | 8         | -  | 9  | 9+ | 3  | 4  | 8  | 9+ | 1         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 8  | 5  | 9+ | 8  | 8  | 1  | 8  | 4*        | 8  | 9  | 8  | -   | 5 |  |  |  |
| 6         | -  | -  | 2  | 4  | -  | -  | -  | 5         | -  | 9  | 9  | -  | -  | 7  | 9+ | -         | 9+ | 9+ | 8  | 9  | 9+ | 9+ | 8  | 9         | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 4* | 5         | 9+ | 9  | 4* | 6   |   |  |  |  |
| 7         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 6  | 5  | -  | -  | 1  | 9  | 1*        | 9+ | 9+ | 6  | 8  | 9  | 9+ | 8  | 9+        | 9+ | 9  | 9  | 9+ | 8  | 8  | 9  | 5         | 8  | 9  | 4  | 7   |   |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | -  | -  | -  | -  | 5  | -         | 9+ | 9  | 2  | 1* | 8  | 9+ | 9  | 9         | 9+ | 9  | 9  | 8  | 9  | 9  | 2  | 9+        | 8  | 8  | 1  | 8   |   |  |  |  |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2  | -         | 8  | 9  | 1  | -  | 5  | 9  | 8  | 9+        | 9+ | 8  | 6  | 8  | 8  | 8  | 2  | 9+        | 8  | 8  | 5  | 9   |   |  |  |  |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 1  | -         | 5  | 9  | 1  | -  | 1  | 9  | 8  | 9         | 9+ | 8  | 8  | 8  | 9  | 9  | 9  | 4         | 9  | 8  | 6  | 10  |   |  |  |  |
| 11        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2  | 2         | 2  | 5  | 2  | -  | -  | 9  | 8  | 8         | 4  | 8  | 8  | 7  | 8  | 9  | 9  | 4         | 9  | 9  | 5  | 11  |   |  |  |  |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | 2         | -  | 5  | 5  | 1  | -  | 9  | 9  | 7         | 9+ | 9  | 9  | 7  | 8  | 9  | 9  | 4         | 9  | 9  | 4  | 12  |   |  |  |  |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 8         | -  | 5  | 8  | 5  | -  | 9  | 9  | 7         | 9+ | 9+ | 9  | 6  | 8  | 9  | 9  | 4         | 9  | 9  | 6  | 13  |   |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | 1  | -  | -  | 8  | 9         | -  | 7  | 9+ | 9  | 1* | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9  | 9+        | 9  | 9  | 8  | 14  |   |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 5  | -  | -  | 4  | -  | -  | 9  | 9         | 2  | 9+ | 9+ | 9  | 2* | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 9+        | 9+ | 9+ | 8  | 15  |   |  |  |  |
| 16        | -  | -  | -  | -  | 2  | -  | -  | 6         | 8  | -  | 2  | 8  | 8  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 5  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 16  |   |  |  |  |
| 17        | 4  | 7  | -  | -  | 8  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9  | 9+ | 9  | 17  |   |  |  |  |
| 18        | 8  | 8  | -  | 7  | 9  | 8  | -  | 9+        | 9  | 2  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9  | 9+ | 9  | 18  |   |  |  |  |
| 19        | 9  | 8  | 1  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9  | 9+ | 9  | 19  |   |  |  |  |
| 20        | 9+ | 8  | 4  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 20  |   |  |  |  |
| 21        | 9+ | 8  | 7  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 8  | 9  | 21  |   |  |  |  |
| 22        | 9+ | 7  | 9  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 8  | 9  | 22  |   |  |  |  |
| 23        | 9  | 5  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9  | 8  | 9+ | 23  |   |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |   |  |  |  |

Sep., Angola (Luanda), for SSN = Ultra High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |   |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|---|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |   |  |  |  |
| 0         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 0   |   |  |  |  |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 1   |   |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 2   |   |  |  |  |
| 3         | 8  | -  | 9  | 9+ | 6  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9  | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 3   |   |  |  |  |
| 4         | 8  | -  | 9  | 9  | 2  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 1  | 9  | 9+ | 5         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 8         | 9+ | 5  | 9+ | 9  | 9+ | -  | 6  | 8         | 5  | 6  | 5  | 8   | 4 |  |  |  |
| 5         | 4  | -  | 9  | 8  | -  | -  | 5  | 9         | -  | 9+ | 9+ | 4  | 3  | 8  | 9+ | 1         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 9  | 5  | 9+ | 8  | 9+ | 5  | 8  | 2*        | 9  | 9+ | 8  | 1   | 5 |  |  |  |
| 6         | -  | -  | 4  | 3  | -  | -  | -  | 6         | -  | 9  | 9  | -  | -  | 7  | 9+ | 1         | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 4*        | 5  | 9+ | 9  | 6*  | 6 |  |  |  |
| 7         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 5  | 5  | -  | -  | 2  | 9  | 1*        | 9+ | 9+ | 4  | 8  | 9  | 9+ | 7  | 9+        | 9+ | 9  | 9  | 9  | 9+ | 8  | 9  | 9+        | 9+ | 8  | 5* | 7   |   |  |  |  |
| 8         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | -         | 9  | 9  | 1  | 1  | 8  | 9  | 9  | 9+        | 9+ | 9  | 9  | 7  | 9+ | 8  | 7  | 9+        | 9+ | 8  | 1* | 8   |   |  |  |  |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2  | -         | 8  | 9  | 1  | -  | 6  | 8  | 8  | 9+        | 9+ | 9  | 6  | 8  | 9  | 8  | 9  | 9+        | 9  | 8  | -  | 9   |   |  |  |  |
| 10        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2  | -         | 4  | 9  | 2  | -  | -  | 9  | 8  | 9         | 9+ | 9  | 7  | 9  | 8  | 9  | 9+ | 4         | 9  | 8  | 8  | 10  |   |  |  |  |
| 11        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2  | 1         | 1  | 9  | 4  | -  | -  | 9  | 8  | 8         | 9  | 9  | 7  | 8  | 8  | 9  | 9  | 4         | 9  | 9  | 8  | 11  |   |  |  |  |
| 12        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 2         | 1  | 9  | 7  | 1  | -  | 9  | 9  | 8         | 8  | 9+ | 9  | 6  | 8  | 9  | 9  | 9+        | 9  | 9  | 9  | 12  |   |  |  |  |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 8         | -  | 5  | 9  | 6  | -  | 9  | 9  | 7         | 9+ | 9+ | 9  | 6  | 8  | 9+ | 9  | 9+        | 9  | 9  | 8  | 13  |   |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | 1  | -  | -  | 8  | 9         | -  | 9  | 9+ | 9  | 1* | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 5  | 8  | 9+ | 9  | 9+        | 9+ | 9  | 8  | 14  |   |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 5  | -  | -  | 7  | -  | -  | 9+ | 9         | 2  | 9+ | 9+ | 9  | 2* | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 9+        | 9+ | 9+ | 8  | 15  |   |  |  |  |
| 16        | -  | 1  | -  | -  | 4  | -  | -  | 7         | 8  | -  | 2  | 9  | 8  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 16  |   |  |  |  |
| 17        | 6  | 7  | -  | -  | 8  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 17  |   |  |  |  |
| 18        | 9  | 8  | -  | 9+ | 9  | 8  | -  | 9+        | 9+ | 3  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 18  |   |  |  |  |
| 19        | 9+ | 8  | 1  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 19  |   |  |  |  |
| 20        | 9+ | 8  | 4  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 20 |     |   |  |  |  |
| 21        | 9+ | 8  | 7  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 6  | 9+ | 21  |   |  |  |  |
| 22        | 9  | 7  | 8  | 9+ | 9  | 1  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 4  | 9+ | 22  |   |  |  |  |
| 23        | 9  | 5  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 7  | 9+ | 23 |     |   |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |   |  |  |  |

Oct., Angola (Luanda), for SSN = Ultra High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |  |
| 0         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 5  | 9+        | 9+ | 9+ | 0  |     |    |  |  |  |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9  | 9+ | 1  |     |    |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9  | 9  | 9+ | 9  | 9  | 9         | 9  | 9  | 2  |     |    |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 7  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9  | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | -  | 8  | 9+ | 7         | 7  | 9  | 8  | 3   |    |  |  |  |
| 4         | 8  | -  | 9  | 9+ | 2  | -  | 8  | 9+        | -  | 9+ | 9+ | 8  | 1  | 9  | 9+ | 6         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8         | 9+ | 5  | 9+ | 9  | 9+ | -  | 8  | 9+        | 8  | 7  | 8  | 8   | 4  |  |  |  |
| 5         | 5  | -  | 8  | 8  | -  | -  | 5  | 9         | -  | 9  | 9+ | 5  | 5  | 9  | 9+ | 3         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 9+ | 5  | 9+ | 9  | 9+ | 8  | 8  | 6         | 9  | 9  | 8  | 3   | 5  |  |  |  |
| 6         | -  | -  | 2  | 4  | -  | -  | -  | 6         | -  | 9  | 9  | -  | -  | 7  | 9+ | 1         | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 7  | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 5* | 5         | 9+ | 9  | 5  | 6   |    |  |  |  |
| 7         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 4  | 6  | -  | -  | 2  | 9+ | 1         | 9+ | 9+ | 8  | 9  | 9  | 9+ | 7  | 9+        | 9+ | 9  | 9  | 8  | 9+ | 8  | 9+ | 9+        | 9+ | 9  | 2* | 7   |    |  |  |  |
| 8         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 1*        | 9  | 9  | 5  | 2  | 9  | 9+ | 8  | 9+        | 9+ | 9  | 8  | 1  | 9+ | 8  | 9+ | 9+        | 9+ | 8  | -  | 8   |    |  |  |  |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | -         | 7  | 8  | 2  | -  | 7  | 9  | 7  | 9+        | 9+ | 9  | 4  | 9  | 9+ | 8  | 9+ | 9+        | 9  | 8  | -  | 9   |    |  |  |  |
| 10        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | -         | 5  | 8  | 2  | -  | 1  | 9  | 8  | 9         | 9+ | 9  | 4  | 9  | 9  | 9  | 9+ | 4         | 9  | 9  | 9  | 10  |    |  |  |  |
| 11        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | 1         | 1  | 5  | 4  | -  | -  | 9  | 8  | 8         | 9+ | 9  | 5  | 8  | 9+ | 9  | 9  | 4         | 9  | 9  | 9  | 11  |    |  |  |  |
| 12        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 3         | -  | 5  | 6  | 1  | -  | 9  | 9  | 7         | 9+ | 9+ | 8  | 6  | 9+ | 9+ | 9  | 4         | 9  | 9  | 8  | 12  |    |  |  |  |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 8         | -  | 5  | 8  | 4  | -  | 9  | 9  | 7         | 9  | 9+ | 9  | 6  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 8  | 13  |    |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | -  | 9+ | 9  | 9  | 1  | 9+ | 9+ | 8         | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 9  | 14  |    |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 2         | 5  | -  | -  | 5  | -  | -  | 9+ | 9+        | 1  | 9+ | 9+ | 9  | 4  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 4         | 9+ | 9+ | 9  | 15  |    |  |  |  |
| 16        | -  | 1  | -  | -  | 4  | -  | -  | 8         | 8  | -  | 2  | 9  | 7  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 16  |    |  |  |  |
| 17        | 7  | 7  | -  | 1  | 9  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 17 |  |  |  |
| 18        | 9  | 8  | -  | 9+ | 9+ | 7  | -  | 9+        | 9+ | 2  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 18  |    |  |  |  |
| 19        | 9+ | 8  | 1  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 19  |    |  |  |  |
| 20        | 9+ | 8  | 3  | 9+ | 9+ | 8  | 1  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 4  | 9+ | 9+ | 8         | 9+ | 9+ | 9  | 20  |    |  |  |  |
| 21        | 9+ | 8  | 6  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 5  | 9  | 21 |     |    |  |  |  |
| 22        | 9  | 8  | 7  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 6  | 9+ | 22 |     |    |  |  |  |
| 23        | 9  | 6  | 8  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 8  | 9+  | 23 |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |  |  |  |

Nov., Angola (Luanda), for SSN = Ultra High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |  |
| 0         | 9  | 4  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 5  | 9+        | 9+ | 9+ | 0  |     |    |  |  |  |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 1         | 9  | 9+ | 1  |     |    |  |  |  |
| 2         | 8  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 2  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 7  | 9  | 9+ | 9+        | 9+ | 8  | 2  |     |    |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 7  | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | -  | 5  | 9+        | 8  | 8  | 9  | 4   | 3  |  |  |  |
| 4         | 9  | -  | 9  | 9  | 3  | -  | 7  | 9+        | -  | 9+ | 9+ | 9  | 4  | 9  | 9+ | 6         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 7  | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | -  | 7  | 9+        | 8  | 8  | 9  | 4   | 4  |  |  |  |
| 5         | 5  | -  | 8  | 8  | -  | -  | 5  | 9         | -  | 9  | 9+ | 6  | 4  | 8  | 9+ | 4         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 9+ | 5  | 9+ | 9+ | 9  | 2  | 8  | 9         | 5  | 9  | 8  | 3   | 5  |  |  |  |
| 6         | -  | -  | 1  | 2  | -  | -  | -  | 7         | -  | 9  | 9  | -  | -  | 7  | 9+ | 3         | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 6         | 5  | 9+ | 9  | 1   | 6  |  |  |  |
| 7         | -  | -  | -  | -  | -  | -  | -  | 2         | -  | 3  | 4  | -  | -  | 3  | 9+ | 2         | 9+ | 9+ | 8  | 9  | 9  | 9+ | 9  | 9+        | 9+ | 9+ | 9  | 2  | 9+ | 9  | 9+ | 9+        | 9+ | 9  | -  | 7   |    |  |  |  |
| 8         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 1*        | 9  | 9  | 4  | 1  | 9  | 9+ | 7  | 9+        | 9+ | 9  | 6  | 1  | 9+ | 8  | 9+ | 9+        | 9  | 8  | -  | 8   |    |  |  |  |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | -         | 6  | 9  | 3  | -  | 5  | 9+ | 7  | 9+        | 9+ | 9  | 7  | 9  | 9+ | 8  | 9+ | 4         | 9  | 8  | -  | 9   |    |  |  |  |
| 10        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | -         | 5  | 9  | 3  | -  | 1  | 9  | 8  | 9         | 9+ | 9  | 7  | 9  | 9+ | 9  | 9+ | 4         | 9  | 8  | 9  | 10  |    |  |  |  |
| 11        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | 1         | 1  | 5  | 5  | -  | -  | 9  | 7  | 9         | 9  | 9  | 7  | 8  | 9  | 9  | 9  | 4         | 9  | 9  | 9  | 11  |    |  |  |  |
| 12        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 2         | -  | 5  | 7  | -  | -  | 9  | 9  | 8         | 9+ | 9+ | 9  | 7  | 9  | 9  | 9  | 4         | 9  | 9  | 9  | 12  |    |  |  |  |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 6         | -  | 5  | 9  | 3  | -  | 9+ | 9  | 7         | 9+ | 9+ | 9  | 7  | 9+ | 9  | 9  | 4         | 9  | 9  | 9  | 13  |    |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | 1  | -  | -  | 9  | 9         | -  | 9+ | 9+ | 9  | 1* | 9+ | 9+ | 7         | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 9  | 14  |    |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 3         | 5  | -  | -  | 5  | -  | -  | 9+ | 9+        | 1  | 9+ | 9+ | 9  | 5  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 4         | 9+ | 9+ | 9  | 15  |    |  |  |  |
| 16        | -  | 1  | -  | -  | 2  | -  | -  | 8         | 8  | -  | 2  | 9  | -  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9         | 9+ | 9+ | 9  | 16  |    |  |  |  |
| 17        | 7  | 7  | -  | -  | 8  | -  | -  | 9+        | 9  | -  | 9+ | 9+ | 8  | 1  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 17 |  |  |  |
| 18        | 9  | 8  | -  | 9+ | 9  | 7  | -  | 9+        | 9  | 1  | 9+ | 9+ | 9  | 4  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 18  |    |  |  |  |
| 19        | 9+ | 8  | -  | 9+ | 9+ | 8  | 1  | 9+        | 9+ | 6  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 2  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 19  |    |  |  |  |
| 20        | 9+ | 8  | 2  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 20  |    |  |  |  |
| 21        | 9+ | 8  | 6  | 9+ | 9+ | 6  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 5  | 9+ | 21  |    |  |  |  |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 7  | 9  | 9+ | 9+ | 9+        | 8  | 9+ | 22 |     |    |  |  |  |
| 23        | 9  | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 7  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 8  | 9+  | 23 |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |  |  |  |

Dec., Angola (Luanda), for SSN = Ultra High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |   |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|---|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |   |  |  |  |
| 0         | 9  | 5  | 8  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9         | 8  | 9  | 9+ | 0   |   |  |  |  |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 5  | 9  | 9+ | 9         | 1  | 8  | 9  | 1   |   |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 3  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 7  | 9  | 9+ | 6         | 8  | 9  | 8  | 2   |   |  |  |  |
| 3         | 7  | -  | 9  | 9+ | 8  | -  | 7  | 9+        | -  | 9+ | 9+ | 9+ | 1  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | -  | 7  | 9+ | 5         | 8  | 9  | 2  | 3   |   |  |  |  |
| 4         | 8  | -  | 9  | 9+ | 4  | -  | 6  | 9+        | -  | 9+ | 9+ | 9  | 3  | 9  | 9+ | 8         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 3  | 9         | 9+ | 5  | 9+ | 9+ | 9  | -  | 3  | 8         | 8  | 7  | 7  | -   | 4 |  |  |  |
| 5         | 6  | -  | 8  | 9  | -  | -  | 5  | 9         | -  | 9  | 9+ | 6  | 4  | 8  | 9+ | 6         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9         | 9+ | 5  | 9+ | 9+ | 9  | -  | 6  | 3         | 5  | 8  | 7  | 2   | 5 |  |  |  |
| 6         | -  | -  | 1  | 2  | -  | -  | -  | 7         | -  | 8  | 9  | 1  | -  | 8  | 9+ | 5         | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9  | 9+        | 9+ | 5  | 9+ | 9  | 9  | 9  | 9  | 5         | 9  | 9  | 7  | 1   | 6 |  |  |  |
| 7         | -  | -  | -  | -  | -  | -  | -  | 3         | -  | 4  | 6  | -  | -  | 4  | 9+ | 4         | 9+ | 9+ | 9  | 8  | 9  | 9+ | 9  | 9+        | 9+ | 9+ | 9  | 6  | 9+ | 9  | 8  | 8         | 9  | 8  | -  | 7   |   |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 9  | 1         | 9  | 9+ | 5  | 2  | 9  | 9+ | 9  | 9         | 9+ | 9+ | 7  | -  | 9+ | 8  | 7  | 4         | 9  | 8  | -  | 8   |   |  |  |  |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | -         | 6  | 9  | 4  | -  | 7  | 9+ | 7  | 9         | 9+ | 9  | 7  | 3  | 9+ | 9  | 8  | 9         | 9  | 8  | -  | 9   |   |  |  |  |
| 10        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | -         | 5  | 9  | 4  | -  | 4  | 9  | 8  | 9         | 9+ | 9  | 7  | 9  | 9  | 9  | 9  | 9+        | 9  | 9  | 5  | 10  |   |  |  |  |
| 11        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 1         | 2  | 9  | 5  | -  | 1  | 9  | 8  | 9         | 4  | 9  | 7  | 8  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 11  |   |  |  |  |
| 12        | -  | -  | -  | 8  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 2         | 1  | 9  | 7  | -  | 1  | 9  | 9  | 8         | 5  | 9+ | 8  | 8  | 9  | 9  | 8  | 9         | 9  | 9  | 9  | 12  |   |  |  |  |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 6         | -  | 9  | 9  | 2  | -  | 9+ | 9  | 8         | 9+ | 9+ | 9  | 8  | 9+ | 9  | 9  | 9+        | 9  | 9  | 9  | 13  |   |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | 1  | -  | -  | 9  | 9         | -  | 9+ | 9+ | 9  | 1  | 9+ | 9+ | 6         | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 9  | 9+        | 9  | 9  | 9  | 14  |   |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 4         | 5  | -  | -  | 8  | -  | -  | 9+ | 9+        | 1  | 9+ | 9+ | 9  | 6  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 9  | 15  |   |  |  |  |
| 16        | 1  | -  | -  | -  | 2  | -  | -  | 9         | 8  | -  | 2  | 9  | -  | -  | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 16  |   |  |  |  |
| 17        | 8  | 7  | -  | 1  | 9  | -  | -  | 9+        | 9  | -  | 9+ | 9+ | 8  | 2  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 17  |   |  |  |  |
| 18        | 9  | 8  | -  | 9+ | 9  | 7  | -  | 9+        | 9  | 1  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 18  |   |  |  |  |
| 19        | 9+ | 8  | -  | 9+ | 9+ | 8  | 1  | 9+        | 9+ | 6  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 19  |   |  |  |  |
| 20        | 9+ | 8  | -  | 9+ | 9+ | 8  | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 5  | 9+ | 9+ | 4         | 9+ | 8  | 9  | 20  |   |  |  |  |
| 21        | 9  | 8  | 5  | 9+ | 9+ | 6  | 8  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 1  | 9  | 9+ | 5         | 9+ | 5  | 9+ | 21  |   |  |  |  |
| 22        | 9  | 8  | 7  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9  | 9+ | 1  | 9  | 9+ | 9+        | 9  | 6  | 9+ | 22  |   |  |  |  |
| 23        | 9  | 8  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9+        | 9+ | 7  | 9+ | 23  |   |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |   |  |  |  |

Jan., Angola (Luanda), for SSN = Very High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |   |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|---|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |   |  |  |  |
| 0         | 8  | 5  | 8  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 5  | 7  | 9+ | 5  | -         | 9  | 9  | 0  |     |   |  |  |  |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9+ | 9  | 9  | 9+        | 3  | 9  | 9+ | 1  | 5  | 9  | 9+ | -         | 8  | 7  | 1  |     |   |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 9  | 9+ | 9  | 9+ | 8         | -  | 1  | 9  | 8  | 1  | 8  | 1  | 8         | -  | 2  |    |     |   |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | -  | 7         | 9+ | 9+ | 8  | 9+ | 4  | -  | -  | 8         | 5  | -  | 6  | -   | 3 |  |  |  |
| 4         | 9  | -  | 9  | 9+ | 4  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | 4  | 9  | 8  | 8         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | -  | 5         | 9+ | 5  | 8  | 9  | 4  | -  | -  | 2         | 5  | -  | -  | -   | 4 |  |  |  |
| 5         | 7  | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9+ | 9+ | 7  | 5  | 8  | 9+ | 6         | 9+ | 2  | 9+ | 9+ | 9+ | -  | 8  | 8         | 9  | 9  | 8  | 5  | -  | -  | -  | 5         | -  | -  | -  | 5   |   |  |  |  |
| 6         | 1  | -  | 5  | 7  | -  | -  | -  | 8         | -  | 9  | 9+ | 1  | -  | 8  | 9+ | 5         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 4         | 5  | 9+ | 9  | 1  | 1  | 6  | -  | 5         | 7  | 7  | -  | 6   |   |  |  |  |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 4         | -  | 6  | 8  | -  | -  | 6  | 9+ | 4         | 9+ | 9+ | 9  | 5  | 8  | 9+ | 8  | 9+        | 9+ | 9  | 9  | -  | 9+ | 9  | -  | 7         | 9  | 8  | -  | 7   |   |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 3  | -  | -  | 1  | 9  | 1*        | 9  | 9+ | 6  | 1* | 8  | 9+ | 9  | 9+        | 9+ | 9  | 8  | -  | 9+ | 9  | 4  | 9         | 8  | 8  | -  | 8   |   |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 1         | 8  | 9  | 5  | -  | 6  | 9+ | 8  | 9         | 9+ | 9  | 7  | -  | 9+ | 9  | 6  | 9         | 9  | 8  | -  | 9   |   |  |  |  |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 1         | 7  | 9  | 5  | -  | 5  | 9+ | 8  | 9         | 9+ | 9  | 8  | 4  | 6  | 9  | 7  | 9+        | 9  | 8  | -  | 10  |   |  |  |  |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 1         | 4  | 9  | 6  | -  | 3  | 9  | 8  | 9         | 9+ | 9  | 8  | 9  | 9  | 9  | 9  | 9+        | 9  | 9  | -  | 11  |   |  |  |  |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 3         | 2  | 9  | 8  | 1  | 1  | 9  | 9  | 9         | 5  | 9+ | 9  | 8  | 8  | 9  | 9  | 9+        | 9+ | 9  | 9  | 12  |   |  |  |  |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 6         | 1  | 8  | 9  | 5  | 1  | 9+ | 9  | 9         | 8  | 9+ | 9  | 8  | 8  | 9  | 9  | 9         | 9  | 9  | 9  | 13  |   |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | 2  | -  | -  | 9  | 9         | 1  | 9+ | 9+ | 9  | 2  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 8  | 9  | 9  | 9         | 9+ | 9  | 9  | 14  |   |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 5         | 6  | -  | -  | 6  | -  | -  | 9+ | 9+        | 2  | 9+ | 9+ | 9  | 7  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 8  | 9  | 9  | 9+        | 9+ | 9  | 9  | 15  |   |  |  |  |
| 16        | 1  | -  | -  | -  | 2  | -  | -  | 8         | 8  | -  | 3  | 9  | 7  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+ | 9+        | 9+ | 9  | 9  | 16  |   |  |  |  |
| 17        | 7  | 7  | -  | 1  | 9  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | 1  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9+ | 9  | 9  | 17  |   |  |  |  |
| 18        | 9  | 8  | -  | 9+ | 9  | 7  | -  | 9+        | 9+ | 2  | 9+ | 9+ | 9  | 5  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 7  | 9  | 9+ | 9+        | 9  | 9  | 9+ | 18  |   |  |  |  |
| 19        | 9  | 8  | -  | 9+ | 9+ | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 1  | 9  | 9  | 9+        | 9  | 9  | 9+ | 19  |   |  |  |  |
| 20        | 9+ | 8  | 2  | 9+ | 9+ | 8  | 5  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | -  | 8  | 9+ | 9+        | 7  | 6  | 9+ | 20  |   |  |  |  |
| 21        | 9+ | 8  | 6  | 9+ | 9  | 6  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | -  | 7  | 9+ | 9+ | 7         | 9  | 9+ | 21 |     |   |  |  |  |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 9+ | 1  | 3  | 9+ | 5         | 5  | 9  | 9+ | 22  |   |  |  |  |
| 23        | 9  | 7  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 9+ | 1  | 2  | 9+ | 8         | -  | 9  | 9+ | 23  |   |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |   |  |  |  |

Feb., Angola (Luanda), for SSN = Very High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |  |
| 0         | 9  | 5  | 9  | 9+ | 8  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 2  | 9  | 9+ | 8         | 8  | 8  | 9+ | 0   |    |  |  |  |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 5  | 9  | 9+ | 5         | -  | 9  | 9  | 1   |    |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 2  | 7  | 9+ | 5         | 8  | 9  | 7  | 2   |    |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 3  | 8         | 9+ | 9+ | 9  | 9+ | 9+ | -  | -  | 9         | 5  | 1  | 9  | 1   | 3  |  |  |  |
| 4         | 9  | -  | 9  | 9  | 3  | -  | 8  | 9+        | -  | 9+ | 9+ | 8  | 5  | 9  | 9  | 6         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 1  | 5         | 9+ | 9+ | 8  | 9+ | 9  | -  | -  | 7         | 5  | -  | 3  | -   | 4  |  |  |  |
| 5         | 7  | -  | 9  | 8  | -  | -  | 6  | 9         | -  | 9+ | 9+ | 6  | 4  | 9  | 9+ | 4         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 4  | 9         | 9  | 5  | 9+ | 8  | 8  | -  | 4  | -         | 5  | 3  | 5  | -   | 5  |  |  |  |
| 6         | 1  | -  | 5  | 6  | -  | -  | -  | 8         | -  | 9  | 9  | 1  | -  | 8  | 9+ | 3*        | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 7         | 5  | 9+ | 9  | 6  | 5  | 8  | 2* | 9         | 9  | 8  | -  | 6   |    |  |  |  |
| 7         | -  | -  | -  | -  | -  | -  | -  | 2         | -  | 5  | 7  | -  | -  | 4  | 9+ | 1         | 9+ | 9+ | 9  | 8  | 9  | 9+ | 8  | 9+        | 9+ | 9+ | 9  | 4  | 9+ | 9  | 6  | 5         | 9  | 9  | -  | 7   |    |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 2  | 1  | -  | -  | -  | 9  | 2*        | 9  | 9+ | 6  | 1  | 9  | 9+ | 9  | 9         | 9+ | 9  | 8  | -  | 9+ | 9  | 2  | 9+        | 9  | 8  | -  | 8   |    |  |  |  |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | -         | 8  | 9  | 4  | -  | 7  | 9+ | 8  | 9         | 9+ | 9  | 8  | -  | 9+ | 9  | 5  | 4         | 9  | 8  | -  | 9   |    |  |  |  |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | -         | 5  | 9  | 4  | -  | 4  | 9+ | 8  | 9         | 9+ | 9  | 7  | 9  | 9  | 9  | 9  | 4         | 9  | 8  | -  | 10  |    |  |  |  |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | -         | 1  | 9  | 5  | -  | 2  | 9  | 8  | 9         | 9+ | 9  | 8  | 9  | 8  | 9  | 9  | 9+        | 9  | 8  | 9  | 11  |    |  |  |  |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 2         | 1  | 6  | 7  | 1  | -  | 9  | 9  | 9         | 9+ | 9+ | 9  | 8  | 9  | 9  | 9  | 4         | 9  | 9  | 9  | 12  |    |  |  |  |
| 13        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 6         | -  | 6  | 9  | 5  | -  | 9+ | 9  | 8         | 9+ | 9+ | 9  | 7  | 9+ | 9  | 9  | 4         | 9+ | 9  | 9  | 13  |    |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | 1  | -  | -  | 9  | 9         | -  | 9+ | 9+ | 8  | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 9  | 14  |    |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 3         | 5  | -  | -  | 7  | -  | -  | 9+ | 9         | 2  | 9+ | 9+ | 9  | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 9  | 15  |    |  |  |  |
| 16        | -  | -  | -  | -  | 3  | -  | -  | 8         | 8  | -  | 2  | 9  | 7  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 4         | 9+ | 9+ | 9+ | 16  |    |  |  |  |
| 17        | 5  | 7  | -  | -  | 6  | -  | -  | 9         | 9  | -  | 9+ | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 17  |    |  |  |  |
| 18        | 9  | 8  | -  | 9+ | 9  | 8  | -  | 9+        | 9+ | 2  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 18  |    |  |  |  |
| 19        | 9  | 8  | -  | 9+ | 9  | 8  | -  | 9+        | 9  | 6  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 8  | 9+ | 19  |    |  |  |  |
| 20        | 9  | 8  | 2  | 9+ | 9  | 8  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 4  | 9+ | 9+ | 9+        | 9+ | 8  | 9+ | 20  |    |  |  |  |
| 21        | 9  | 8  | 6  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 9+ | 1  | 8  | 9+ | 9+        | 9+ | 7  | 9+ | 21  |    |  |  |  |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 7  | 9+ | 7  | 1  | 9+ | 5         | 9+ | 7  | 9+ | 22  |    |  |  |  |
| 23        | 9  | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 6  | 9+ | 6  | 2  | 9+        | 5  | 9+ | 7  | 9+  | 23 |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |  |  |  |

**Mar., Angola (Luanda), for SSN = Very High, Sigs in S-Units. By N6BV, ARRL.**

|     | 80 Meters |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |    |
|-----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|----|
| UTC | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |    |
| 0   | 9         | 5  | 9  | 9+ | 8  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 7  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 0  |     |    |
| 1   | 9         | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 1  |     |    |
| 2   | 9         | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 3  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9  | 2  |     |    |
| 3   | 9         | -  | 9  | 9+ | 8  | -  | 9  | 9+        | -  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 8  | 8  | 9+ | 9+ | 9  | 9+ | 9+        | -  | -  | 9+ | 5  | 1  | 9  | 8   | 3  |
| 4   | 9         | -  | 9  | 9  | 2  | -  | 8  | 9+        | -  | 9+ | 9+ | 8  | 1  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 4  | 7  | 9+ | 9  | 8  | 9+ | 9+        | -  | -  | 8  | 5  | -  | 4  | 4   | 4  |
| 5   | 7         | -  | 9  | 8  | -  | -  | 6  | 9         | -  | 9+ | 9+ | 6  | 2  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9  | 9  | 9  | 5  | 9+ | 8  | 9         | -  | 6  | 1  | 5  | 6  | 8  | -   | 5  |
| 6   | -         | -  | 6  | 6  | -  | -  | -  | 8         | -  | 9  | 9  | 1  | -  | 8  | 9+        | 2* | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 8  | 7  | 5  | 9+ | 9+ | 8  | 9         | 9  | 9  | 4* | 5  | 9+ | 8  | 2*  | 6  |
| 7   | -         | -  | -  | -  | -  | -  | -  | 2         | -  | 6  | 8  | -  | -  | 4  | 9+        | 1  | 9+ | 9+ | 9  | 9  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 7  | 9+        | 9  | 4  | 5  | 9+ | 9  | -  | 7   |    |
| 8   | -         | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 2  | -  | -  | -  | 9         | 2* | 9+ | 9+ | 5  | 2* | 9  | 9+        | 9  | 9  | 9+ | 9  | 8  | 5  | 9+        | 8  | -  | 9+ | 9  | 8  | -  | 8   |    |
| 9   | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7         | -  | 8  | 9  | 4  | -  | 7  | 9+        | 8  | 9+ | 9+ | 9  | 7  | 5  | 9+        | 9  | 9+ | 4  | 9  | 8  | -  | 9   |    |
| 10  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5         | 1  | 6  | 9  | 3  | -  | 2  | 9+        | 8  | 9  | 9+ | 9  | 8  | 9  | 9         | 9  | 9  | 4  | 9  | 9  | 2  | 10  |    |
| 11  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4         | 1  | 2  | 8  | 4  | -  | -  | 9         | 8  | 9  | 9+ | 9  | 8  | 9  | 9         | 9  | 9  | 4  | 9  | 9  | 9  | 11  |    |
| 12  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5         | 3  | -  | 9  | 6  | 1  | -  | 9         | 9  | 8  | 9+ | 9+ | 9  | 8  | 9         | 9  | 9  | 4  | 9  | 9  | 9  | 12  |    |
| 13  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 8  | -  | 6  | 8  | 5  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | 7  | 9         | 9+ | 9  | 4  | 9+ | 9  | 9  | 13  |    |
| 14  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | 1  | -  | -  | 8         | 9  | -  | 9+ | 9+ | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 4  | 9+ | 9  | 9  | 14  |    |
| 15  | -         | -  | -  | -  | -  | -  | -  | 2         | 5  | -  | -  | 7  | -  | -  | 9         | 9  | 1  | 9+ | 9+ | 9  | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 9+        | 9+ | 9  | 4  | 9+ | 9+ | 9  | 15  |    |
| 16  | -         | -  | -  | -  | 1  | -  | -  | 7         | 8  | -  | 2  | 8  | 7  | -  | 9+        | 9+ | 6  | 9+ | 9+ | 9+ | 7  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 9  | 4  | 9+ | 9+ | 9  | 16  |    |
| 17  | 4         | 7  | -  | -  | 6  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 17  |    |
| 18  | 9         | 8  | -  | 9+ | 9  | 7  | -  | 9+        | 9  | 2  | 9+ | 9+ | 9  | 1  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 18  |    |
| 19  | 9         | 8  | -  | 9+ | 9+ | 8  | -  | 9+        | 9  | 6  | 9+ | 9+ | 9  | 5  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 19  |    |
| 20  | 9+        | 8  | 2  | 9+ | 9+ | 8  | 1  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9  | 20  |    |
| 21  | 9+        | 8  | 6  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 5  | 9+ | 4  | 9+  | 21 |
| 22  | 9         | 8  | 8  | 9+ | 9  | 4  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 7  | 9+ | 9+        | 6  | 6  | 9+ | 9+ | 9+ | 4  | 9+  | 22 |
| 23  | 9         | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 7  | 7  | 9+ | 5  | 9+ | 6  | 9+  | 23 |
|     | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |    |

Apr., Angola (Luanda), for SSN = Very High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |     |
| 0         | 9  | 4  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 0   |    |  |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 1   |    |  |  |     |
| 2         | 9  | -  | 8  | 9+ | 9  | -  | 9  | 9+        | 2  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 2   |    |  |  |     |
| 3         | 5  | -  | 8  | 9+ | 7  | -  | 9  | 9+        | -  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 7         | 9+ | 9+ | 9  | 9+ | 9+ | -  | 1  | 9+        | 5  | 1  | 5  | 9   | 3  |  |  |     |
| 4         | 7  | -  | 8  | 9  | 2  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 1  | 9  | 9+ | 5         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 7  | 7         | 9+ | 5  | 9  | 8  | 9+ | -  | -  | 5         | 5  | 1  | -  | 6   | 4  |  |  |     |
| 5         | 3  | -  | 9  | 9  | -  | -  | 5  | 9         | -  | 9+ | 9+ | 5  | 3  | 9  | 9+ | 4         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 8  | 5  | 9+ | 9  | 8  | -  | 9  | -         | 5  | 9  | 8  | -   | 5  |  |  |     |
| 6         | -  | -  | 6  | 6  | -  | -  | -  | 6         | -  | 9  | 9  | -  | -  | 7  | 9+ | 1         | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 8         | 8  | 9+ | 9+ | 9+ | 9+ | 8  | 9  | 5*        | 5  | 9+ | 9  | 5*  | 6  |  |  |     |
| 7         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 7  | 7  | -  | -  | 3  | 9  | 1*        | 9+ | 9+ | 9  | 8  | 9  | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 8         | 9+ | 9+ | 9  | 5*  | 7  |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 2  | 1  | -  | -  | -  | 8  | 1         | 9+ | 9+ | 6  | 2  | 9  | 9+ | 9  | 9+        | 9+ | 8  | 9  | 9  | 9+ | 8  | 2* | 9+        | 9  | 9  | 1  | 8   |    |  |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | -         | 9  | 8  | 3  | 1* | 8  | 9+ | 9  | 9+        | 9+ | 9  | 8  | 9  | 9+ | 9  | 9  | 9+        | 9  | 9  | -  | 9   |    |  |  |     |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 1         | 6  | 8  | 2  | -  | 2  | 9+ | 8  | 9         | 9+ | 8  | 8  | 9  | 9  | 9  | 9+ | 4         | 9  | 9  | -  | 10  |    |  |  |     |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 2         | 3  | 8  | 4  | 1  | 1  | 9  | 8  | 9         | 9+ | 9  | 8  | 8  | 9  | 9  | 9  | 9+        | 4  | 9  | 9  | 7   | 11 |  |  |     |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 3         | 2  | 7  | 7  | 2  | -  | 9  | 9  | 8         | 9+ | 9+ | 9  | 8  | 9  | 9  | 9  | 9         | 4  | 9  | 9  | 9   | 12 |  |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 6         | -  | 6  | 9  | 6  | -  | 9+ | 9  | 8         | 9+ | 9+ | 9  | 8  | 9  | 9+ | 9  | 4         | 9+ | 9  | 9  | 13  |    |  |  |     |
| 14        | -  | -  | -  | 9  | -  | -  | -  | -         | 1  | -  | -  | 1  | -  | -  | 9  | 9         | -  | 9+ | 9+ | 9  | 1  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 8  | 14  |    |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 5  | -  | -  | 7  | -  | -  | 9  | 9+        | 2  | 9+ | 9+ | 9  | 6  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9  | 4         | 9+ | 9+ | 9  | 15  |    |  |  |     |
| 16        | -  | -  | -  | -  | 1  | -  | -  | 6         | 8  | -  | 2  | 8  | 7  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 4         | 9+ | 9+ | 9  | 16  |    |  |  |     |
| 17        | 3  | 7  | -  | -  | 6  | -  | -  | 9         | 8  | -  | 9+ | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 5         | 9+ | 9+ | 9  | 17  |    |  |  |     |
| 18        | 8  | 8  | -  | 7  | 9  | 8  | -  | 9+        | 9+ | 3  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 18  |    |  |  |     |
| 19        | 9  | 8  | -  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9  | 4  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 19  |    |  |  |     |
| 20        | 9+ | 8  | 3  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9+ | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 20  |    |  |  |     |
| 21        | 9+ | 8  | 7  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 5  | 9+ | 21  |    |  |  |     |
| 22        | 9+ | 8  | 8  | 9+ | 9  | 8  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 8  | 9+ | 22  |    |  |  |     |
| 23        | 9  | 6  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 5         | 9+ | 8  | 9+ | 23  |    |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |  |  |     |

May, Angola (Luanda), for SSN = Very High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |   |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|---|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |   |  |  |     |
| 0         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 0   |   |  |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 7  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 1   |   |  |  |     |
| 2         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 2  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 2   |   |  |  |     |
| 3         | 7  | -  | 9  | 9+ | 2  | -  | 9  | 9         | -  | 9+ | 9+ | 9  | -  | 9  | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 7  | 4         | 9+ | 9  | 8  | 9+ | 9+ | -  | -  | 7         | 5  | -  | 5  | 8   | 3 |  |  |     |
| 4         | 6  | -  | 8  | 9  | 1  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | -  | 9  | 9+ | 4         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 5  | 7         | 9  | 5  | 9  | 5  | 9  | -  | 1  | -         | 5  | 2  | -  | -   | 4 |  |  |     |
| 5         | 1  | -  | 9  | 9  | -  | -  | 5  | 8         | -  | 9  | 9+ | 4  | 3  | 8  | 9+ | 3         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 4  | 5  | 9+ | 9  | 8  | -  | 9  | -         | 5  | 9  | 8  | -   | 5 |  |  |     |
| 6         | -  | -  | 4  | 5  | -  | -  | -  | 6         | -  | 9  | 9  | -  | -  | 7  | 9+ | -         | 9+ | 9+ | 8  | 9  | 9+ | 9+ | 9+ | 7         | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9  | 4*        | 5  | 9+ | 9  | 3   | 6 |  |  |     |
| 7         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 8  | 7  | -  | -  | 2  | 9+ | 1*        | 9+ | 9+ | 8  | 8  | 9  | 9+ | 9+ | 7         | 9+ | 9+ | 9  | 9  | 9+ | 9  | 8  | 8         | 5  | 9  | 9  | 6   | 7 |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 2  | 1  | -  | -  | -  | 8  | 1*        | 9+ | 9  | 6  | 3  | 9  | 9+ | 9  | 9+        | 9+ | 8  | 9  | 9+ | 9  | 8  | 5  | 9+        | 9  | 9  | 4  | 8   |   |  |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 1         | 9  | 8  | 4  | 2  | 7  | 9  | 9  | 9+        | 9+ | 9  | 8  | 8  | 9  | 9  | 9+ | 9+        | 9  | 9  | -  | 9   |   |  |  |     |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2  | 1         | 7  | 7  | 3  | 1  | 3  | 9  | 8  | 9+        | 9+ | 8  | 8  | 8  | 9+ | 9  | 9+ | 4         | 9  | 9  | -  | 10  |   |  |  |     |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 1         | 4  | 7  | 4  | 2  | 1  | 9  | 8  | 9         | 9+ | 8  | 8  | 8  | 9  | 9  | 9+ | 4         | 9  | 9  | -  | 11  |   |  |  |     |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 3         | 1  | 6  | 6  | 4  | -  | 9  | 9  | 8         | 9+ | 9  | 9  | 8  | 9  | 9  | 9  | 4         | 9+ | 9  | 2  | 12  |   |  |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 7         | 1  | 6  | 6  | 7  | -  | 9  | 9  | 8         | 9+ | 9+ | 9  | 8  | 9  | 9  | 9  | 4         | 9+ | 9  | 5  | 13  |   |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 1  | -  | -  | 9  | 9         | 1  | 9+ | 9  | 9  | 1  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 4         | 9+ | 9  | 7  | 14  |   |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 5  | -  | -  | 4  | -  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | 5  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 4         | 9+ | 9+ | 8  | 15  |   |  |  |     |
| 16        | -  | -  | -  | -  | 1  | -  | -  | 5         | 8  | -  | 2  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9  | 5         | 9+ | 9+ | 9  | 16  |   |  |  |     |
| 17        | 2  | 7  | -  | -  | 7  | 1  | -  | 8         | 9  | -  | 7  | 9  | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 5         | 9  | 9+ | 9  | 17  |   |  |  |     |
| 18        | 8  | 8  | -  | 5  | 9  | 8  | -  | 9         | 9  | 3  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 5         | 9  | 9+ | 9  | 18  |   |  |  |     |
| 19        | 9  | 8  | 1  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 5         | 9  | 9+ | 9  | 19  |   |  |  |     |
| 20        | 9  | 8  | 2  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 5  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 5         | 9  | 8  | 9  | 20  |   |  |  |     |
| 21        | 9+ | 8  | 6  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 5         | 9  | 8  | 9  | 21  |   |  |  |     |
| 22        | 9  | 7  | 8  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 5         | 8  | 8  | 9  | 22  |   |  |  |     |
| 23        | 9  | 6  | 9  | 9+ | 9  | 1  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 5         | 7  | 8  | 9+ | 23  |   |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |   |  |  |     |

**Jun., Angola (Luanda), for SSN = Very High, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 8  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | -  | 6  | 9+ | 6         | 1  | 4  | 9  | 0   |  |  |  |  |
| 1         | 7  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 8  | 9+ | 9+        | 5  | 9+ | 8  | 9+ | -  | 4  | 9  | 5         | 5  | 1  | 9  | 1   |  |  |  |  |
| 2         | 7  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 1  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 7  | 9+ | 5  | 7  | 9+        | 5  | 8  | 7  | 9+ | -  | -  | 9  | 5         | -  | -  | 7  | 2   |  |  |  |  |
| 3         | 6  | -  | 9  | 9+ | 2  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 1  | 2  | 9+        | 5  | 5  | 6  | 9+ | -  | -  | 6  | 5         | -  | -  | 6  | 3   |  |  |  |  |
| 4         | 5  | -  | 9  | 9+ | 1  | -  | 7  | 9         | -  | 9+ | 9+ | 8  | -  | 9  | 9+ | 5         | 9+ | 2  | 9+ | 9  | 9+ | 2  | 6  | 8         | 5  | 8  | 3  | 8  | -  | 2  | -  | 5         | 1  | -  | -  | 4   |  |  |  |  |
| 5         | 1  | -  | 9  | 8  | -  | -  | 4  | 8         | -  | 9  | 9+ | 3  | 3  | 8  | 9+ | 3         | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 8  | 4         | 5  | 9+ | 7  | 5  | -  | 9  | -  | 5         | 9  | 7  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 5  | 4  | -  | -  | -  | 4         | -  | 9  | 9  | -  | -  | 7  | 9+ | -         | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 7  | 5         | 5  | 9  | 9+ | 8  | 7  | 9  | -  | 5         | 9  | 9  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 1  | -  | -  | -  | -  | -         | -  | 8  | 5  | -  | -  | 1  | 9  | 1*        | 9+ | 9+ | 7  | 8  | 9+ | 9+ | 7  | 9+        | 9+ | 9  | 9  | 9+ | 5  | 8  | 5  | 5         | 9  | 9  | 2  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 1  | -  | -  | -  | 6  | 1*        | 9+ | 9  | 4  | 6  | 9  | 9+ | 9  | 9         | 9+ | 8  | 9  | 9  | 5  | 8  | 2  | 5         | 9  | 9  | 1  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | -         | 9  | 9  | 3  | 4  | 7  | 9+ | 9  | 9+        | 9+ | 9  | 9  | 8  | 6  | 9  | 7  | 5         | 9  | 9  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 2         | 8  | 9  | 3  | 2  | 4  | 9  | 9  | 9+        | 9+ | 8  | 9  | 7  | 8  | 9  | 8  | 4         | 9  | 9  | 1  | 10  |  |  |  |  |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | 2         | 5  | 9  | 4  | 4  | 1  | 9  | 8  | 9         | 9+ | 9  | 9  | 8  | 8  | 9  | 9+ | 4         | 8  | 9  | 1  | 11  |  |  |  |  |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 5         | 1  | 8  | 6  | 7  | -  | 9+ | 9  | 9         | 9+ | 9  | 9  | 7  | 6  | 9  | 9  | 4         | 9  | 9  | 1  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 7         | 2  | 9  | 8  | 8  | 1  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 7  | 8  | 9  | 9  | 9+        | 9  | 9  | 2  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | -  | -  | -  | 8  | 9         | 1  | 9  | 9  | 9  | 2* | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 8  | 9  | 9  | 9+        | 9+ | 9  | 3  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 6  | -  | -  | 4  | -  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | 4  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 8  | 9  | 9  | 4         | 9+ | 8  | 4  | 15  |  |  |  |  |
| 16        | -  | -  | -  | -  | 1  | -  | -  | 4         | 8  | -  | -  | 8  | 8  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 4  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 8  | 9  | 9+ | 9+        | 9  | 8  | 7  | 16  |  |  |  |  |
| 17        | 1  | 7  | -  | -  | 7  | 4  | -  | 8         | 9  | 1  | 8  | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9  | 8  | 9+ | 5         | 7  | 8  | 9  | 17  |  |  |  |  |
| 18        | 6  | 8  | -  | 6  | 9  | 7  | -  | 9         | 9  | 4  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 8  | 9+ | 5         | 5  | 7  | 9  | 18  |  |  |  |  |
| 19        | 8  | 8  | 1  | 9+ | 9+ | 8  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 8  | 9+ | 9+        | 7  | 6  | 9  | 19  |  |  |  |  |
| 20        | 9  | 8  | 3  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 3  | 6  | 9+ | 5         | 7  | 5  | 9  | 20  |  |  |  |  |
| 21        | 9  | 8  | 6  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 5  | 9+ | 9  | 9+ | 2  | 4  | 9+ | 5         | 6  | 1  | 9  | 21  |  |  |  |  |
| 22        | 9  | 8  | 8  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 5  | 9+ | 8  | 9+ | 2  | 4  | 9+ | 5         | 4  | -  | 9  | 22  |  |  |  |  |
| 23        | 8  | 6  | 9  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | 1  | 7  | 9+ | 8         | 2  | 2  | 9  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

Jul., Angola (Luanda), for SSN = Very High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 8  | -  | 8  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 8  | 9+ | 1  | 5  | 9+ | 9  | -         | 5  | 9+ | 0  |     |  |  |  |  |
| 1         | 8  | -  | 8  | 9+ | 9  | -  | 8  | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9  | 9         | 9+ | 9  | 9+ | -  | 4  | 9  | 8  | 5         | 5  | 9+ | 1  |     |  |  |  |  |
| 2         | 6  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 2  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 8         | 9+ | 9+ | 9+ | 7  | 9+ | 9  | 8  | 9+        | 9  | 9  | 9+ | -  | -  | 8  | 5  | -         | 5  | 9  | 2  |     |  |  |  |  |
| 3         | 6  | -  | 9  | 9+ | 4  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 5         | 9+ | 9+ | 9+ | 9  | 9+ | 2  | 2  | 9+        | 5  | 5  | 8  | 9+ | -  | -  | 4  | 5         | -  | -  | 5  | 3   |  |  |  |  |
| 4         | 5  | -  | 9  | 9  | 1  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | -  | 9  | 9+ | 5         | 9+ | 2  | 9+ | 9  | 9+ | 2  | 6  | 6         | 5  | 7  | 1  | 7  | -  | -  | -  | 5         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 1  | -  | 9  | 8  | -  | -  | 5  | 8         | -  | 9  | 9+ | 3  | 3  | 8  | 9+ | 2         | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 1         | 5  | 9+ | 7  | 6  | -  | 8  | -  | 5         | 8  | 2  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 4  | 4  | -  | -  | -  | 5         | -  | 9  | 9  | -  | -  | 7  | 9+ | -         | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 8  | 3*        | 5  | 9  | 9+ | 9  | 5  | 9  | -  | 5         | 9  | 7  | -  | 6   |  |  |  |  |
| 7         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 8  | 6  | -  | -  | 2  | 9  | 1*        | 9+ | 9+ | 6  | 8  | 9  | 9+ | 7  | 9+        | 9+ | 9  | 9  | 9+ | 3  | 9  | 2  | 5         | 8  | 9  | 1  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 2  | 1  | -  | -  | -  | 7  | -         | 9+ | 9  | 6  | 3  | 9  | 9+ | 9  | 9         | 9+ | 9  | 9  | 7  | 4  | 9  | 2  | 5         | 8  | 9  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | -         | 9  | 9  | 4  | 2  | 7  | 9+ | 9  | 9+        | 9+ | 9  | 9  | 8  | 4  | 9  | 1  | 4         | 9  | 9  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3  | 2         | 7  | 9  | 4  | 1  | 3  | 9  | 9  | 9+        | 9+ | 8  | 8  | 8  | 6  | 9  | 8  | 4         | 9  | 9  | 2  | 10  |  |  |  |  |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 2         | 3  | 9  | 4  | 2  | 1  | 9  | 8  | 9         | 9+ | 9  | 9  | 8  | 7  | 9  | 4  | 4         | 8  | 9  | 2  | 11  |  |  |  |  |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 5         | 1  | 9  | 6  | 5  | -  | 9+ | 9  | 8         | 9+ | 9  | 8  | 7  | 6  | 9  | 9  | 4         | 9  | 9  | 2  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 8         | 2  | 8  | 9  | 7  | 1* | 9+ | 9  | 9         | 4  | 9+ | 9  | 8  | 8  | 9  | 9  | 9+        | 9  | 9  | 2  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 1  | 9  | 9  | 8  | 2* | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9  | 9  | 4         | 9  | 9  | 3  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 5  | -  | -  | 4  | -  | -  | 9  | 9+        | 3  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9  | 9  | 4         | 9+ | 8  | 5  | 15  |  |  |  |  |
| 16        | -  | -  | -  | -  | 2  | -  | -  | 5         | 8  | -  | -  | 8  | 9  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 4  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 8  | 9  | 8  | 9+ | 9+        | 9  | 8  | 8  | 16  |  |  |  |  |
| 17        | 2  | 6  | -  | -  | 7  | 1  | -  | 8         | 9  | -  | 9+ | 9  | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9  | 8  | 9+ | 9+        | 7  | 8  | 9  | 17  |  |  |  |  |
| 18        | 7  | 8  | -  | 6  | 9  | 7  | -  | 9         | 9  | 2  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 8  | 9  | 9  | 9+ | 5         | 6  | 8  | 9  | 18  |  |  |  |  |
| 19        | 9  | 8  | -  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 8  | 9+ | 5         | 6  | 8  | 8  | 19  |  |  |  |  |
| 20        | 9  | 8  | 2  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 7  | 8  | 9+ | 5         | 6  | 6  | 9  | 20  |  |  |  |  |
| 21        | 9  | 8  | 5  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 8  | 9+ | 6  | 4  | 9+ | 9         | 6  | 2  | 9  | 21  |  |  |  |  |
| 22        | 9  | 8  | 7  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 8  | 9+ | 5  | 5  | 9+ | 9         | 6  | 4  | 9  | 22  |  |  |  |  |
| 23        | 9  | 6  | 8  | 9+ | 9  | 1  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 4  | 8  | 9+ | 9+ | 2         | 3  | 9+ | 23 |     |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

Aug., Angola (Luanda), for SSN = Very High, Sigs in S-Units. By N6BV, ARRL.

|     | 80 Meters |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |
|-----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|
| UTC | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |
| 0   | 9         | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 1         | 7  | 9+ | 9  | -  | 5  | 9+ | 0   |
| 1   | 9         | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 6  | 9+ | 9+ | 9+ | -  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 9  | 9+ | 9+ | 9  | 9+ | 9+ | -         | 6  | 9  | 8  | -  | 7  | 9  | 1   |
| 2   | 8         | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 2  | 9+ | 9+ | 9+ | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9         | 8  | 9+ | 9+ | 9  | 9  | 9+ | -         | 1  | 9  | 5  | 2  | 7  | 8  | 2   |
| 3   | 7         | -  | 9  | 9+ | 6  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | 9  | 9+ | 2         | 4  | 9+ | 5  | 6  | 8  | 9+ | -         | -  | 6  | 5  | -  | 1  | 7  | 3   |
| 4   | 7         | -  | 9  | 9+ | 1  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 1  | 9  | 9+        | 5  | 9+ | 2  | 9+ | 9+ | 9+ | 2         | 6  | 8  | 5  | 8  | 1  | 9  | -         | 1  | -  | 5  | 1  | -  | -  | 4   |
| 5   | 2         | -  | 9  | 9  | -  | -  | 5  | 8         | -  | 9  | 9+ | 4  | 3  | 8  | 9+        | 3  | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 8  | 2  | 5  | 9+ | 8  | 4  | -         | 9  | -  | 5  | 9  | 6  | -  | 5   |
| 6   | -         | -  | 4  | 5  | -  | -  | -  | 5         | -  | 9  | 9  | -  | -  | 7  | 9+        | 1  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 8  | 5  | 5  | 9+ | 9+ | 7  | 7         | 8  | -  | 5  | 9  | 9  | -  | 6   |
| 7   | -         | -  | -  | -  | -  | -  | -  | -         | -  | 7  | 7  | -  | -  | 2  | 9         | 1* | 9+ | 9+ | 8  | 8  | 9  | 9+        | 9  | 9+ | 9+ | 9  | 8  | 8  | 8         | 8  | 4  | 5  | 8  | 9  | -  | 7   |
| 8   | -         | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 1  | -  | -  | -  | 7         | 1* | 9+ | 9+ | 5  | 4  | 8  | 9         | 9  | 7  | 9+ | 9  | 8  | 7  | 8         | 9  | -  | 5  | 8  | 9  | -  | 8   |
| 9   | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5         | 1  | 9  | 9  | 3  | -  | 7  | 9         | 8  | 9+ | 9+ | 8  | 7  | 7  | 8         | 9  | 4  | 4  | 9  | 9  | -  | 9   |
| 10  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2         | 1  | 6  | 9  | 3  | -  | 2  | 9         | 9  | 9  | 9+ | 8  | 8  | 8  | 8         | 9  | 8  | 4  | 9  | 9  | 2  | 10  |
| 11  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4         | 2  | 3  | 9  | 4  | 1  | -  | 9         | 8  | 9  | 9+ | 9  | 8  | 8  | 8         | 9  | 9  | 4  | 9  | 9  | 2  | 11  |
| 12  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5         | 4  | 1  | 9  | 6  | 4  | -  | 9+        | 9  | 8  | 9+ | 9  | 9  | 8  | 9         | 9  | 9  | 4  | 9  | 9  | 3  | 12  |
| 13  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7         | 8  | 1  | 9  | 9  | 8  | -  | 9+        | 9  | 8  | 4  | 9+ | 9  | 8  | 9         | 9  | 9  | 9+ | 9  | 9  | 4  | 13  |
| 14  | -         | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 2  | -  | -  | 9         | 9  | 1  | 9+ | 9+ | 9  | 1  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9         | 9  | 9  | 9+ | 9  | 9  | 5  | 14  |
| 15  | -         | -  | -  | -  | -  | -  | -  | 2         | 6  | -  | -  | 7  | -  | -  | 9+        | 9+ | 2  | 9+ | 9+ | 9+ | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 9  | 9+ | 9+ | 9  | 7  | 15  |
| 16  | -         | -  | -  | -  | 2  | -  | -  | 6         | 8  | -  | 3  | 8  | 8  | -  | 9+        | 9+ | 6  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 16  |
| 17  | 3         | 7  | -  | -  | 7  | 1  | -  | 9         | 9  | 1  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 17  |
| 18  | 8         | 8  | -  | 8  | 9  | 8  | -  | 9+        | 9+ | 3  | 9+ | 9+ | 9  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 8  | 18  |
| 19  | 9         | 8  | 1  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9  | 1  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 9  | 9+ | 9+ | 7  | 9  | 9  | 19  |
| 20  | 9         | 8  | 3  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 6  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 5         | 8  | 9+ | 9+ | 7  | 6  | 9  | 20  |
| 21  | 9+        | 8  | 7  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 7         | 8  | 9+ | 9+ | 5  | 4  | 9  | 21  |
| 22  | 9         | 7  | 9  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 7  | 9+ | 6         | 5  | 9+ | 9+ | 4  | 3  | 9  | 22  |
| 23  | 9         | 6  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 4         | 7  | 9+ | 9  | 2  | 5  | 9+ | 23  |
|     | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |

Sep., Angola (Luanda), for SSN = Very High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |     |
| 0         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 7  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 0   |    |  |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 1   |    |  |  |     |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 2  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9  | 9+ | 9+ | 9  | 9+ | 9+ | 9         | 9+ | 9  | 9+ | 9   | 2  |  |  |     |
| 3         | 8  | -  | 9  | 9+ | 7  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 6  | 7         | 9+ | 9  | 8  | 9+ | 9+ | -  | -  | 9         | 5  | -  | 5  | 5   | 3  |  |  |     |
| 4         | 8  | -  | 9  | 9  | 2  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 2  | 9  | 9+ | 6         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 4  | 8         | 9+ | 5  | 9  | 7  | 9+ | -  | 3  | 4         | 5  | 2  | 3  | 4   | 4  |  |  |     |
| 5         | 5  | -  | 9  | 8  | -  | -  | 6  | 9         | -  | 9+ | 9+ | 5  | 5  | 8  | 9+ | 3         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 7  | 5  | 9+ | 9  | 7  | -  | 9  | -         | 5  | 9  | 9  | -   | 5  |  |  |     |
| 6         | -  | -  | 5  | 4  | -  | -  | -  | 6         | -  | 9  | 9  | -  | -  | 7  | 9+ | 1         | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 8         | 6  | 9+ | 9+ | 9+ | 9  | 9  | 9  | 4*        | 5  | 9+ | 9  | 1   | 6  |  |  |     |
| 7         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 6  | 6  | -  | -  | 2  | 9  | 1*        | 9+ | 9+ | 7  | 9  | 9  | 9+ | 9+ | 8         | 9+ | 9+ | 9  | 9  | 7  | 9+ | 8  | 7         | 5  | 9+ | 8  | -   | 7  |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 1  | -  | -  | -  | 8  | 2*        | 9+ | 9  | 5  | 1  | 9  | 9+ | 9  | 9         | 9+ | 8  | 9  | 5  | 9+ | 9  | -  | 9+        | 9  | 8  | -  | 8   |    |  |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 1         | 8  | 9  | 2  | -  | 8  | 9  | 8  | 9+        | 9+ | 9  | 8  | 8  | 9+ | 9  | 9  | 4         | 9  | 8  | -  | 9   |    |  |  |     |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | -         | 6  | 9  | 3  | -  | 2  | 9  | 8  | 9         | 9+ | 9  | 8  | 9  | 8  | 9  | 9  | 4         | 9  | 9  | 2  | 10  |    |  |  |     |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 2         | 3  | 9  | 5  | 1  | 1  | 9  | 9  | 9         | 9+ | 9  | 9  | 8  | 8  | 9  | 9  | 4         | 9  | 9  | 8  | 11  |    |  |  |     |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 3         | 1  | 9  | 8  | 3  | -  | 9+ | 9  | 9         | 9+ | 9+ | 9  | 8  | 8  | 9  | 9  | 4         | 9  | 9  | 9  | 12  |    |  |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 8         | 1  | 9  | 9  | 7  | -  | 9+ | 9  | 9         | 9+ | 9+ | 9  | 8  | 8  | 9+ | 9  | 9+        | 9  | 9  | 9  | 13  |    |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 2  | -  | -  | 9  | 9         | 2  | 9+ | 9+ | 9  | 2* | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 9+        | 9+ | 9  | 9  | 14  |    |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 2         | 6  | -  | -  | 8  | -  | -  | 9+ | 9+        | 4  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 9+        | 9+ | 9+ | 9  | 15  |    |  |  |     |
| 16        | -  | -  | -  | -  | 4  | -  | -  | 7         | 8  | -  | 3  | 9  | 7  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 16  |    |  |  |     |
| 17        | 5  | 7  | -  | 1  | 7  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9  | 17  |    |  |  |     |
| 18        | 9  | 8  | -  | 9+ | 9  | 8  | -  | 9+        | 9+ | 4  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9  | 9+ | 9  | 18  |    |  |  |     |
| 19        | 9  | 8  | 1  | 9+ | 9+ | 8  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | 4  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 4  | 9+ | 9+        | 9+ | 9  | 9+ | 9+  | 19 |  |  |     |
| 20        | 9+ | 8  | 5  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 1  | 9  | 9+        | 9+ | 9  | 8  | 9   | 20 |  |  |     |
| 21        | 9+ | 8  | 8  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 7  | 9+ | 9  | 9+ | 4  | 8  | 9+        | 5  | 9+ | 6  | 9   | 21 |  |  |     |
| 22        | 9  | 8  | 8  | 9+ | 9  | 3  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 6  | 9+ | 4  | 1  | 9+ | 5         | 9  | 5  | 9+ | 22  |    |  |  |     |
| 23        | 9  | 6  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 4  | 9  | 9+        | 5  | 9  | 6  | 9+  | 23 |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |  |  |     |

Oct., Angola (Luanda), for SSN = Very High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |   |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|---|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |   |  |     |
| 0         | 9  | 4  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 9+        | 9  | 9+ | 9  | 9+  | 0  | 0 |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 8         | 9  | 9  | 9+ | 1   | 1  |   |  |     |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 2  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 5  | 8  | 9+ | 6  | 8         | 9  | 6  | 6  | 2   | 2  |   |  |     |
| 3         | 8  | -  | 9  | 9+ | 7  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 7  | 9         | 9+ | 9+ | 9  | 9+ | 9+ | -  | 1  | 9+        | 5  | 2  | 8  | 3   | 3  | 3 |  |     |
| 4         | 8  | -  | 9  | 9  | 2  | -  | 8  | 9+        | -  | 9+ | 9+ | 8  | 5  | 9  | 9+ | 7         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 5  | 9         | 9+ | 5  | 9+ | 9  | 9+ | -  | 6  | 9         | 5  | 4  | 5  | 4   | 4  | 4 |  |     |
| 5         | 5  | -  | 9  | 8  | -  | -  | 6  | 9         | -  | 9  | 9+ | 5  | 5  | 9  | 9+ | 3         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 9  | 5  | 9+ | 9  | 8  | -  | 9  | 2         | 7  | 9  | 9  | 1*  | 5  | 5 |  |     |
| 6         | -  | -  | 3  | 5  | -  | -  | -  | 7         | -  | 9  | 9  | 1  | -  | 8  | 9+ | 2         | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 9+        | 9+ | 9+ | 9  | 9  | 9+ | 9  | 4* | 5         | 9+ | 9  | 1  | 6   | 6  |   |  |     |
| 7         | -  | -  | -  | -  | -  | -  | -  | 2         | -  | 4  | 6  | -  | -  | 3  | 9+ | 1         | 9+ | 9+ | 9  | 8  | 9  | 9+ | 8  | 9+        | 9+ | 9+ | 9  | 6  | 9+ | 8  | 8  | 9+        | 9+ | 9  | -  | 7   | 7  |   |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 9  | 2*        | 9  | 9+ | 7  | 4  | 9  | 9+ | 9  | 9+        | 9+ | 9  | 9  | 1* | 9+ | 9  | 9+ | 9+        | 9  | 8  | -  | 8   | 8  |   |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 1         | 8  | 9  | 4  | -  | 8  | 9+ | 7  | 9+        | 9+ | 9  | 8  | 9  | 9+ | 9  | 9  | 4         | 9  | 9  | -  | 9   | 9  |   |  |     |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | -         | 6  | 9  | 4  | -  | 2  | 9  | 8  | 9         | 9+ | 9  | 8  | 9  | 9  | 9  | 9+ | 4         | 9  | 9  | 8  | 10  | 10 |   |  |     |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 2         | 2  | 9  | 5  | -  | -  | 9  | 8  | 9         | 9+ | 9  | 8  | 9  | 9  | 9  | 9  | 4         | 9  | 9  | 9  | 11  | 11 |   |  |     |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 4         | 1  | 8  | 8  | 2  | -  | 9  | 9  | 9         | 9+ | 9+ | 9  | 8  | 9  | 9  | 9  | 4         | 9  | 9  | 9  | 12  | 12 |   |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 8         | 1  | 7  | 9  | 6  | -  | 9+ | 9  | 8         | 9+ | 9+ | 9  | 8  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 9  | 13  | 13 |   |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 1  | -  | -  | 9  | 9         | 1  | 9+ | 9  | 9  | 2  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 9  | 14  | 14 |   |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 4         | 6  | -  | -  | 6  | -  | -  | 9+ | 9+        | 3  | 9+ | 9+ | 9  | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9  | 4         | 9+ | 9+ | 9  | 15  | 15 |   |  |     |
| 16        | -  | -  | -  | -  | 4  | -  | -  | 8         | 8  | -  | 3  | 9  | 7  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 4         | 9+ | 9+ | 9  | 16  | 16 |   |  |     |
| 17        | 7  | 7  | -  | 1  | 8  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 17  | 17 |   |  |     |
| 18        | 9  | 8  | -  | 9+ | 9  | 7  | -  | 9+        | 9+ | 3  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 7  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 18  | 18 |   |  |     |
| 19        | 9+ | 8  | 1  | 9+ | 9+ | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 4  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 19  | 19 |   |  |     |
| 20        | 9+ | 8  | 3  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 5         | 9+ | 8  | 9+ | 20  | 20 |   |  |     |
| 21        | 9+ | 8  | 6  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 5  | 9  | 9+ | 9+ | 9+        | 5  | 9+ | 21 | 21  |    |   |  |     |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 8  | 9+ | 8  | 2  | 9+ | 9+ | 9+        | 8  | 9+ | 22 | 22  |    |   |  |     |
| 23        | 9  | 6  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 5  | 9+        | 8  | 9+ | 23 | 23  |    |   |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |   |  |     |

Nov., Angola (Luanda), for SSN = Very High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |   |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|---|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |   |  |     |
| 0         | 9  | 5  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 0   |    |   |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 9  | 9+ | 5  | -  | 9         | 8  | 8  | 1  |     |    |   |  |     |
| 2         | 8  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 3  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 2   |    |   |  |     |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9  | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 2  | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 9+ | 3 |  |     |
| 4         | 9  | -  | 9  | 9  | 4  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | 4  | 9  | 9+ | 7         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 4  | 9         | 9+ | 5  | 9+ | 9+ | 9  | -  | 4  | 9         | 5  | 5  | 5  | -   | 4  |   |  |     |
| 5         | 6  | -  | 8  | 8  | -  | -  | 5  | 9         | -  | 9  | 9+ | 6  | 5  | 8  | 9+ | 5         | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 9  | 8  | -  | 8  | 4  | 6         | 9  | 8  | -  | 5   |    |   |  |     |
| 6         | -  | -  | 2  | 3  | -  | -  | -  | 7         | -  | 9  | 9  | 1  | -  | 8  | 9+ | 4         | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 9+        | 5  | 9+ | 9  | 7  | 9  | 9  | 3* | 5         | 9  | 8  | -  | 6   |    |   |  |     |
| 7         | -  | -  | -  | -  | -  | -  | -  | 3         | -  | 5  | 5  | -  | -  | 4  | 9+ | 4         | 9+ | 9+ | 9  | 8  | 9  | 9+ | 8  | 9+        | 9+ | 9+ | 9  | 1  | 9+ | 9  | 9  | 9         | 9  | 9  | -  | 7   |    |   |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 1  | -  | -  | -  | 9  | 1*        | 9  | 9+ | 6  | 3  | 9  | 9+ | 9  | 9+        | 9+ | 9+ | 9  | -  | 9+ | 9  | 6  | 9         | 9  | 8  | -  | 8   |    |   |  |     |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 1*        | 8  | 9  | 5  | -  | 7  | 9+ | 8  | 9+        | 9+ | 9  | 8  | 7  | 9+ | 9  | 9+ | 9         | 9  | 9  | -  | 9   |    |   |  |     |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 1         | 7  | 9  | 5  | -  | 5  | 9+ | 8  | 9+        | 9+ | 9  | 8  | 9  | 9+ | 9  | 9+ | 9+        | 9  | 9  | 6  | 10  |    |   |  |     |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 1         | 2  | 9  | 6  | -  | 2  | 9  | 8  | 9         | 9+ | 9  | 8  | 9  | 9  | 9  | 9+ | 4         | 9  | 9  | 9  | 11  |    |   |  |     |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 3         | 1  | 9  | 8  | 1  | -  | 9  | 9  | 9         | 9+ | 9+ | 9  | 8  | 9  | 9  | 9  | 4         | 9  | 9  | 9  | 12  |    |   |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 6         | 1  | 6  | 9  | 5  | 1  | 9+ | 9  | 8         | 9+ | 9+ | 9  | 8  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 9  | 13  |    |   |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 2  | -  | -  | 9  | 9         | 1  | 9+ | 9+ | 9  | 1  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 4         | 9+ | 9  | 9  | 14  |    |   |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 4         | 6  | -  | -  | 6  | -  | -  | 9+ | 9         | 2  | 9+ | 9+ | 9  | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 4         | 9+ | 9+ | 9  | 15  |    |   |  |     |
| 16        | 1  | -  | -  | -  | 3  | -  | -  | 8         | 8  | -  | 2  | 9  | 7  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 4         | 9+ | 9+ | 9  | 16  |    |   |  |     |
| 17        | 7  | 7  | -  | 1  | 8  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | 1  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 17  |    |   |  |     |
| 18        | 9  | 8  | -  | 9+ | 9  | 7  | -  | 9+        | 9+ | 2  | 9+ | 9+ | 9  | 5  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 18 |   |  |     |
| 19        | 9  | 8  | -  | 9+ | 9+ | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 19  |    |   |  |     |
| 20        | 9+ | 8  | 2  | 9+ | 9+ | 8  | 5  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 20 |   |  |     |
| 21        | 9  | 8  | 7  | 9+ | 9  | 6  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 9+ | 1  | 9  | 9+ | 9+        | 9+ | 7  | 9+ | 21  |    |   |  |     |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 7  | 9+ | 7  | 7  | 9+ | 9+        | 9+ | 8  | 9+ | 22  |    |   |  |     |
| 23        | 9  | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 23  |    |   |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |   |  |     |

**Dec., Angola (Luanda), for SSN = Very High, Sigs in S-Units. By N6BV, ARRL.**

|     | 80 Meters |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |    |   |
|-----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|----|---|
| UTC | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |    |   |
| 0   | 9         | 6  | 8  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 0  |     |    |   |
| 1   | 9         | -  | 8  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 9+ | 9+ | 8  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 1  |     |    |   |
| 2   | 9         | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 4  | 9+ | 9+ | 9+ | -  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 2  |     |    |   |
| 3   | 6         | -  | 9  | 9+ | 8  | -  | 8  | 9+        | -  | 9+ | 9+ | 9+ | 1  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 2  | 9  | 9+ | 9  | 9+ | 9+ | 9+        | 7  | -  | 1  | 8  | 5  | 2  | 6   | -  | 3 |
| 4   | 8         | -  | 9  | 9+ | 5  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | 5  | 9  | 9         | 8  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 1  | 9  | 9+ | 5  | 9+ | 9+ | 7         | -  | 1  | 5  | 5  | 1  | 1  | -   | 4  |   |
| 5   | 6         | -  | 8  | 8  | -  | -  | 6  | 9         | -  | 9+ | 9+ | 7  | 5  | 8  | 9+        | 7  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 4  | 9  | 9  | 5  | 9+ | 9  | 7         | -  | 4  | -  | 5  | 4  | 5  | -   | 5  |   |
| 6   | 1         | -  | 2  | 3  | -  | -  | -  | 8         | -  | 9  | 9  | 1  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9  | 9  | 5  | 9+ | 9  | 4         | 5  | 9  | 1  | 6  | 9  | 8  | -   | 6  |   |
| 7   | -         | -  | -  | -  | -  | -  | -  | 4         | -  | 5  | 7  | -  | -  | 5  | 9+        | 5  | 9+ | 9+ | 9  | 9  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 4  | 9+        | 9  | 2* | 9  | 9  | 8  | -  | 7   |    |   |
| 8   | -         | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 1  | -  | -  | 1  | 9+        | 1  | 9  | 9+ | 6  | 1* | 8  | 9+        | 9  | 9  | 9+ | 9+ | 8  | -  | 9+        | 9  | 4  | 4  | 9  | 7  | -  | 8   |    |   |
| 9   | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 1  | 8  | 9  | 5  | -  | 7  | 9+        | 8  | 9  | 9+ | 9+ | 7  | -  | 9+        | 9  | 7  | 9  | 9  | 8  | -  | 9   |    |   |
| 10  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 1  | 7  | 9  | 5  | -  | 4  | 9+        | 8  | 9  | 9+ | 9  | 8  | 9  | 8         | 9  | 9  | 9+ | 9  | 9  | -  | 10  |    |   |
| 11  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5         | 1  | 3  | 9  | 6  | -  | 3  | 9         | 8  | 9  | 9+ | 9  | 8  | 9  | 9         | 9  | 9  | 9+ | 9  | 9  | 9  | 11  |    |   |
| 12  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 2  | 2  | 9  | 8  | 1  | 1  | 9         | 9  | 8  | 9+ | 9+ | 9  | 8  | 9         | 9  | 9  | 9+ | 9  | 9  | 9  | 12  |    |   |
| 13  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 6  | 1  | 9  | 9  | 5  | 1  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9         | 9  | 9  | 9+ | 9  | 9  | 9  | 13  |    |   |
| 14  | -         | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 2  | -  | -  | 9         | 9  | 1  | 9+ | 9+ | 9  | 2  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9         | 9  | 9  | 9+ | 9  | 9  | 9  | 14  |    |   |
| 15  | -         | -  | -  | -  | -  | -  | -  | 5         | 6  | -  | -  | 7  | -  | -  | 9+        | 9+ | 2  | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9         | 9  | 9  | 9+ | 9+ | 9  | 9  | 15  |    |   |
| 16  | 1         | -  | -  | -  | 2  | -  | -  | 9         | 8  | -  | 3  | 9  | -  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9         | 8  | 9+ | 9+ | 9+ | 9+ | 9  | 9   | 16 |   |
| 17  | 8         | 7  | -  | 1  | 7  | -  | -  | 9+        | 9  | -  | 9+ | 9+ | 8  | 2  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 17  |    |   |
| 18  | 9         | 8  | -  | 9+ | 9  | 8  | -  | 9+        | 9+ | 1  | 9+ | 9+ | 9  | 7  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 7  | 9+ | 9+ | 9+ | 9  | 9  | 9+  | 18 |   |
| 19  | 9         | 8  | -  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 6  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 2  | 9+ | 9+ | 9+ | 9+ | 8  | 9+  | 19 |   |
| 20  | 9+        | 8  | 1  | 9+ | 9+ | 8  | 6  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | -  | 9  | 9+ | 5  | 9  | 6  | 9+  | 20 |   |
| 21  | 9         | 8  | 5  | 9+ | 9  | 5  | 8  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 9  | 9+        | -  | 8  | 9+ | 5  | 9  | 5  | 9+  | 21 |   |
| 22  | 9         | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 6  | 9+ | 8  | 9+        | -  | 4  | 9+ | 5  | 7  | 5  | 9   | 22 |   |
| 23  | 9         | 7  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 7  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 5  | 9+ | 9  | 9+        | -  | 5  | 9+ | 9  | 5  | 4  | 9   | 23 |   |
|     | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |    |   |

Jan., Angola (Luanda), for SSN = High, Sigs in S-Units. By N6BV, ARRL.

|     | 80 Meters |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |   |
|-----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|---|
| UTC | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |   |
| 0   | 9         | 6  | 8  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 5  | 5  | 9  | 9+ | -         | 6  | 9  | 8  | -  | 7  | 8  | 0   |   |
| 1   | 9         | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 8         | 9  | 9+ | 5  | 1  | 9  | 9  | -         | 6  | 8  | 5  | -  | 5  | 3  | 1   |   |
| 2   | 9         | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9  | 9  | 9+ | 4         | 8  | 9+ | 9  | 8  | 9  | 8  | -         | 3  | 8  | 5  | 2  | 6  | -  | 2   |   |
| 3   | 9         | -  | 9  | 9+ | 8  | -  | 8  | 9+        | 1  | 9+ | 9+ | 9  | 1  | 9  | 9         | 8  | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | -  | 6  | 9  | 7  | 7  | 9  | 2         | -  | -  | 7  | 5  | -  | 5  | -   | 3 |
| 4   | 9         | -  | 9  | 9+ | 5  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | 5  | 9  | 7         | 8  | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | -  | 5  | 9  | 8  | 7  | 6  | 1         | -  | 1  | 4  | 5  | 1  | 1  | -   | 4 |
| 5   | 7         | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9+ | 9+ | 7  | 5  | 9  | 9         | 7  | 9+ | 2  | 9+ | 9+ | 9+ | 9         | -  | 8  | 8  | 5  | 8  | 5  | 2         | -  | -  | -  | 5  | -  | -  | -   | 5 |
| 6   | 1         | -  | 6  | 7  | -  | -  | -  | 8         | -  | 9  | 9+ | 3  | -  | 8  | 9+        | 5  | 9+ | 9+ | 9+ | 9  | 9+ | 9         | 9  | 2* | 5  | 9+ | 8  | 1  | -         | 1  | -  | 5  | 2  | 2  | -  | 6   |   |
| 7   | -         | -  | -  | 1  | -  | -  | -  | 5         | -  | 6  | 8  | -  | -  | 6  | 9+        | 5  | 9+ | 9+ | 9  | 5  | 9  | 9+        | 9  | 9  | 9+ | 9+ | 9  | -  | 8         | 9  | 2  | 4  | 6  | 5  | -  | 7   |   |
| 8   | -         | -  | -  | -  | -  | -  | -  | 1         | -  | 4  | 4  | -  | -  | 2  | 9+        | 4* | 9  | 9+ | 8  | 2* | 8  | 9+        | 9  | 8  | 9+ | 9+ | 9  | -  | 9         | 6  | -  | 8  | 9  | 6  | -  | 8   |   |
| 9   | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 3  | 8  | 8  | 6  | -  | 5  | 9+        | 8  | 9  | 9+ | 9+ | 8  | -  | 9         | 7  | 2  | 9  | 9  | 8  | -  | 9   |   |
| 10  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7         | 2  | 6  | 9  | 6  | -  | 6  | 9         | 8  | 9+ | 9+ | 9+ | 8  | 4  | 7         | 9  | 6  | 9  | 9  | 8  | -  | 10  |   |
| 11  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 3         | 3  | 5  | 8  | 7  | 1  | 4  | 9         | 8  | 9  | 6  | 9+ | 8  | 9  | 6         | 9  | 9  | 9  | 9  | 9  | 1  | 11  |   |
| 12  | -         | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4         | 6  | 3  | 9  | 8  | 3  | 2  | 9         | 9  | 9  | 8  | 9+ | 8  | 8  | 7         | 9  | 9  | 9  | 9  | 9  | 7  | 12  |   |
| 13  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 8  | 2  | 9  | 9  | 7  | 2  | 9+        | 9  | 9  | 8  | 9+ | 9  | 8  | 8         | 9  | 9  | 9  | 9  | 8  | 9  | 13  |   |
| 14  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | 4  | -  | -  | 9         | 9  | 2  | 9+ | 9+ | 8  | 2  | 9+        | 9+ | 9  | 8  | 9+ | 9+ | 9  | 8         | 9+ | 9  | 9+ | 9  | 8  | 9  | 14  |   |
| 15  | -         | -  | -  | -  | -  | -  | -  | 5         | 6  | -  | -  | 7  | -  | -  | 9+        | 9+ | 4  | 9+ | 9+ | 9  | 7  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 8         | 9+ | 9  | 9  | 9  | 8  | 9  | 15  |   |
| 16  | 1         | -  | -  | -  | 2  | -  | -  | 8         | 8  | -  | 4  | 8  | 7  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 9  | 9+ | 9+ | 9+ | 6  | 9  | 16  |   |
| 17  | 7         | 7  | -  | 2  | 9  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | 1  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 7         | 9  | 9+ | 9+ | 9  | 5  | 9  | 17  |   |
| 18  | 9         | 8  | -  | 9+ | 9  | 8  | -  | 9+        | 9  | 2  | 9+ | 9+ | 9  | 6  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 5  | 9+ | 9+ | 9+ | 4         | 9  | 9  | 9+ | 8  | 5  | 9+ | 18  |   |
| 19  | 9         | 9  | -  | 9+ | 9  | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 5  | 9+ | 9+ | 9+ | 1         | 8  | 9  | 9+ | 6  | 9  | 9  | 19  |   |
| 20  | 9         | 9  | 2  | 9+ | 9  | 8  | 5  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 5  | 9+ | 9  | 9+ | -         | 6  | 9+ | 9+ | 3  | 7  | 9  | 20  |   |
| 21  | 9         | 8  | 6  | 9+ | 9  | 5  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | -         | 2  | 9+ | 5  | 1  | 6  | 9  | 21  |   |
| 22  | 9         | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | -         | 6  | 9  | 9+ | -  | 8  | 9  | 22  |   |
| 23  | 9         | 7  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9  | 9  | 9+ | -         | 5  | 9  | 9+ | -  | 8  | 9  | 23  |   |
|     | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |   |

**Feb., Angola (Luanda), for SSN = High, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |
| 0         | 9  | 6  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 1  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | -  | 8         | 9+ | 5  | 1  | 8  | 9  | 0  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 8  | 9  | 9+ | -  | 8         | 9  | 5  | -  | 6  | 8  | 1  |     |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9  | 9  | 9+ | 8         | 9  | 9+ | 9+ | 9+ | 9  | 9  | -         | 7  | 9  | 5  | 6  | 8  | 2  |     |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 1         | 6  | 9+ | 9+ | 8  | 9+ | 7  | -         | 1  | 8  | 5  | 2  | 7  | -  | 3   |
| 4         | 9  | -  | 9  | 9+ | 4  | -  | 8  | 9+        | -  | 9+ | 9+ | 8  | 5  | 9  | 9         | 7  | 9+ | 9+ | 9  | 9+ | 9+ | 1         | 5  | 9  | 8  | 7  | 8  | 6  | -         | 1  | 7  | 5  | 1  | 2  | -  | 4   |
| 5         | 7  | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9+ | 9+ | 7  | 4  | 9  | 9+        | 5  | 9+ | 2  | 9+ | 9+ | 9+ | -         | 9  | 8  | 9  | 9  | 8  | 8  | -         | -  | 1  | 5  | -  | -  | 1  | 5   |
| 6         | 1  | -  | 6  | 7  | -  | -  | -  | 8         | -  | 9  | 9+ | 2  | 1  | 8  | 9+        | 4  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 3* | 5  | 9+ | 9  | 4  | -         | 8  | -  | 6  | 8  | 8  | -  | 6   |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 3         | -  | 6  | 8  | -  | -  | 5  | 9+        | 2  | 9+ | 9+ | 9  | 9  | 9  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 1  | 9         | 9  | 6  | 9  | 9  | 8  | -  | 7   |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 3  | -  | -  | 1  | 9+        | 2* | 9+ | 9+ | 7  | 5  | 9  | 9+        | 8  | 7  | 9+ | 9+ | 9  | -  | 9         | 9  | -  | 8  | 9  | 8  | -  | 8   |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 1* | 9  | 9+ | 4  | 1  | 8  | 9+        | 8  | 8  | 9+ | 9+ | 8  | -  | 9         | 8  | 2  | 9  | 9  | 8  | -  | 9   |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 1  | 6  | 9  | 4  | -  | 5  | 9+        | 8  | 9  | 9+ | 9+ | 8  | 7  | 7         | 9  | 8  | 9+ | 9  | 8  | -  | 10  |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 2  | 2  | 9  | 5  | 1  | 4  | 9+        | 8  | 9  | 8  | 9+ | 8  | 9  | 7         | 9  | 9  | 9+ | 9  | 8  | 5  | 11  |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 5  | 1  | 9  | 8  | 3  | 2  | 9+        | 9  | 9  | 9  | 9+ | 9  | 8  | 7         | 9  | 9  | 9+ | 9  | 9  | 8  | 12  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 8  | 1  | 7  | 9  | 6  | 1  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 8         | 9  | 9  | 4  | 9  | 9  | 9  | 13  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | 2  | -  | -  | 9         | 9  | 1  | 9+ | 9+ | 8  | 2  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 8         | 9+ | 9  | 4  | 9  | 9  | 9  | 14  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 4         | 6  | -  | -  | 8  | -  | -  | 9+        | 9+ | 4  | 9+ | 9+ | 9+ | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 8         | 9+ | 9  | 9+ | 9  | 9  | 9  | 15  |
| 16        | -  | -  | -  | -  | 5  | -  | -  | 8         | 8  | -  | 4  | 9  | 7  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9+ | 8  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 7         | 9+ | 9  | 9+ | 9+ | 8  | 9  | 16  |
| 17        | 5  | 7  | -  | 1  | 8  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | 1  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8         | 9+ | 9+ | 9+ | 9+ | 8  | 9  | 17  |
| 18        | 9  | 8  | -  | 7  | 9  | 8  | -  | 9+        | 9  | 2  | 9+ | 9+ | 9  | 3  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8         | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 18  |
| 19        | 9  | 8  | -  | 9+ | 9  | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 6  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 6  | 9+ | 9+ | 9+ | 6         | 9  | 9+ | 9+ | 9+ | 7  | 9+ | 19  |
| 20        | 9  | 9  | 3  | 9+ | 9  | 8  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 5  | 9+ | 9  | 9+ | 2         | 7  | 9+ | 5  | 9+ | 6  | 9+ | 20  |
| 21        | 9  | 8  | 7  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 1  | 3         | 9+ | 5  | 9  | 4  | 9  | 21 |     |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9  | 8  | 9+ | 2         | 4  | 9+ | 5  | 8  | 6  | 9+ | 22  |
| 23        | 9  | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 9  | 9+ | 9+ | 8  | 9+ | 1  | 2         | 9+ | 8  | 5  | 7  | 9+ | 23 |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |

Mar., Angola (Luanda), for SSN = High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |   |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|---|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |   |  |  |     |
| 0         | 9  | 5  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 0   |   |  |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9  | 9  | 9+ | 9+ | 9+ | 9+ | 9  | 9         | 9  | 9+ | 9+ | 9+  | 1 |  |  |     |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9         | 9  | 9+ | 9+ | 9+  | 2 |  |  |     |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 1  | 6         | 9+ | 9+ | 8  | 9+ | 9+ | -  | 1  | 9         | 5  | 1  | 8  | -   | 3 |  |  |     |
| 4         | 9  | -  | 9  | 9  | 3  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | 2  | 9  | 9  | 7         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 1  | 6         | 9+ | 8  | 7  | 8  | 9  | -  | 2  | 8         | 5  | -  | 2  | -   | 4 |  |  |     |
| 5         | 7  | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9+ | 9+ | 6  | 4  | 9  | 9+ | 5         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 6  | 9         | 8  | 5  | 9+ | 8  | 8  | -  | 2  | 1         | 5  | -  | 2  | 1   | 5 |  |  |     |
| 6         | 1  | -  | 7  | 7  | -  | -  | -  | 8         | -  | 9  | 9+ | 1  | 1  | 8  | 9+ | 3         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 3* | 5  | 9+ | 9+ | 6  | 8  | 9  | 1*        | 9  | 9  | 9  | -   | 6 |  |  |     |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 2         | -  | 7  | 8  | -  | -  | 5  | 9+ | 1         | 9+ | 9+ | 9  | 9  | 9  | 9+ | 9  | 9+        | 9+ | 9+ | 9  | 8  | 9+ | 9  | 7  | 5         | 9  | 9  | 1  | 7   |   |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 2  | 4  | -  | -  | 1  | 9  | 3*        | 9+ | 9+ | 7  | 8  | 9  | 9+ | 8  | 9         | 9+ | 9  | 9  | 5  | 9  | 9  | -  | 9         | 9  | 9  | -  | 8   |   |  |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 1*        | 9  | 9  | 5  | 1  | 8  | 9+ | 8  | 9+        | 9+ | 9  | 8  | 1  | 9  | 9  | 5  | 9         | 9  | 9  | -  | 9   |   |  |  |     |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 1         | 7  | 9  | 5  | -  | 5  | 9+ | 8  | 9         | 9+ | 9  | 8  | 9  | 6  | 9  | 9  | 4         | 9  | 9  | 1  | 10  |   |  |  |     |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 1         | 4  | 9  | 5  | 1  | 4  | 9+ | 8  | 9         | 9+ | 9+ | 8  | 9  | 6  | 9  | 9  | 9+        | 9  | 9  | 5  | 11  |   |  |  |     |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 4         | 1  | 9  | 7  | 3  | -  | 9+ | 9  | 9         | 9+ | 9+ | 9  | 8  | 8  | 9  | 9  | 9+        | 9  | 9  | 9  | 12  |   |  |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 7         | -  | 6  | 9  | 7  | 1  | 9+ | 9  | 8         | 9+ | 9+ | 9  | 8  | 8  | 9  | 9  | 9+        | 9+ | 9  | 9  | 13  |   |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 2  | -  | -  | 8  | 9         | 1  | 9+ | 9+ | 9  | 2  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 8  | 9+ | 9  | 9+        | 9+ | 9  | 9  | 14  |   |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 3         | 6  | -  | -  | 8  | -  | -  | 9+ | 9+        | 2  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9  | 4         | 9+ | 9  | 9  | 15  |   |  |  |     |
| 16        | -  | -  | -  | -  | 2  | -  | -  | 7         | 8  | -  | 3  | 8  | 7  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9  | 5         | 9+ | 9+ | 9  | 16  |   |  |  |     |
| 17        | 5  | 7  | -  | -  | 6  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+ | 5         | 9  | 9+ | 9  | 17  |   |  |  |     |
| 18        | 8  | 8  | -  | 7  | 9  | 8  | -  | 9+        | 9  | 2  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9  | 18  |   |  |  |     |
| 19        | 9  | 8  | -  | 9+ | 9  | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 5  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9  | 9  | 9  | 19  |   |  |  |     |
| 20        | 9  | 8  | 2  | 9+ | 9  | 8  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 6  | 9  | 9+ | 5         | 9  | 6  | 9+ | 20  |   |  |  |     |
| 21        | 9  | 8  | 7  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 5  | 9+ | 8  | 9+ | 3  | 7  | 9+ | 5         | 9+ | 5  | 9+ | 21  |   |  |  |     |
| 22        | 9  | 8  | 8  | 9+ | 9  | 4  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 7  | 9+ | 1  | 2  | 9+ | 5         | 9  | 4  | 9+ | 22  |   |  |  |     |
| 23        | 9  | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 9+ | 2  | 5  | 9+ | 9+        | 7  | 5  | 9+ | 23  |   |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |   |  |  |     |

Apr., Angola (Luanda), for SSN = High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |    |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|----|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |    |  |     |
| 0         | 9  | 4  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 0   |    |    |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 1   |    |    |  |     |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9  | 9+ | 9+ | 9  | 9+ | 9  | 9+        | 9  | 9+ | 9  | 2   |    |    |  |     |
| 3         | 8  | -  | 9  | 9+ | 6  | -  | 9  | 9+        | -  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9         | 9+ | 9  | 9+ | 9  | 9+ | 9  | 9+ | 9         | 9+ | 9  | 9+ | 9   | 3  |    |  |     |
| 4         | 8  | -  | 8  | 9+ | 2  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 1  | 9  | 9+ | 6         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9         | 9+ | 9  | 9+ | 9  | 9+ | 9  | 9+ | 9         | 9+ | 9  | 9+ | 9   | 4  |    |  |     |
| 5         | 4  | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9  | 9+ | 5  | 3  | 9  | 9+ | 5         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9         | 7  | 5  | 9+ | 9  | 7  | -  | 6  | -         | 5  | 8  | 5  | 1   | 5  |    |  |     |
| 6         | -  | -  | 7  | 7  | -  | -  | -  | 6         | -  | 9  | 9+ | 1  | 1  | 8  | 9+ | 2         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 6  |    |  |     |
| 7         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 7  | 8  | -  | -  | 4  | 9+ | 1         | 9+ | 9+ | 9  | 9  | 9  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9+ | 9+ | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 7  |    |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 2  | 3  | -  | -  | -  | 8  | 4*        | 9+ | 9+ | 7  | 8  | 9  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9+ | 9+ | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 8  |    |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 1         | 9  | 9  | 5  | 2  | 8  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9+ | 9+ | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 9  | 9  |  |     |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 1         | 7  | 9  | 3  | 1  | 4  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 9  | 10 |  |     |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 2         | 5  | 9  | 5  | 2  | 2  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 9  | 11 |  |     |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 5         | 3  | 9  | 8  | 5  | 1  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 9  | 12 |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 8         | 1  | 7  | 9  | 8  | 1  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 9  | 13 |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 2  | -  | -  | 9  | 9         | 1  | 9+ | 9+ | 9  | 2  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 9  | 14 |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 2         | 6  | -  | -  | 7  | -  | -  | 9  | 9+        | 3  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 9  | 15 |  |     |
| 16        | -  | -  | -  | -  | 2  | -  | -  | 6         | 8  | -  | 4  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 9  | 16 |  |     |
| 17        | 3  | 6  | -  | -  | 6  | -  | -  | 9         | 9  | -  | 9+ | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 9  | 17 |  |     |
| 18        | 8  | 8  | -  | 7  | 9  | 8  | -  | 9+        | 9  | 3  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 9  | 18 |  |     |
| 19        | 9  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9  | 4  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 9   | 9  | 19 |  |     |
| 20        | 9  | 8  | 2  | 9+ | 9+ | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 9+ | 20 |  |     |
| 21        | 9  | 8  | 7  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 9+ | 21 |  |     |
| 22        | 9  | 8  | 8  | 9+ | 9  | 8  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 9+ | 22 |  |     |
| 23        | 9  | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+  | 9+ | 23 |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |    |  |     |

May, Angola (Luanda), for SSN = High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |     |
| 0         | 9  | 4  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 0   |    |  |  |     |
| 1         | 8  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 7  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 9+        | 5  | 9+ | 8  | 9+ | 2  | 7  | 9  | 6         | 7  | 3  | 9  | 1   |    |  |  |     |
| 2         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 8  | 8  | 9+        | 9  | 9  | 9  | 9+ | 1  | 2  | 9  | 5         | 3  | 5  | 9  | 2   |    |  |  |     |
| 3         | 7  | -  | 9  | 9+ | 3  | -  | 9  | 9+        | -  | 9+ | 9+ | 9  | -  | 9  | 9  | 7         | 9+ | 9+ | 9+ | 9  | 9+ | 2  | 5  | 9+        | 6  | 7  | 8  | 9+ | -  | -  | 7  | 5         | -  | 1  | 7  | 3   |    |  |  |     |
| 4         | 7  | -  | 9  | 9+ | 1  | -  | 8  | 9         | -  | 9  | 9+ | 8  | 1  | 9  | 9  | 7         | 9+ | 3  | 9+ | 9+ | 9+ | 4  | 8  | 8         | 6  | 8  | 3  | 8  | -  | 2  | -  | 5         | 2  | -  | -  | 4   |    |  |  |     |
| 5         | 2  | -  | 9  | 9  | -  | -  | 5  | 8         | -  | 9  | 9+ | 5  | 3  | 9  | 9+ | 5         | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 6         | 5  | 9+ | 8  | 7  | -  | 8  | -  | 5         | 8  | 4  | 1  | 5   |    |  |  |     |
| 6         | -  | -  | 6  | 7  | -  | -  | -  | 6         | -  | 9  | 9  | -  | -  | 8  | 9+ | 1         | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9  | 2*        | 5  | 9+ | 9+ | 7  | 5  | 9  | -  | 5         | 9  | 9  | -  | 6   |    |  |  |     |
| 7         | -  | -  | 1  | -  | -  | -  | -  | 1         | -  | 8  | 8  | -  | -  | 2  | 9+ | 1         | 9+ | 9+ | 8  | 9  | 9+ | 9+ | 8  | 9+        | 9+ | 9  | 9  | 9  | 4  | 9  | 7  | 5         | 9  | 9  | 3  | 7   |    |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 3  | 2  | -  | -  | -  | 8  | 1*        | 9+ | 9+ | 6  | 8  | 9  | 9+ | 8  | 8         | 9+ | 9  | 8  | 8  | 4  | 9  | 5  | 5         | 9  | 9  | 4  | 8   |    |  |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 1         | 9  | 9  | 4  | 4  | 8  | 9  | 8  | 9+        | 9+ | 9  | 8  | 6  | 7  | 9  | 4  | 5         | 9  | 9  | -  | 9   |    |  |  |     |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 2         | 8  | 9  | 4  | 3  | 5  | 9  | 8  | 9+        | 9+ | 8  | 8  | 7  | 8  | 9  | 8  | 4         | 9  | 9  | -  | 10  |    |  |  |     |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 4         | 5  | 9  | 5  | 4  | 2  | 9  | 9  | 9         | 9+ | 9  | 9  | 8  | 8  | 9  | 7  | 4         | 9  | 9  | -  | 11  |    |  |  |     |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 5         | 4  | 9  | 7  | 6  | 2  | 9+ | 9  | 9         | 9+ | 9  | 9  | 8  | 8  | 9  | 9  | 4         | 9+ | 9  | 2  | 12  |    |  |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 8         | 1  | 9  | 8  | 8  | 1  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 8  | 9  | 9  | 9  | 4         | 9+ | 9  | 1  | 13  |    |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 1  | -  | -  | 9  | 9         | 2  | 9+ | 9  | 9  | 2  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9  | 9  | 4         | 9+ | 9  | 2  | 14  |    |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 6  | -  | -  | 4  | -  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9  | 9  | 5         | 9+ | 9  | 4  | 15  |    |  |  |     |
| 16        | -  | -  | -  | -  | 1  | -  | -  | 5         | 8  | -  | 3  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9  | 9  | 5         | 9+ | 8  | 9  | 16  |    |  |  |     |
| 17        | 2  | 7  | -  | -  | 6  | 1  | -  | 8         | 9  | 1  | 8  | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 8  | 9  | 5         | 9  | 8  | 9  | 17  |    |  |  |     |
| 18        | 7  | 8  | -  | 6  | 9  | 8  | -  | 9         | 9+ | 3  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 8  | 9+ | 5         | 6  | 7  | 9  | 18  |    |  |  |     |
| 19        | 9  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 8  | 9+        | 5  | 5  | 5  | 9   | 19 |  |  |     |
| 20        | 9  | 8  | 3  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 5  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 4  | 9+ | 9         | 5  | 2  | 9  | 20  |    |  |  |     |
| 21        | 9  | 8  | 6  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 9+ | 6  | 1  | 9+ | 9+        | 5  | 1  | 9  | 21  |    |  |  |     |
| 22        | 9  | 8  | 8  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 9+ | 5  | 6  | 9+ | 9         | 5  | 6  | 9  | 22  |    |  |  |     |
| 23        | 8  | 6  | 9  | 9+ | 9  | 1  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 4  | 8  | 9+ | 9         | 5  | 6  | 9+ | 23  |    |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |  |  |     |

Jun., Angola (Luanda), for SSN = High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |     |
| 0         | 8  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 6  | 9  | 9+        | 9  | 9  | 8  | 9+ | -  | 6  | 8  | 5         | 2  | -  | 8  | 0   |  |  |  |     |
| 1         | 8  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 6  | 8  | 9+        | 8  | 9  | 6  | 9+ | -  | 1  | 6  | 5         | 1  | -  | 4  | 1   |  |  |  |     |
| 2         | 7  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 2  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 8         | 9+ | 9+ | 9+ | 8  | 9+ | 2  | 3  | 9+        | 5  | 5  | 5  | 9+ | -  | -  | 4  | 5         | -  | -  | 5  | 2   |  |  |  |     |
| 3         | 6  | -  | 9  | 9+ | 3  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | -  | 9  | 8  | 6         | 9+ | 9  | 9  | 8  | 9+ | -  | -  | 9         | 6  | 1  | -  | 9  | -  | -  | -  | 5         | -  | -  | -  | 3   |  |  |  |     |
| 4         | 5  | -  | 9  | 9+ | 1  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | -  | 9  | 8  | 7         | 9+ | 2  | 9+ | 7  | 9+ | -  | 5  | 2         | 6  | 6  | 1  | 2  | -  | -  | -  | 5         | -  | -  | -  | 4   |  |  |  |     |
| 5         | 1  | -  | 9  | 9  | -  | -  | 5  | 8         | -  | 9  | 9+ | 4  | 4  | 9  | 9+ | 5         | 9  | 9+ | 9+ | 9  | 9+ | 8  | 9  | 1*        | 5  | 9+ | 7  | 6  | -  | 6  | -  | 5         | 6  | 2  | -  | 5   |  |  |  |     |
| 6         | -  | -  | 6  | 6  | -  | -  | -  | 5         | -  | 9  | 9  | -  | -  | 8  | 9+ | 1         | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 1*        | 5  | 9+ | 9+ | 8  | 3  | 9  | -  | 5         | 7  | 7  | -  | 6   |  |  |  |     |
| 7         | -  | -  | 1  | -  | -  | -  | -  | -         | -  | 8  | 7  | -  | -  | 2  | 9  | 1*        | 9+ | 9+ | 7  | 9  | 9  | 9+ | 8  | 9         | 9+ | 9  | 9  | 8  | 3  | 9  | 7  | 5         | 8  | 9  | 2  | 7   |  |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 5  | 2  | -  | -  | -  | 8  | 1*        | 9  | 9+ | 6  | 8  | 9  | 9+ | 9  | 9         | 9+ | 9  | 9  | 8  | 3  | 9  | 5  | 5         | 9  | 9  | 3  | 8   |  |  |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 1         | 9  | 9  | 1  | 5  | 8  | 9+ | 8  | 8         | 9+ | 8  | 9  | 5  | 6  | 9  | 1  | 5         | 8  | 9  | -  | 9   |  |  |  |     |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 3         | 8  | 9  | 5  | 5  | 6  | 9+ | 8  | 9+        | 9+ | 9  | 9  | 8  | 6  | 9  | 9  | 4         | 8  | 9  | 1  | 10  |  |  |  |     |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 4         | 6  | 9  | 5  | 7  | 2  | 9+ | 9  | 9         | 9+ | 9  | 9  | 8  | 5  | 9  | 6  | 4         | 8  | 9  | -  | 11  |  |  |  |     |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 7         | 3  | 5  | 6  | 7  | 2  | 9+ | 9  | 9         | 5  | 9  | 9  | 8  | 5  | 9  | 7  | 9+        | 9  | 9  | 2  | 12  |  |  |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 8         | 2  | 7  | 8  | 9  | 2  | 8  | 9+ | 9         | 5  | 9+ | 9  | 8  | 6  | 9  | 9  | 4         | 9  | 9  | 4  | 13  |  |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | 1  | -  | -  | 8  | 9         | 3  | 8  | 9  | 9  | 2  | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 8  | 6  | 9  | 9  | 9+        | 9+ | 8  | 4  | 14  |  |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 6  | -  | -  | 5  | 6  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | 4  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 6  | 8  | 9  | 9+        | 9  | 6  | 5  | 15  |  |  |  |     |
| 16        | -  | -  | -  | -  | 1  | -  | -  | 5         | 8  | -  | -  | 8  | 9  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 5  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 7  | 7  | 9  | 9+        | 9  | 5  | 6  | 16  |  |  |  |     |
| 17        | 1  | 7  | -  | -  | 7  | 7  | -  | 8         | 9  | 2  | 8  | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 6  | 9+ | 5         | 5  | 4  | 7  | 17  |  |  |  |     |
| 18        | 5  | 8  | -  | 6  | 9  | 7  | -  | 9         | 9+ | 5  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 7  | 6  | 9  | 5         | 6  | 3  | 9  | 18  |  |  |  |     |
| 19        | 8  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9  | 9  | 9  | 7  | 5  | 9  | 5         | 5  | 1  | 9  | 19  |  |  |  |     |
| 20        | 9  | 8  | 4  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9  | 9+        | 5  | 9+ | 9  | 9+ | 3  | 2  | 9  | 9         | 2  | -  | 9  | 20  |  |  |  |     |
| 21        | 9  | 8  | 7  | 9+ | 9+ | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9  | 7  | 9+ | 1  | -  | 9  | 8         | 1  | 1  | 9  | 21  |  |  |  |     |
| 22        | 8  | 8  | 9  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 5  | 9  | 7  | 9+ | -  | 5  | 9  | 5         | 1  | -  | 9  | 22  |  |  |  |     |
| 23        | 8  | 6  | 9  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 5  | 9  | 8  | 9+ | -  | 8  | 9  | 5         | 1  | 3  | 9  | 23  |  |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |     |

**Jul., Angola (Luanda), for SSN = High, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 8  | 4  | 8  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 7  | 9  | 9+        | 5  | 9  | 8  | 9+ | -  | 1  | 8  | 5         | 1  | -  | 8  | 0   |  |  |  |  |
| 1         | 7  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 7  | 8  | 9+        | 5  | 9  | 8  | 9+ | -  | -  | 5  | 5         | 1  | -  | 5  | 1   |  |  |  |  |
| 2         | 6  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 2  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 7         | 9+ | 9+ | 9+ | 8  | 9+ | 4  | 4  | 9+        | 7  | 5  | 8  | 9+ | -  | -  | 4  | 5         | -  | -  | 5  | 2   |  |  |  |  |
| 3         | 6  | -  | 9  | 9+ | 2  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | -  | 9+ | 9  | 6         | 9+ | 9+ | 9  | 9  | 9+ | -  | -  | 9         | 6  | 1  | 4  | 9  | -  | -  | -  | 5         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 5  | -  | 9  | 9+ | 1  | -  | 8  | 9         | -  | 9  | 9+ | 8  | 1  | 9  | 9  | 7         | 9+ | 9  | 9  | 8  | 9+ | -  | 4  | 1         | 6  | 5  | -  | 1  | -  | -  | -  | 5         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 1  | -  | 9  | 9  | -  | -  | 5  | 8         | -  | 9  | 9+ | 4  | 3  | 9  | 9+ | 5         | 9  | 2  | 9+ | 9+ | 9+ | 8  | 9  | -         | 9  | 9+ | 8  | 6  | -  | 3  | -  | 5         | 4  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 6  | 5  | -  | -  | -  | 6         | -  | 9  | 9  | -  | -  | 7  | 9+ | 1         | 9+ | 9+ | 8  | 9+ | 9+ | 9+ | 9  | -         | 5  | 9+ | 9+ | 8  | 1  | 9  | -  | 9         | 7  | 8  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 1  | -  | -  | -  | -  | -         | -  | 8  | 7  | -  | -  | 2  | 9  | 2*        | 9+ | 9+ | 5  | 9  | 9  | 9+ | 8  | 9         | 9+ | 9  | 9  | 8  | 1  | 9  | 5  | 5         | 9  | 8  | 1  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 2  | -  | -  | -  | 8  | 2         | 9  | 9+ | 5  | 7  | 9  | 9+ | 8  | 9         | 9+ | 8  | 9  | 6  | 2  | 9  | 5  | 5         | 9  | 7  | 1  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 1         | 9  | 9  | 3  | 4  | 8  | 9  | 8  | 8         | 9+ | 8  | 9  | 7  | 4  | 9  | -  | 5         | 9  | 8  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 2         | 8  | 9  | 2  | 4  | 7  | 9+ | 8  | 9         | 9+ | 8  | 9  | 8  | 5  | 9  | 9  | 9         | 8  | 9  | 1  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 4         | 5  | 7  | 3  | 5  | 2  | 9+ | 9  | 9         | 9+ | 9  | 9  | 8  | 5  | 9  | 7  | 9         | 8  | 9  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 7         | 3  | 8  | 7  | 7  | 2  | 8  | 9  | 9         | 4  | 9  | 9  | 8  | 4  | 9  | 7  | 9+        | 9  | 9  | 3  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 8         | 4  | 5  | 8  | 8  | 2  | 8  | 9+ | 9         | 5  | 9+ | 9  | 8  | 5  | 9  | 8  | 4         | 9  | 8  | 3  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | -  | -  | -  | 9  | 9+        | 3  | 9+ | 9+ | 9  | 2  | 9  | 9+ | 9         | 5  | 9+ | 9+ | 8  | 6  | 9  | 9  | 4         | 9  | 8  | 4  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 2         | 6  | -  | -  | 5  | 1  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 9  | 6  | 8  | 9  | 5         | 9  | 6  | 5  | 15  |  |  |  |  |
| 16        | -  | -  | -  | -  | 1  | -  | -  | 6         | 8  | -  | 1  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 7  | 7  | 9  | 5         | 8  | 5  | 6  | 16  |  |  |  |  |
| 17        | 2  | 7  | -  | -  | 6  | 5  | -  | 8         | 9  | 1  | 8  | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  |    |    |           |    |    |    |    |    |    |    |           |    |    |    |     |  |  |  |  |

**Aug., Angola (Luanda), for SSN = High, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |  |
| 0         | 9  | 4  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 8  | 8  | 8  | 9+ | -  | 5  | 9  | 6         | -  | 2  | 9  | 0   |    |  |  |  |
| 1         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9+ | 1  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 9  | 9+        | 8  | 9  | 9  | 9+ | 1  | 2  | 7  | 5         | 2  | 1  | 8  | 1   |    |  |  |  |
| 2         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 3  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 7  | 6         | 9+ | 8  | 7  | 8  | 9+ | -  | -  | 5         | 5  | -  | 1  | 6   | 2  |  |  |  |
| 3         | 7  | -  | 9  | 9+ | 6  | -  | 9  | 9         | -  | 9+ | 9+ | 9  | -  | 9  | 9+ | 7         | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 1  | 1         | 9  | 5  | 1  | 3  | 8  | -  | -  | -         | 5  | -  | -  | 1   | 3  |  |  |  |
| 4         | 7  | -  | 9  | 9+ | 1  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 1  | 9  | 9  | 6         | 9+ | 2  | 9  | 8  | 9+ | -  | 5  | 3         | 6  | 6  | 1  | 2  | -  | -  | -  | 5         | -  | -  | -  | 4   |    |  |  |  |
| 5         | 2  | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9  | 9+ | 4  | 3  | 9  | 9+ | 5         | 9  | 9+ | 9+ | 9  | 9+ | 8  | 9  | 1*        | 5  | 9+ | 8  | 5  | -  | 6  | -  | 5         | 6  | 1  | -  | 5   |    |  |  |  |
| 6         | -  | -  | 5  | 6  | -  | -  | -  | 6         | -  | 9  | 9+ | -  | -  | 8  | 9+ | 1         | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 8  | -         | 5  | 9+ | 9  | 6  | 3  | 9  | -  | 5         | 8  | 7  | -  | 6   |    |  |  |  |
| 7         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 8  | 8  | -  | -  | 3  | 9  | 2*        | 9+ | 9+ | 7  | 9  | 9  | 9  | 8  | 9         | 9+ | 9  | 9  | 8  | 5  | 9  | 5  | 5         | 8  | 8  | 1  | 7   |    |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 2  | 2  | -  | -  | -  | 8  | 1*        | 9  | 9+ | 7  | 8  | 9  | 9  | 8  | 8         | 9+ | 9  | 9  | 5  | 5  | 8  | 2  | 5         | 8  | 8  | 1  | 8   |    |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 1         | 9  | 9  | 5  | 2  | 8  | 9  | 8  | 7         | 9+ | 9  | 8  | 7  | 6  | 8  | 1  | 5         | 9  | 9  | -  | 9   |    |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 2  | 2         | 7  | 9  | 4  | 1  | 5  | 8  | 8  | 9         | 9+ | 9  | 8  | 6  | 6  | 8  | 9  | 4         | 9  | 9  | 1  | 10  |    |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 4         | 5  | 9  | 4  | 3  | 2  | 9  | 9  | 9         | 9+ | 9  | 9  | 8  | 6  | 9  | 8  | 4         | 8  | 9  | 1  | 11  |    |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 6         | 2  | 6  | 7  | 6  | 1  | 9+ | 9  | 9         | 4  | 9  | 9  | 8  | 8  | 9  | 7  | 9+        | 8  | 9  | 4  | 12  |    |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 8         | 1  | 8  | 9  | 8  | 1  | 9+ | 9+ | 9         | 5  | 9+ | 9  | 8  | 7  | 9  | 9  | 4         | 9  | 9  | 3  | 13  |    |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 3  | -  | -  | 9  | 9         | 1  | 9+ | 9+ | 9  | 2  | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 9  | 8  | 9  | 9  | 4         | 9  | 9  | 4  | 14  |    |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 3         | 6  | -  | -  | 8  | -  | -  | 9+ | 9+        | 4  | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 8  | 9  | 9  | 9+        | 9+ | 8  | 5  | 15  |    |  |  |  |
| 16        | -  | -  | -  | -  | 2  | -  | -  | 7         | 9  | -  | 5  | 8  | 8  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 8  | 9  | 9+        | 9+ | 8  | 6  | 16  |    |  |  |  |
| 17        | 3  | 7  | -  | 1  | 6  | 1  | -  | 9         | 9  | 1  | 9+ | 9  | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 8  | 9+ | 9+        | 8  | 7  | 9  | 17  |    |  |  |  |
| 18        | 8  | 8  | -  | 8  | 8  | 8  | -  | 9         | 9  | 4  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 8  | 9  | 9+        | 2  | 7  | 9  | 18  |    |  |  |  |
| 19        | 9  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 6  | 8  | 9+ | 5         | 1  | 5  | 9  | 19  |    |  |  |  |
| 20        | 9  | 8  | 4  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9  | 9+ | 4  | 7  | 9+ | 9+        | 2  | 1  | 9  | 20  |    |  |  |  |
| 21        | 9  | 8  | 8  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 5  | 9  | 8  | 9+ | 3  | 3  | 9+        | 9  | 1  | -  | 9   | 21 |  |  |  |
| 22        | 9  | 7  | 9  | 9+ | 9  | 7  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 5  | 9  | 7  | 9+ | 1  | 4  | 9         | 9  | -  | 4  | 9   | 22 |  |  |  |
| 23        | 9  | 6  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 9+ | 5  | 8  | 8  | 9+ | -  | 6  | 9         | 8  | 1  | 3  | 9   | 23 |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |  |  |  |

Sep., Angola (Luanda), for SSN = High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |   |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|---|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |   |  |  |     |
| 0         | 9  | 4  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 8  | 9+ | -  | 7  | 9+ | 8  | 3         | 6  | 9  | 0  | 0   |   |  |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 4  | 8  | 9  | 5  | 1         | 7  | 6  | 1  | 1   |   |  |  |     |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 3  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 8  | 8  | 9+        | 9  | 9  | 9+ | -  | 3  | 9  | 5  | 4         | 8  | -  | 2  | 2   |   |  |  |     |
| 3         | 8  | -  | 9  | 9+ | 7  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9+ | 3  | 6  | 9+        | 8  | 8  | 8  | 9  | -  | -  | 8  | 5         | 1  | 4  | 1  | 3   | 3 |  |  |     |
| 4         | 8  | -  | 9  | 9  | 2  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 2  | 9  | 9  | 6         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 2  | 7         | 9  | 9  | 8  | 6  | 9  | -  | 4  | 2         | 5  | 3  | 1  | 3   | 4 |  |  |     |
| 5         | 5  | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9  | 9+ | 5  | 5  | 9  | 9+ | 5         | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 6         | 5  | 9+ | 9  | 6  | -  | 8  | -  | 5         | 8  | 5  | -  | 5   |   |  |  |     |
| 6         | -  | -  | 6  | 5  | -  | -  | -  | 6         | -  | 9  | 9  | 1  | -  | 8  | 9+ | 1         | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 2*        | 5  | 9+ | 9+ | 2  | 6  | 9  | -  | 5         | 9+ | 8  | -  | 6   |   |  |  |     |
| 7         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 6  | 7  | -  | -  | 3  | 9+ | 1         | 9+ | 9+ | 8  | 8  | 9  | 9+ | 8  | 9         | 9+ | 9  | 9  | 6  | 8  | 9  | 5  | 5         | 9  | 8  | -  | 7   |   |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 2  | -  | -  | -  | 8  | 3*        | 9+ | 9+ | 7  | 7  | 9  | 9+ | 8  | 9         | 9+ | 9  | 8  | 4  | 8  | 9  | -  | 4         | 9  | 9  | -  | 8   |   |  |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 1         | 9  | 9  | 5  | -  | 8  | 9  | 9  | 9+        | 9+ | 8  | 8  | 3  | 8  | 8  | 9  | 4         | 8  | 9  | -  | 9   |   |  |  |     |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 1         | 7  | 9  | 4  | -  | 5  | 9+ | 8  | 9         | 9+ | 8  | 8  | 8  | 8  | 9  | 8  | 4         | 9  | 9  | -  | 10  |   |  |  |     |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 2         | 5  | 9  | 6  | 2  | 1  | 9+ | 9  | 9+        | 9+ | 9+ | 8  | 8  | 8  | 9  | 9+ | 9+        | 9  | 9  | 4  | 11  |   |  |  |     |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 5         | 4  | 7  | 8  | 5  | 1  | 9+ | 9  | 9         | 4  | 9+ | 9  | 8  | 9  | 9  | 9+ | 9+        | 9  | 9  | 8  | 12  |   |  |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 8         | 3  | 9  | 9  | 8  | 1  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 8  | 9  | 9+ | 9+        | 9  | 9  | 9  | 13  |   |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 3  | -  | -  | 4  | -  | -  | 9  | 9         | 3  | 9+ | 9+ | 9  | 2* | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+ | 4         | 9  | 9  | 9  | 14  |   |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 4         | 7  | -  | 1  | 8  | -  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+ | 4         | 9+ | 9  | 9  | 15  |   |  |  |     |
| 16        | -  | -  | -  | -  | 5  | -  | -  | 8         | 8  | -  | 5  | 9  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 16  |   |  |  |     |
| 17        | 5  | 7  | -  | 1  | 6  | -  | -  | 9         | 9  | 1  | 9+ | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9  | 9  | 9  | 17  |   |  |  |     |
| 18        | 8  | 8  | -  | 8  | 9  | 7  | -  | 9+        | 9  | 5  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 8  | 9  | 9  | 18  |   |  |  |     |
| 19        | 9  | 9  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | 5  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 8  | 9+ | 9+        | 6  | 6  | 9  | 19  |   |  |  |     |
| 20        | 9  | 8  | 5  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 6  | 4  | 9+ | 5         | 6  | 6  | 9  | 20  |   |  |  |     |
| 21        | 9  | 8  | 8  | 9+ | 9  | 8  | 5  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 9+ | 8  | 9+ | 2  | -  | 9+ | 5         | 5  | 3  | 9  | 21  |   |  |  |     |
| 22        | 9  | 8  | 8  | 9+ | 9  | 4  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 9+ | 6  | 9+ | -  | 1  | 9+ | 5         | 2  | 4  | 9+ | 22  |   |  |  |     |
| 23        | 9  | 6  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 9+ | -  | 7  | 9+ | 9         | -  | 6  | 9+ | 23  |   |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |   |  |  |     |

**Oct., Angola (Luanda), for SSN = High, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |    |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |    |
| 0         | 9  | 5  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 0  |     |    |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 1  |     |    |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 3  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9         | 9  | 9  | 9  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 9  | 9  | 2  |     |    |
| 3         | 8  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | -  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9  | 9  | 9+ | 5  | 8  | 9+ | 8         | -  | 2  | 9  | 5  | 2  | 6  | 2   | 3  |
| 4         | 8  | -  | 9  | 9  | 2  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 5  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 2  | 9  | 9+ | 5  | 8  | 8  | 8         | -  | 7  | 7  | 7  | 4  | 6  | 3   | 4  |
| 5         | 5  | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9  | 9+ | 5  | 5  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9  | 9  | 9  | 5  | 9+ | 9  | 8         | -  | 8  | 1  | 5  | 8  | 9  | 1   | 5  |
| 6         | -  | -  | 5  | 5  | -  | -  | -  | 7         | -  | 9  | 9  | 1  | -  | 8  | 9+        | 3  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 8  | 8  | 9+ | 9+ | 9+ | 6         | 9  | 9  | 2  | 9  | 9  | 9  | -   | 6  |
| 7         | -  | -  | -  | -  | -  | -  | -  | 2         | -  | 5  | 7  | -  | -  | 4  | 9+        | 2  | 9+ | 9+ | 9  | 8  | 9  | 9+        | 8  | 9  | 9+ | 9+ | 9+ | 9  | 5         | 9+ | 9  | 7  | 9  | 9  | 9  | -   | 7  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 1  | -  | -  | 1  | 9         | 2  | 9+ | 9+ | 7  | 8  | 9  | 9+        | 8  | 9  | 9+ | 9+ | 9  | 9  | -         | 9  | 9  | 3  | 9  | 9  | 9  | -   | 8  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 1* | 8  | 9  | 5  | -  | 8  | 9+        | 8  | 9  | 9+ | 9+ | 9  | 8  | 2         | 9  | 9  | 9  | 9  | 9  | 9  | -   | 9  |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | -  | 7  | 9  | 5  | -  | 6  | 9+        | 8  | 9  | 9+ | 9+ | 9+ | 8  | 9         | 9  | 9  | 9+ | 9+ | 9  | 9  | 4   | 10 |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 2  | 4  | 9  | 6  | 1  | 4  | 9+        | 9  | 9  | 9+ | 9+ | 8  | 9  | 9         | 8  | 9  | 9  | 9  | 9  | 9  | 9   | 11 |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 4  | 1  | 9  | 8  | 4  | -  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9         | 8  | 9  | 9  | 9  | 9  | 9  | 9   | 12 |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 8  | 1  | 7  | 9  | 7  | 1  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9         | 9  | 9  | 9  | 9+ | 9+ | 9  | 9   | 13 |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 4  | -  | -  | 9         | 9  | 2  | 9+ | 9+ | 9  | 2  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9         | 9  | 9+ | 9  | 4  | 9+ | 9  | 9   | 14 |
| 15        | -  | -  | -  | -  | -  | -  | -  | 5         | 6  | -  | 1  | 6  | -  | -  | 9+        | 9+ | 5  | 9+ | 9+ | 9+ | 8  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9  | 9  | 4  | 9+ | 9+ | 9   | 15 |
| 16        | 1  | -  | -  | -  | 3  | -  | -  | 8         | 8  | -  | 4  | 9  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9+ | 8  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9  | 4  | 9+ | 9+ | 9  | 16  |    |
| 17        | 7  | 7  | -  | 1  | 7  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9         | 9+ | 9+ | 9  | 9  | 9  | 9  | 9   | 17 |
| 18        | 9  | 8  | -  | 9+ | 9  | 8  | -  | 9+        | 9  | 4  | 9+ | 9+ | 9  | 3  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9         | 9  | 9  | 9  | 9  | 9  | 9  | 9   | 18 |
| 19        | 9  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | 7  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9         | 9  | 9  | 9  | 9  | 9  | 9  | 9   | 19 |
| 20        | 9  | 8  | 3  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 9  | 9+ | 8  | 9+ | 9         | 9  | 9  | 9  | 9  | 9  | 9  | 9   | 20 |
| 21        | 9  | 8  | 7  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 9  | 9+ | 8  | 9  | 9         | 9  | 9  | 9  | 9  | 9  | 9  | 9   | 21 |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9  | 9  | 9  | 9+ | 6  | 9  | 9         | 9  | 9  | 9  | 9  | 9  | 9  | 9   | 22 |
| 23        | 9  | 7  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 9  | 9  | 9  | 9  | 9         | 9  | 9  | 9  | 9  | 9  | 9  | 9   | 23 |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |    |

**Nov., Angola (Luanda), for SSN = High, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |    |   |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|----|---|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |    |   |
| 0         | 9  | 5  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 0   |    |   |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 7  | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 1   |    |   |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 2   |    |   |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 8  | 9+        | 1  | 9+ | 9+ | 9  | 1  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | -  | 8  | 9+ | 9+ | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 3   |    |   |
| 4         | 9  | -  | 9  | 9  | 4  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | 5  | 9  | 9         | 8  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 1  | 9  | 9+ | 5  | 8  | 8  | 8         | 4  | -  | 6  | 8  | 6  | 4  | 5   | -  | 4 |
| 5         | 6  | -  | 9  | 8  | -  | -  | 6  | 9         | -  | 9  | 9+ | 7  | 5  | 9  | 9+        | 6  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 8  | 9  | 9  | 5  | 9+ | 9  | 9         | 6  | -  | 6  | 5  | 5  | 4  | 8   | -  | 5 |
| 6         | 1  | -  | 4  | 4  | -  | -  | -  | 8         | -  | 9  | 9  | 2  | -  | 8  | 9+        | 5  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 5  | 9+ | 9  | 9         | 4  | 8  | 9  | 1  | 9  | 9  | 8   | -  | 6 |
| 7         | -  | -  | -  | -  | -  | -  | -  | 4         | -  | 5  | 6  | -  | -  | 5  | 9+        | 5  | 9+ | 9+ | 9  | 9  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 4         | 9+ | 9  | 5  | 9  | 9  | 8  | -   | 7  |   |
| 8         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 2  | 1  | -  | -  | 1  | 9+        | 2* | 9  | 9+ | 7  | 7  | 8  | 9+        | 8  | 9  | 9+ | 9+ | 8  | -  | 9+        | 9  | 3  | 8  | 9  | 9  | -  | 8   |    |   |
| 9         | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 2  | 8  | 9  | 6  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9  | 8  | 2  | 9+        | 9  | 8  | 9+ | 9  | 9  | -  | 9   |    |   |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 1  | 7  | 9  | 6  | -  | 6  | 9+        | 8  | 9  | 9+ | 9+ | 8  | 9  | 9         | 9  | 9  | 8  | 9+ | 9  | 9  | 2   | 10 |   |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 2  | 4  | 9  | 7  | 1  | 4  | 9+        | 9  | 9  | 9+ | 9+ | 8  | 9  | 9         | 9  | 9  | 9+ | 9+ | 9  | 9  | 9   | 11 |   |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 5  | 2  | 9  | 8  | 4  | 2  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9         | 9  | 9  | 9+ | 9+ | 9  | 9  | 9   | 12 |   |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 8  | 1  | 7  | 9  | 7  | 1  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9         | 9  | 9  | 9+ | 9  | 9  | 9  | 9   | 13 |   |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 4  | -  | -  | 9         | 9  | 1  | 9+ | 9+ | 9  | 3  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9         | 9  | 9  | 9+ | 9  | 9  | 9  | 9   | 14 |   |
| 15        | -  | -  | -  | -  | -  | -  | -  | 5         | 6  | -  | -  | 8  | -  | -  | 9+        | 9+ | 5  | 9+ | 9+ | 9+ | 8  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9         | 9  | 9  | 9+ | 9+ | 9  | 9  | 9   | 15 |   |
| 16        | 1  | -  | -  | -  | 3  | -  | -  | 8         | 8  | -  | 4  | 9  | 7  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+  | 16 |   |
| 17        | 7  | 7  | -  | 1  | 7  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | 2  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+  | 17 |   |
| 18        | 9  | 8  | -  | 9+ | 9  | 8  | -  | 9+        | 9  | 3  | 9+ | 9+ | 9  | 5  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+  | 18 |   |
| 19        | 9  | 9  | -  | 9+ | 9  | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+  | 19 |   |
| 20        | 9  | 9  | 3  | 9+ | 9  | 8  | 5  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+  | 20 |   |
| 21        | 9  | 8  | 6  | 9+ | 9  | 8  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 5  | 9+ | 9  | 9+        | -  | 4  | 9+ | 5  | 9  | 6  | 9+  | 21 |   |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 9+        | 2  | 7  | 9+ | 5  | 7  | 5  | 9+  | 22 |   |
| 23        | 9  | 7  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 7  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 2         | 7  | 9+ | 5  | 4  | 7  | 9  | 23  |    |   |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |    |   |

Dec., Angola (Luanda), for SSN = High, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |     |
| 0         | 9  | 6  | 8  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 5  | 9  | 9+ | 9+ | -  | 7  | 9  | 7         | -  | 6  | 7  | 0   |  |  |  |     |
| 1         | 9  | -  | 8  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9+ | 9+ | 8  | 9  | 9+        | 5  | 5  | 9  | 9  | -  | 8  | 8  | 8         | -  | 6  | 3  | 1   |  |  |  |     |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 9+ | 9+ | 8  | 9  | 9+        | 5  | 9  | 9  | 8  | -  | 5  | 8  | 5         | 2  | 6  | -  | 2   |  |  |  |     |
| 3         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | 5  | 9  | 9  | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | -  | 8  | 9+        | 9  | 9  | 9  | 5  | -  | 4  | 8  | 5         | 3  | 5  | -  | 3   |  |  |  |     |
| 4         | 8  | -  | 9  | 9+ | 5  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | 5  | 9  | 8  | 8         | 9+ | 9+ | 9+ | 9+ | 9+ | -  | 8  | 9         | 5  | 9  | 7  | 2  | -  | 4  | 5  | 5         | 5  | 3  | -  | 4   |  |  |  |     |
| 5         | 6  | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9+ | 9+ | 7  | 5  | 9  | 9+ | 8         | 9+ | 9+ | 9+ | 9+ | 9+ | 1  | 9  | 9         | 5  | 9+ | 9  | 5  | -  | -  | 2  | 5         | -  | -  | -  | 5   |  |  |  |     |
| 6         | 1  | -  | 3  | 5  | -  | -  | -  | 8         | -  | 9  | 9  | 2  | -  | 8  | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 5         | 5  | 9+ | 9  | 5  | 1  | 8  | -  | 6         | 7  | 6  | -  | 6   |  |  |  |     |
| 7         | -  | -  | -  | -  | -  | -  | -  | 5         | -  | 6  | 7  | -  | -  | 6  | 9+ | 6         | 9+ | 9+ | 9  | 5  | 9  | 9+ | 9  | 9         | 9+ | 9+ | 9  | 2  | 9  | 9  | 4  | 4         | 9  | 7  | -  | 7   |  |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 3  | 2  | -  | -  | 1  | 9+ | 2         | 9  | 9+ | 7  | 2  | 6  | 9+ | 9  | 9         | 9+ | 9+ | 8  | -  | 9  | 8  | 1  | 9         | 9  | 8  | -  | 8   |  |  |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 2         | 8  | 9  | 6  | -  | 8  | 9+ | 8  | 9         | 9+ | 9+ | 7  | -  | 9  | 8  | 5  | 9+        | 9  | 9  | -  | 9   |  |  |  |     |
| 10        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 2         | 6  | 8  | 6  | -  | 6  | 9+ | 8  | 9+        | 4  | 9+ | 8  | 6  | 8  | 9  | 7  | 9         | 9  | 9  | -  | 10  |  |  |  |     |
| 11        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 3         | 5  | 9  | 7  | 1  | 4  | 9+ | 8  | 9         | 6  | 9+ | 8  | 9  | 7  | 9  | 9  | 9         | 9  | 5  | 11 |     |  |  |  |     |
| 12        | -  | -  | -  | 9  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 6         | 3  | 9  | 8  | 2  | 2  | 9+ | 9  | 9         | 8  | 9+ | 8  | 8  | 7  | 9  | 9  | 9         | 9  | 9  | 9  | 12  |  |  |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 8         | 1  | 9  | 9  | 7  | 2  | 9+ | 9  | 9         | 8  | 9+ | 9  | 8  | 8  | 9  | 9  | 9+        | 9  | 9  | 9  | 13  |  |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | 4  | -  | -  | 9  | 9         | 1  | 9+ | 9+ | 8  | 3  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 8  | 9  | 9  | 9         | 8  | 9  | 14 |     |  |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 6         | 6  | -  | 1  | 7  | -  | -  | 9+ | 9+        | 4  | 9+ | 9+ | 9  | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 7  | 9+ | 9  | 9+        | 9  | 8  | 9  | 15  |  |  |  |     |
| 16        | 1  | -  | -  | -  | 2  | -  | -  | 9         | 8  | -  | 9+ | 9  | 7  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9  | 7  | 9+ | 16  |  |  |  |     |
| 17        | 7  | 7  | -  | 2  | 7  | -  | -  | 9+        | 9  | -  | 9+ | 9+ | 8  | 2  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9+        | 9+ | 6  | 9+ | 17  |  |  |  |     |
| 18        | 9  | 8  | -  | 9+ | 9  | 7  | -  | 9+        | 9  | 2  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 4  | 9  | 9+ | 9+        | 9  | 7  | 9+ | 18  |  |  |  |     |
| 19        | 9  | 9  | -  | 9+ | 9  | 8  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 2  | 9  | 9+ | 5         | 8  | 9  | 9+ | 19  |  |  |  |     |
| 20        | 9  | 9  | 2  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 5  | 9+ | 9  | 9+ | -  | 8  | 9+ | 5         | 7  | 5  | 9  | 20  |  |  |  |     |
| 21        | 9  | 8  | 6  | 9+ | 9  | 5  | 8  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 7  | 9+ | 9  | 9+ | -  | 5  | 9+ | 5         | 5  | 4  | 9  | 21  |  |  |  |     |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9  | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 8  | 9+ | -  | 8  | 9+ | 5         | 2  | 6  | 9  | 22  |  |  |  |     |
| 23        | 9  | 7  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 7  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 9  | 9+ | -  | 7  | 9+ | 8         | -  | 6  | 9  | 23  |  |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |     |

**Jan., Angola (Luanda), for SSN = Medium, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |   |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|---|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |   |
| 0         | 9  | 6  | 8  | 9+ | 8  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 2         | 4  | 9+ | 6  | -  | 8  | 9  | -         | -  | 6  | 5  | -  | -  | 2  | 0   |   |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9  | 9+ | 3         | 7  | 9  | 9  | -  | 7  | 5  | -         | -  | -  | 5  | -  | -  | -  | 1   |   |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9  | 9  | 9+ | -         | 5  | 9  | 5  | 2  | 8  | -  | -         | -  | 1  | 5  | -  | -  | -  | 2   |   |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 1  | 9+ | 9+ | 8  | 2  | 9+ | 8         | 6  | 9+ | 9+ | 9  | 9+ | 9+ | -         | 1  | 8  | 5  | 1  | 5  | -  | -         | -  | -  | 5  | -  | -  | -  | 3   |   |
| 4         | 8  | -  | 9  | 9+ | 5  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | 5  | 9  | 4         | 8  | 9+ | 2  | 9  | 9+ | 9+ | -         | 4  | 6  | 5  | 2  | 2  | -  | -         | -  | -  | 5  | -  | -  | -  | 4   |   |
| 5         | 7  | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9+ | 9+ | 8  | 5  | 9  | 9         | 8  | 9  | 2  | 9+ | 8  | 9  | -         | 5  | -  | 5  | 4  | 5  | -  | -         | -  | -  | 5  | -  | -  | -  | 5   |   |
| 6         | 1  | -  | 7  | 8  | -  | -  | -  | 8         | -  | 9  | 9+ | 4  | 1  | 8  | 9+        | 9  | 9  | 2  | 9+ | 8  | 8  | 8         | 9  | 9  | -  | 5  | 9  | 9  | -         | -  | -  | -  | 5  | -  | -  | -   | 6 |
| 7         | -  | -  | -  | 2  | -  | -  | -  | 4         | -  | 7  | 9  | -  | -  | 6  | 9+        | 6  | 9+ | 9+ | 9  | 6  | 9  | 9         | 9  | 6  | 5  | 9+ | 9  | 2  | 2         | 6  | -  | 5  | 3  | 1  | -  | 7   |   |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 5  | 5  | -  | -  | 2  | 9         | 3* | 9  | 9+ | 6  | 4  | 8  | 9+        | 9  | 2  | 9+ | 9  | 9  | 2  | 6         | 1  | -  | 5  | 9  | 2  | -  | 8   |   |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7         | 4  | 9  | 9+ | 5  | 3  | 5  | 9         | 8  | 8  | 4  | 9  | 9  | -  | 6         | 7  | -  | 7  | 8  | 8  | -  | 9   |   |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 4  | 8  | 9  | 5  | 1  | 8  | 9         | 8  | 9  | 4  | 9  | 8  | -  | 5         | 9  | 1  | 9  | 7  | 9  | -  | 10  |   |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 5  | 6  | 9  | 5  | 2  | 6  | 8         | 9  | 9  | 5  | 9  | 9  | 8  | 5         | 9  | 8  | 9  | 8  | 8  | -  | 11  |   |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 7  | 5  | 8  | 8  | 5  | 4  | 9         | 9  | 9  | 7  | 9+ | 9  | 9  | 5         | 9  | 9  | 9  | 8  | 7  | 2  | 12  |   |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 9  | 4  | 5  | 9  | 8  | 4  | 9         | 9+ | 9  | 6  | 9+ | 9+ | 9  | 7         | 9  | 9  | 9  | 9  | 6  | 5  | 13  |   |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | -  | -  | -  | 9+        | 9  | 4  | 9+ | 9+ | 9  | 3  | 9         | 9+ | 9  | 6  | 9+ | 9+ | 9  | 6         | 9  | 9  | 9  | 9+ | 5  | 9  | 14  |   |
| 15        | -  | -  | -  | -  | -  | -  | -  | 6         | 7  | -  | -  | 5  | -  | -  | 9+        | 9+ | 6  | 9+ | 9+ | 9+ | 8  | 9+        | 9+ | 9  | 5  | 9+ | 9  | 9  | 6         | 8  | 9  | 9  | 8  | -  | 9  | 15  |   |
| 16        | 1  | 1  | -  | -  | 2  | -  | -  | 9         | 8  | -  | 5  | 8  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 5         | 8  | 9+ | 9  | 6  | -  | 9  | 16  |   |
| 17        | 7  | 8  | -  | 2  | 7  | -  | -  | 9         | 9  | -  | 9+ | 9  | 8  | 2  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ |    |    |    |    |    |           |    |    |    |    |    |    |     |   |

**Feb., Angola (Luanda), for SSN = Medium, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |
| 0         | 9  | 6  | 9  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 9  | 9+ | 9  | 8  | 9  | 9+ | -         | -  | 9  | 5  | -  | 4  | 5  | 0   |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 8         | 9  | 9+ | 9  | 3  | 9  | 9  | -         | 2  | 5  | 5  | -  | 2  | 1  | 1   |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9  | 9  | 9+ | 5         | 8  | 9+ | 9  | 6  | 9  | 7  | -         | 1  | 6  | 5  | -  | 3  | -  | 2   |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9  | 1  | 9  | 9         | 8  | 9+ | 9+ | 9+ | 9  | 9+ | -         | 2  | 9  | 8  | 2  | 8  | 1  | -         | -  | 4  | 5  | -  | 1  | -  | 3   |
| 4         | 9  | -  | 9  | 9+ | 4  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | 5  | 9  | 6         | 8  | 9+ | 9+ | 9  | 9+ | 9+ | -         | 4  | 8  | 5  | 1  | 3  | 1  | -         | -  | -  | 5  | -  | -  | -  | 4   |
| 5         | 7  | -  | 9  | 9+ | -  | -  | 7  | 9         | -  | 9+ | 9+ | 7  | 5  | 9  | 9         | 7  | 9  | 2  | 9+ | 9  | 9  | -         | 9  | 2  | 5  | 8  | 8  | 1  | -         | -  | -  | 5  | -  | -  | -  | 5   |
| 6         | 1  | -  | 7  | 8  | -  | -  | -  | 8         | -  | 9+ | 9+ | 4  | 1  | 8  | 9+        | 5  | 9+ | 9+ | 9+ | 9+ | 9  | 9         | 9  | 1* | 5  | 9+ | 8  | -  | -         | 4  | -  | 5  | 4  | 4  | -  | 6   |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 4         | -  | 7  | 8  | -  | -  | 6  | 9+        | 5  | 9+ | 9+ | 9  | 7  | 9  | 9+        | 9  | 8  | 5  | 9+ | 9  | 3  | 8         | 8  | -  | 5  | 9  | 5  | -  | 7   |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 5  | 5  | -  | -  | 2  | 9         | 4* | 9  | 9+ | 8  | 6  | 9  | 9+        | 9  | 2  | 5  | 9+ | 9  | 4  | 8         | 7  | -  | 5  | 9  | 8  | -  | 8   |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 2  | 9  | 9+ | 6  | 2* | 8  | 9+        | 8  | 8  | 9+ | 9+ | 8  | -  | 6         | 9  | -  | 9  | 9  | 9  | -  | 9   |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 2  | 8  | 9  | 5  | 1  | 8  | 9         | 8  | 9  | 4  | 9+ | 8  | 4  | 6         | 9  | 3  | 9  | 9  | 8  | -  | 10  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5         | 4  | 4  | 9  | 6  | 2  | 5  | 9         | 9  | 9  | 6  | 9+ | 8  | 9  | 6         | 9  | 8  | 4  | 9  | 8  | -  | 11  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5         | 6  | 5  | 9  | 7  | 5  | 4  | 9         | 9  | 9  | 8  | 9+ | 9  | 9  | 6         | 9  | 9  | 4  | 9  | 8  | 4  | 12  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 8  | 2  | 9  | 9  | 8  | 3  | 9         | 9+ | 9  | 8  | 9+ | 9+ | 9  | 6         | 9  | 9  | 4  | 9  | 6  | 7  | 13  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | -  | -  | -  | 9         | 9  | 2  | 9+ | 9+ | 9  | 2  | 9         | 9+ | 9  | 8  | 9+ | 9+ | 9  | 6         | 9  | 9  | 4  | 9+ | 6  | 8  | 14  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 5         | 7  | -  | -  | 8  | -  | -  | 9+        | 9+ | 2  | 9+ | 9+ | 9+ | 7  | 9+        | 9+ | 9  | 8  | 9+ | 9+ | 9  | 6         | 9  | 9  | 4  | 9+ | 5  | 9  | 15  |
| 16        | 1  | 1  | -  | -  | 5  | -  | -  | 8         | 8  | -  | 5  | 9  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8         | 9  | 9  | 5  | 9  | 5  | 9  | 16  |
| 17        | 5  | 7  | -  | 2  | 8  | -  | -  | 9         | 9  | -  | 9+ | 9+ | 8  | 1  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 5         | 9  | 9+ | 5  | 7  | 2  | 9  | 17  |
| 18        | 8  | 8  | -  | 8  | 8  | 8  | -  | 9+        | 9  | 4  | 9+ | 9+ | 9  | 3  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 5  | 9+ | 9+ | 9+ | 2         | 8  | 9+ | 5  | 8  | 3  | 9  | 18  |
| 19        | 9  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 5  | 9+ | 9+ | 9+ | -         | 7  | 9+ | 5  | 7  | 7  | 9  | 19  |
| 20        | 9  | 9  | 3  | 9+ | 9  | 8  | 4  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 5  | 9+ | 9  | 9+ | -         | 4  | 9+ | 5  | 7  | 5  | 9  | 20  |
| 21        | 9  | 8  | 7  | 9+ | 9  | 7  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 9  | 9+ | 5  | 9+ | 8  | 9+ | -         | 1  | 9  | 5  | 5  | 5  | 9  | 21  |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 8  | 9+ | 1         | -  | 9+ | 9  | 1  | 5  | 9+ | 22  |
| 23        | 9  | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9         | 7  | 9+ | 9+ | 9  | 9  | 9+ | 1         | -  | 9+ | 8  | -  | 6  | 8  | 23  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |

Mar., Angola (Luanda), for SSN = Medium, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |  |
| 0         | 9  | 6  | 9  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | -  | 4  | 9  | 5         | 4  | 7  | 7  | 0   |    |  |  |  |
| 1         | 9+ | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9  | 9+        | 9+ | 8  | 9  | 9+ | 2  | 7  | 8  | 5         | -  | 6  | 1  | 1   |    |  |  |  |
| 2         | 9+ | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 6  | 8         | 9+ | 9+ | 8  | 9  | 9  | -  | 1  | 9         | 5  | 1  | 7  | -   | 2  |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9  | -  | 9+ | 9  | 8         | 9+ | 9+ | 9  | 9  | 9  | 9+ | -  | 2         | 9+ | 9  | 3  | 9  | 5  | -  | -  | 8         | 5  | -  | 3  | -   | 3  |  |  |  |
| 4         | 9  | -  | 9  | 9  | 5  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | 2  | 9  | 7  | 8         | 9+ | 9+ | 9  | 9+ | 9+ | -  | 5  | 9         | 6  | 3  | 5  | 4  | -  | -  | 2  | 5         | -  | -  | -  | 4   |    |  |  |  |
| 5         | 7  | -  | 9  | 9  | -  | -  | 7  | 9         | -  | 9  | 9+ | 7  | 5  | 9  | 9+ | 7         | 9+ | 2  | 9+ | 9  | 9+ | -  | 9  | 5         | 9  | 9  | 8  | 4  | -  | -  | -  | 5         | -  | -  | -  | 5   |    |  |  |  |
| 6         | 1  | -  | 8  | 8  | -  | -  | 3  | 8         | -  | 9+ | 9+ | 3  | 2  | 8  | 9+ | 5         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 2* | 5  | 9+ | 9  | 1  | 1  | 8  | -         | 6  | 8  | 7  | -   | 6  |  |  |  |
| 7         | -  | -  | -  | 2  | -  | -  | -  | 3         | -  | 8  | 9  | -  | -  | 6  | 9+ | 3         | 9+ | 9+ | 9  | 9  | 9+ | 9+ | 9  | 9         | 8  | 9+ | 9+ | 9  | 5  | 8  | 9  | 3         | 8  | 9  | 9  | -   | 7  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 4  | 5  | -  | -  | 1  | 9+ | 4*        | 9+ | 9+ | 7  | 7  | 8  | 9+ | 8  | 2         | 9+ | 9+ | 9  | 5  | 8  | 9  | -  | 7         | 9  | 9  | -  | 8   |    |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 8  | 3*        | 9  | 9+ | 5  | 1  | 9  | 9+ | 8  | 8         | 9+ | 9+ | 8  | -  | 7  | 9  | -  | 8         | 9  | 9  | -  | 9   |    |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 2         | 8  | 9  | 4  | 1  | 6  | 9  | 8  | 9+        | 4  | 9+ | 8  | 7  | 7  | 9  | 8  | 9         | 9  | 9  | -  | 10  |    |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 4         | 5  | 8  | 6  | 2  | 5  | 9  | 9  | 9         | 4  | 9  | 8  | 9  | 7  | 9  | 9  | 4         | 9  | 9  | -  | 11  |    |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 6         | 2  | 9  | 8  | 5  | 4  | 9+ | 9  | 9         | 4  | 9+ | 9  | 8  | 7  | 9  | 9  | 4         | 9  | 9  | 2  | 12  |    |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 8         | 1  | 9  | 9  | 8  | 2  | 9+ | 9+ | 9         | 5  | 9+ | 9  | 8  | 7  | 9+ | 9  | 4         | 9  | 9  | 6  | 13  |    |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 4  | -  | -  | 9  | 9         | 1  | 9+ | 9+ | 9  | 3  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 8  | 9  | 9  | 4         | 9+ | 8  | 8  | 14  |    |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 4         | 6  | -  | -  | 8  | -  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 8  | 9  | 9  | 4         | 9+ | 9  | 9  | 15  |    |  |  |  |
| 16        | -  | -  | -  | -  | 2  | -  | -  | 7         | 9  | -  | 5  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 9  | 9  | 9+        | 9+ | 8  | 9  | 16  |    |  |  |  |
| 17        | 5  | 7  | -  | 1  | 6  | -  | -  | 9         | 9  | -  | 9+ | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 9  | 9+ | 5         | 9  | 8  | 9  | 17  |    |  |  |  |
| 18        | 8  | 8  | -  | 8  | 9  | 8  | -  | 9+        | 9  | 3  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 7  | 8  | 9  | 5         | 8  | 7  | 9  | 18  |    |  |  |  |
| 19        | 9  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 4  | 8  | 9+ | 5         | 8  | 6  | 9  | 19  |    |  |  |  |
| 20        | 9  | 8  | 3  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 5  | 9+ | 9  | 9+ | -  | 8  | 9+        | 5  | 8  | 8  | 9   | 20 |  |  |  |
| 21        | 9  | 8  | 7  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 5  | 9+ | 9  | 9+ | -  | 4  | 9+        | 5  | 8  | 2  | 9   | 21 |  |  |  |
| 22        | 9  | 8  | 9  | 9+ | 9  | 4  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9  | 8         | 9+ | 9+ | 9+ | 9+ | 1  | -  | 9+ | 9         | 6  | 6  | 9+ | 22  |    |  |  |  |
| 23        | 9  | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 8  | 9+ | 9+ | 1  | 1  | 9+ | 8         | 1  | 7  | 9  | 23  |    |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |  |  |  |

**Apr., Angola (Luanda), for SSN = Medium, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 9  | 5  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 8  | 9+ | -  | 7  | 9  | 7  | 2         | 6  | 9  | 0  |     |  |  |  |  |
| 1         | 9  | 1  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 9+ | 9         | 9+ | 9  | 9+ | 1  | 7  | 8  | 5  | 2         | 5  | 8  | 1  |     |  |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 7  | 8  | 9+        | 9  | 8  | 9  | 9+ | -  | 1  | 8  | 5         | 2  | 5  | 1  | 2   |  |  |  |  |
| 3         | 8  | -  | 9  | 9+ | 6  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | 1  | 5  | 9         | 6  | 6  | 7  | 8  | -  | -  | 6  | 5         | -  | 1  | -  | 3   |  |  |  |  |
| 4         | 8  | -  | 8  | 9+ | 3  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 2  | 9  | 9  | 8         | 9+ | 3  | 9  | 8  | 9+ | -  | 6  | 8         | 6  | 7  | 2  | 7  | -  | 1  | -  | 5         | 1  | -  | -  | 4   |  |  |  |  |
| 5         | 4  | -  | 9  | 9  | -  | -  | 7  | 9         | -  | 9  | 9+ | 6  | 4  | 9  | 9+ | 6         | 9  | 9+ | 9+ | 9  | 9+ | 7  | 9  | 1         | 5  | 9+ | 8  | 4  | -  | 2  | -  | 5         | 2  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 6  | 8  | -  | -  | 2  | 7         | -  | 9  | 9+ | 1  | 2  | 8  | 9+ | 3         | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 2*        | 5  | 9+ | 9  | 2  | 1  | 9  | -  | 9         | 9  | 8  | -  | 6   |  |  |  |  |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 2         | -  | 8  | 8  | -  | -  | 5  | 9+ | 5*        | 9+ | 9+ | 8  | 9  | 9  | 9  | 9  | 8         | 9+ | 9  | 9  | 6  | 4  | 9  | 3  | 5         | 9  | 8  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 3  | 5  | -  | -  | 1  | 9  | 5*        | 9+ | 9+ | 7  | 8  | 9  | 9  | 9  | 5         | 9+ | 9  | 9  | 4  | 5  | 9  | -  | 5         | 9  | 9  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 8  | 3*        | 9  | 9  | 3  | 4  | 8  | 9  | 8  | 9         | 9+ | 9  | 8  | 2  | 7  | 9  | 2  | 4         | 8  | 9  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 3         | 8  | 7  | 6  | 3  | 7  | 9+ | 8  | 9         | 9+ | 9  | 9  | 7  | 8  | 9  | 9  | 4         | 8  | 9  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 4         | 6  | 8  | 7  | 4  | 4  | 9+ | 9  | 9         | 4  | 9  | 9  | 8  | 8  | 9  | 8  | 4         | 9  | 9  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 7         | 5  | 9  | 8  | 6  | 2  | 9+ | 9  | 9         | 4  | 9+ | 9  | 9  | 8  | 9  | 8  | 4         | 9  | 9  | 1  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 8         | 2  | 9  | 9  | 8  | 3  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 8  | 9  | 9  | 4         | 9+ | 9  | 1  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 4  | -  | -  | 9  | 9         | 3  | 9+ | 9+ | 9  | 3  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 8  | 9  | 9  | 9+        | 9+ | 9  | 2  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 3         | 7  | -  | -  | 8  | -  | -  | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 8  | 9  | 9+        | 9+ | 8  | 5  | 15  |  |  |  |  |
| 16        | -  | -  | -  | -  | 2  | -  | -  | 7         | 9  | -  | 5  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 8  | 9+ | 5         | 9+ | 9  | 9  | 16  |  |  |  |  |
| 17        | 3  | 6  | -  | 1  | 6  | 1  | -  | 9         | 9  | 1  | 9+ | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 8  | 9+ | 5         | 9+ | 8  | 9  | 17  |  |  |  |  |
| 18        | 8  | 8  | -  | 7  | 8  | 8  | -  | 9+        | 9  | 3  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 8  | 9+ | 5         | 5  | 8  | 9  | 18  |  |  |  |  |
| 19        | 9  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 4  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 8  | 9  | 5         | 2  | 4  | 9  | 19  |  |  |  |  |
| 20        | 9  | 8  | 3  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 4  | 6  | 9+ | 5  | 4         | 3  | 9  | 20 |     |  |  |  |  |
| 21        | 9  | 8  | 7  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 1  | 1  | 9+ | 9  | 3         | 5  | 9  | 21 |     |  |  |  |  |
| 22        | 9  | 8  | 8  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9  | 8  | 9+ | 1  | 2  | 9+ | 9  | 2         | 6  | 9  | 22 |     |  |  |  |  |
| 23        | 9  | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 1  | 7  | 9  | 8  | 1         | 6  | 9  | 23 |     |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**May, Angola (Luanda), for SSN = Medium, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 8  | 5  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 5  | 9  | 9+        | 9  | 8  | 6  | 9+ | -  | 2  | 5  | 5         | -  | -  | 5  | 0   |  |  |  |  |
| 1         | 8  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 5  | 8  | 9+        | 8  | 8  | 6  | 9+ | -  | 2  | 2  | 5         | 2  | -  | 2  | 1   |  |  |  |  |
| 2         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | 1  | 9  | 9  | 8         | 9+ | 9+ | 9+ | 8  | 9+ | 1  | 5  | 9         | 6  | 6  | 6  | 9  | -  | -  | 5  | 5         | -  | -  | 5  | 2   |  |  |  |  |
| 3         | 8  | -  | 9  | 9+ | 3  | -  | 9  | 9         | 1  | 9+ | 9+ | 9  | -  | 9  | 7  | 5         | 9+ | 9  | 8  | 8  | 9+ | -  | 1  | 8         | 6  | 1  | 1  | 8  | -  | -  | -  | 5         | -  | -  | 1  | 3   |  |  |  |  |
| 4         | 7  | -  | 8  | 9+ | 2  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 1  | 9  | 8  | 8         | 9  | 3  | 9  | 6  | 9  | -  | 6  | 3         | 6  | 6  | 1  | 2  | -  | -  | -  | 5         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 3  | -  | 9  | 9  | -  | -  | 7  | 9         | -  | 9  | 9+ | 5  | 4  | 9  | 9+ | 6         | 9  | 9+ | 9+ | 8  | 9  | 6  | 9  | -         | 9  | 9+ | 8  | 4  | -  | 4  | -  | 5         | 1  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 6  | 8  | -  | -  | 2  | 6         | -  | 9  | 9+ | -  | -  | 8  | 9+ | 2         | 9+ | 9+ | 9  | 9+ | 9+ | 9  | 9  | -         | 5  | 9+ | 9  | 2* | 1  | 9  | -  | 8         | 8  | 8  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 1  | 1  | -  | -  | -  | 2         | -  | 8  | 8  | -  | -  | 5  | 9+ | 3         | 9+ | 9+ | 8  | 9  | 9  | 9+ | 8  | 9         | 9+ | 9+ | 9  | 7  | 2  | 9  | 3  | 5         | 9  | 7  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 5  | 4  | -  | -  | 1  | 9  | 2         | 9  | 9+ | 4  | 8  | 9  | 9+ | 9  | 8         | 9+ | 8  | 9  | 5  | 2  | 9  | 1  | 5         | 8  | 8  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 7  | 4*        | 9  | 2  | 7  | 5  | 9  | 9  | 9  | 8         | 9+ | 9  | 9  | 3  | 2  | 9  | -  | 5         | 8  | 9  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 4         | 8  | 3  | 4  | 4  | 7  | 9  | 9  | 9+        | 9+ | 9  | 9  | 7  | 4  | 9  | 8  | 4         | 8  | 9  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 5         | 7  | 4  | 4  | 5  | 5  | 9+ | 9  | 9         | 9+ | 9  | 9  | 8  | 4  | 9+ | 8  | 4         | 8  | 9  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 6         | 5  | 5  | 8  | 7  | 4  | 9+ | 9  | 9         | 5  | 9  | 9  | 8  | 3  | 9  | 7  | 4         | 9  | 9  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | 4  | 8  | 8  | 9  | 3  | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 8  | 5  | 9  | 9  | 4         | 9+ | 9  | -  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 1  | -  | -  | 9  | 9         | 4  | 9+ | 9  | 9  | 5  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 8  | 6  | 9  | 9  | 9+        | 9+ | 6  | -  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 7  | -  | -  | 5  | 6  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 9  | 7  | 8  | 9  | 5         | 9+ | 2  | -  | 15  |  |  |  |  |
| 16        | -  | 4  | -  | -  | 1  | -  | -  | 6         | 8  | -  | 5  | 8  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 8  | 4  | 9  | 5         | 9+ | 1  | 4  | 16  |  |  |  |  |
| 17        | 2  | 7  | -  | 1  | 6  | 7  | -  | 8         | 9  | 1  | 8  | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  |    |    |    |           |    |    |    |    |    |    |    |           |    |    |    |     |  |  |  |  |

Jun., Angola (Luanda), for SSN = Medium, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |     |
| 0         | 8  | 5  | 9  | 9+ | 9  | -  | 7  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 2  | 8  | 9         | 5  | 7  | 5  | 9  | -  | -  | 1  | 5         | -  | -  | 1  | 0   |  |  |  |     |
| 1         | 8  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 6  | 9+ | 2  | 6  | 9         | 5  | 7  | 4  | 9  | -  | -  | -  | 5         | -  | -  | -  | 1   |  |  |  |     |
| 2         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9+ | 1  | 9  | 9  | 6         | 9+ | 9  | 9  | 8  | 9+ | -  | 1  | 9         | 6  | 2  | 4  | 9  | -  | -  | 1  | 5         | -  | -  | 1  | 2   |  |  |  |     |
| 3         | 7  | -  | 9  | 9+ | 5  | -  | 9  | 9         | 1  | 9+ | 9+ | 9  | -  | 9  | 5  | 4         | 9+ | 8  | 7  | 5  | 9+ | -  | -  | 6         | 6  | -  | -  | 6  | -  | -  | -  | 5         | -  | -  | -  | 3   |  |  |  |     |
| 4         | 7  | -  | 9  | 9+ | 2  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | -  | 9  | 6  | 8         | 9  | 3  | 9+ | 2  | 9  | -  | 4  | -         | 6  | 5  | 1  | -  | -  | -  | -  | 5         | -  | -  | -  | 4   |  |  |  |     |
| 5         | 2  | -  | 9  | 9  | -  | -  | 7  | 8         | -  | 9  | 5  | 5  | 4  | 9  | 9+ | 6         | 8  | 2  | 9+ | 8  | 9  | 4  | 9  | -         | 9  | 9+ | 9  | 1  | -  | 1  | -  | 5         | 1  | -  | -  | 5   |  |  |  |     |
| 6         | -  | -  | 6  | 7  | -  | -  | 1  | 6         | -  | 9  | 9+ | -  | 1  | 7  | 9+ | 4         | 9+ | 9+ | 9  | 9+ | 9+ | 8  | 8  | -         | 5  | 9+ | 9+ | 2  | -  | 9  | -  | 8         | 5  | 5  | -  | 6   |  |  |  |     |
| 7         | -  | -  | 2  | 1  | -  | -  | -  | 1         | -  | 8  | 8  | -  | -  | 5  | 9  | 4         | 9+ | 9+ | 7  | 9  | 9  | 9  | 8  | 7         | 5  | 9  | 9  | 5  | -  | 9  | -  | 5         | 8  | 6  | -  | 7   |  |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 6  | 4  | -  | -  | -  | 9  | 4*        | 9  | 9+ | 6  | 7  | 9  | 8  | 8  | 8         | 9+ | 9  | 9  | 5  | -  | 9  | -  | 9         | 9  | 8  | -  | 8   |  |  |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | -  | -  | -  | -  | 7  | 2         | 9+ | 9  | 5  | 7  | 9  | 8  | 9  | 8         | 9+ | 8  | 9  | 5  | 3  | 9  | -  | 9         | 9  | 8  | -  | 9   |  |  |  |     |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 4         | 9  | 9  | 5  | 7  | 7  | 9  | 9  | 9+        | 9+ | 8  | 9  | 6  | 3  | 9  | 5  | 9         | 8  | 9  | -  | 10  |  |  |  |     |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 6         | 7  | 8  | 5  | 7  | 4  | 8  | 9  | 9         | 5  | 9  | 9  | 7  | 3  | 9  | 8  | 9         | 8  | 9  | -  | 11  |  |  |  |     |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 7         | 5  | 9  | 8  | 8  | 3  | 8  | 9  | 9         | 5  | 9  | 9  | 7  | 2  | 9  | 8  | 9         | 9  | 9  | 1  | 12  |  |  |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | 5  | 9  | 9  | 8  | 3  | 8  | 9+ | 9         | 5  | 9+ | 9+ | 7  | 2  | 9  | 8  | 5         | 9  | 8  | 3  | 13  |  |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 2  | -  | -  | 9  | 9+        | 5  | 2  | 9  | 9  | 3  | 9  | 9+ | 9         | 5  | 9+ | 9+ | 8  | 2  | 9  | 8  | 5         | 9+ | 4  | 3  | 14  |  |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 1         | 7  | -  | -  | 5  | 8  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | 5  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 8  | 3  | 7  | 9  | 9         | 9  | -  | 4  | 15  |  |  |  |     |
| 16        | -  | 4  | -  | -  | 1  | -  | -  | 5         | 8  | -  | 1  | 8  | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 9  | 4  | 1  | 9  | 9         | 7  | -  | 5  | 16  |  |  |  |     |
| 17        | 1  | 7  | -  | 1  | 6  | 7  | -  | 8         | 9  | 2  | 8  | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9  | 9+        | 9+ | 9+ | 7  | 9  | 5  | -  | 9  | 9+        | 4  | -  | 6  | 17  |  |  |  |     |
| 18        | 5  | 8  | -  | 6  | 8  | 8  | -  | 9         | 9  | 5  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 8  | 9+        | 9+ | 9+ | 8  | 9  | 7  | -  | 9  | 9         | -  | -  | 7  | 18  |  |  |  |     |
| 19        | 6  | 8  | 2  | 9+ | 9  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 8  | 9+        | 9+ | 9  | 8  | 9  | 3  | -  | 9  | 8         | -  | -  | 9  | 19  |  |  |  |     |
| 20        | 8  | 9  | 5  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 3  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 5  | 9+        | 9  | 8  | 7  | 9  | -  | -  | 7  | 5         | -  | -  | 8  | 20  |  |  |  |     |
| 21        | 8  | 8  | 8  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 8  | 7  | 9+        | 9  | 7  | 8  | 9+ | -  | -  | 4  | 5         | -  | -  | 5  | 21  |  |  |  |     |
| 22        | 8  | 8  | 9  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 7  | 9  | 9+        | 8  | 5  | 4  | 9+ | -  | 2  | 5  | 5         | -  | -  | 6  | 22  |  |  |  |     |
| 23        | 8  | 8  | 9  | 9+ | 9  | 8  | 5  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 5  | 9  | 9+        | 6  | 5  | 6  | 9+ | -  | 1  | 4  | 5         | -  | -  | 5  | 23  |  |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |     |

**Jul., Angola (Luanda), for SSN = Medium, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 8  | 4  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 1  | 7  | 9         | 6  | 6  | 4  | 9  | -  | -  | 1  | 5         | -  | -  | 1  | 0   |  |  |  |  |
| 1         | 7  | -  | 9  | 9+ | 9+ | -  | 8  | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 5  | 9+ | 1  | 6  | 8         | 6  | 6  | 3  | 9  | -  | -  | -  | 5         | -  | -  | -  | 1   |  |  |  |  |
| 2         | 7  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | -  | 9+ | 9  | 6         | 9+ | 9+ | 9  | 8  | 9+ | -  | 1  | 8         | 6  | 2  | 5  | 9  | -  | -  | 1  | 5         | -  | -  | 1  | 2   |  |  |  |  |
| 3         | 6  | -  | 9  | 9+ | 2  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | -  | 9  | 5  | 4         | 9+ | 7  | 8  | 5  | 9+ | -  | -  | 6         | 6  | -  | -  | 6  | -  | -  | -  | 5         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 6  | -  | 9  | 9+ | 1  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 1  | 9  | 6  | 7         | 9  | 9  | 9+ | 2  | 9  | -  | 3  | -         | 6  | 4  | -  | -  | -  | -  | -  | 6         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 2  | -  | 9  | 9  | -  | -  | 7  | 8         | -  | 9  | 5  | 5  | 4  | 9  | 9+ | 6         | 6  | 2  | 9+ | 8  | 9  | 2  | 9  | -         | 6  | 9  | 6  | 1  | -  | -  | -  | 5         | -  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 6  | 7  | -  | -  | -  | 7         | -  | 9  | 9+ | -  | -  | 7  | 9+ | 4         | 9+ | 9+ | 9  | 9+ | 9  | 8  | 9  | -         | 5  | 9  | 9  | 1  | -  | 8  | -  | 6         | 5  | 5  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 1  | -  | -  | -  | -  | 1         | -  | 8  | 8  | -  | -  | 5  | 9+ | 2         | 9+ | 9+ | 8  | 9  | 9+ | 9  | 8  | 7         | 5  | 9  | 9  | 2  | -  | 9  | -  | 9         | 7  | 5  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 6  | 3  | -  | -  | -  | 9  | 2         | 9  | 9+ | 6  | 8  | 9  | 8  | 8  | 7         | 9+ | 8  | 9  | 2  | -  | 9  | -  | 9         | 9  | 6  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 3         | 9  | 9  | 3  | 6  | 8  | 8  | 9  | 8         | 9+ | 8  | 9  | 3  | 1  | 9  | -  | 8         | 8  | 7  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 4         | 8  | 9  | 5  | 5  | 7  | 8  | 9  | 9         | 5  | 8  | 9  | 7  | 2  | 9  | 1  | 9+        | 9  | 8  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 6         | 7  | 9  | 5  | 6  | 5  | 8  | 9  | 9         | 5  | 9  | 9  | 8  | 2  | 9  | 6  | 8         | 9  | 9  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 8         | 5  | 9  | 8  | 8  | 4  | 8  | 9  | 9         | 5  | 9  | 9  | 7  | 1  | 9  | 6  | 8         | 9  | 9  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 5  | 8  | 9  | 8  | 2  | 8  | 9+ | 9         | 5  | 9+ | 9+ | 7  | 1  | 9  | 4  | 9         | 9  | 8  | 2  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 2  | -  | -  | 9  | 9+        | 5  | 2  | 9  | 9  | 5  | 8  | 9+ | 9         | 5  | 9+ | 9+ | 8  | 1  | 9  | 6  | 9         | 9  | 3  | 2  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 3         | 7  | -  | -  | 5  | 7  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9         | 5  | 9+ | 9  | 8  | 1  | 6  | 9  | 9         | 9  | -  | 2  | 15  |  |  |  |  |
| 16        | -  | 4  | -  | -  | 1  | -  | -  | 6         | 8  | -  | 1  | 8  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9         | 5  | 9+ | 8  | 9  | 1  | 1  | 9  | 9         | 6  | -  | 4  | 16  |  |  |  |  |
| 17        | 1  | 7  | -  | 1  | 6  | 7  | -  | 8         | 9  | 1  | 8  | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9  | 9+        | 9+ | 9+ | 6  | 9  | 2  | -  | 9  | 5         | 3  | -  | 6  | 17  |  |  |  |  |
| 18        | 5  | 8  | -  | 6  | 8  | 8  | -  | 9         | 9  | 3  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 8  | 9+        | 9+ | 9+ | 8  | 9  | 5  | -  | 9  | 9         | -  | -  | 7  | 18  |  |  |  |  |
| 19        | 6  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 7  | 9+        | 9+ | 9  | 7  | 9  | 2  | -  | 9  | 8         | -  | -  | 8  | 19  |  |  |  |  |
| 20        | 8  | 9  | 2  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 5  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 4  | 9+        | 9  | 6  | 6  | 9  | -  | -  | 8  | 5         | -  | -  | 6  | 20  |  |  |  |  |
| 21        | 8  | 8  | 6  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 7  | 5  | 9+        | 8  | 4  | 8  | 9+ | -  | -  | 6  | 5         | -  | -  | 6  | 21  |  |  |  |  |
| 22        | 8  | 8  | 8  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 5  | 9  | 9+        | 5  | 2  | 6  | 9+ | -  | 2  | 7  | 5         | -  | -  | 7  | 22  |  |  |  |  |
| 23        | 8  | 7  | 8  | 9+ | 9  | 5  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 3  | 8  | 9+        | 5  | 5  | 5  | 9+ | -  | 1  | 5  | 5         | -  | -  | 5  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**Aug., Angola (Luanda), for SSN = Medium, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 8  | 5  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 1  | 8  | 9+        | 5  | 3  | 7  | 9+ | -  | -  | 2  | 5         | -  | -  | 2  | 0   |  |  |  |  |
| 1         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | 7  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 7  | 9+ | 2  | 7  | 8         | 5  | 6  | 6  | 8  | -  | 1  | 1  | 5         | 1  | -  | 1  | 1   |  |  |  |  |
| 2         | 7  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9  | -  | 9  | 9+ | 8         | 9+ | 9+ | 9+ | 8  | 9+ | 1  | 3  | 9         | 6  | 4  | 7  | 9  | -  | -  | 1  | 5         | -  | -  | 2  | 2   |  |  |  |  |
| 3         | 7  | -  | 9  | 9+ | 4  | -  | 9  | 9         | 1  | 9+ | 9+ | 9  | -  | 9+ | 6  | 5         | 9+ | 9  | 8  | 9  | 9+ | -  | -  | 7         | 6  | -  | 2  | 7  | -  | -  | -  | 5         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 7  | -  | 9  | 9+ | 1  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 3  | 9  | 6  | 8         | 9  | 3  | 9+ | 5  | 9  | -  | 4  | -         | 6  | 5  | 1  | 1  | -  | -  | -  | 5         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 3  | -  | 9  | 9  | -  | -  | 7  | 9         | -  | 9  | 5  | 5  | 4  | 9  | 9+ | 6         | 8  | 2  | 9+ | 8  | 9  | 2  | 9  | -         | 9  | 9+ | 8  | 1  | -  | 2  | -  | 5         | 1  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 6  | 7  | -  | -  | -  | 7         | -  | 9  | 9+ | -  | 1  | 8  | 9+ | 2         | 9+ | 9+ | 9  | 9+ | 9+ | 8  | 8  | -         | 5  | 9+ | 9  | -  | -  | 9  | -  | 9         | 5  | 7  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 1  | 1  | -  | -  | -  | 2         | -  | 8  | 8  | -  | -  | 5  | 9+ | 2         | 9+ | 9+ | 7  | 9  | 9+ | 9  | 8  | 5         | 5  | 9  | 9  | 3  | -  | 9  | -  | 5         | 7  | 7  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 4  | -  | -  | 1  | 9  | 2         | 9  | 9+ | 6  | 8  | 9  | 9  | 8  | 5         | 9+ | 8  | 9  | 2  | -  | 9  | -  | 5         | 9  | 8  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 7  | 3         | 9  | 9  | 5  | 4  | 8  | 8  | 8  | 8         | 9+ | 8  | 9  | 1  | 2  | 9  | -  | 9         | 8  | 8  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 3         | 8  | 9  | 5  | 5  | 6  | 9  | 9  | 9+        | 5  | 8  | 9  | 6  | 2  | 9  | 5  | 9+        | 8  | 9  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 5         | 6  | 9  | 7  | 5  | 5  | 8  | 9  | 9         | 5  | 9  | 9  | 7  | 3  | 9  | 8  | 9         | 9  | 9  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 8         | 4  | 9  | 7  | 8  | 4  | 8  | 9  | 9         | 5  | 9+ | 9  | 7  | 2  | 9  | 8  | 9         | 9  | 9  | 1  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | 6  | 9  | 9  | 9  | 4  | 8  | 9+ | 9         | 5  | 9+ | 9+ | 8  | 2  | 9  | 5  | 9         | 9  | 9  | 2  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 4  | -  | -  | 3  | -  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9  | 6  | 9  | 9+ | 9         | 5  | 9+ | 9+ | 8  | 2  | 9  | 7  | 9         | 9  | 7  | 2  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 4         | 7  | -  | -  | 8  | 7  | -  | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9         | 5  | 9+ | 9+ | 9  | 2  | 8  | 9  | 9         | 9  | 2  | 3  | 15  |  |  |  |  |
| 16        | -  | 4  | -  | -  | 4  | -  | -  | 7         | 8  | -  | 5  | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 5  | 9+ | 9  | 9  | 2  | 4  | 9  | 9         | 7  | 1  | 5  | 16  |  |  |  |  |
| 17        | 3  | 7  | -  | 1  | 6  | 4  | -  | 9         | 9  | 1  | 9+ | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 5  | 9+ | 9  | 9  | 5  | 1  | 9  | 5         | 8  | -  | 7  | 17  |  |  |  |  |
| 18        | 6  | 8  | -  | 8  | 8  | 7  | -  | 9         | 9  | 4  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 9+        | 9+ | 9+ | 8  | 9  | 7  | -  | 9  | 5         | -  | -  | 8  | 18  |  |  |  |  |
| 19        | 8  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9  | 3  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9+        | 9+ | 6  | 5  | 9  | 5  | -  | 9  | 9         | -  | -  | 9  | 19  |  |  |  |  |
| 20        | 9  | 9  | 4  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+        | 6  | 2  | 5  | 9  | -  | -  | 8  | 8         | -  | -  | 9  | 20  |  |  |  |  |
| 21        | 9  | 8  | 7  | 9+ | 9  | 8  | -  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 8  | 3  | 9+        | 6  | 1  | 9  | 9+ | -  | -  | 8  | 6         | -  | -  | 8  | 21  |  |  |  |  |
| 22        | 9  | 8  | 9  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 5  | 9  | 9+        | 9  | -  | 8  | 9+ | -  | -  | 8  | 5         | -  | 1  | 8  | 22  |  |  |  |  |
| 23        | 8  | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 1  | 9+ | 9+        | 6  | 2  | 7  | 9+ | -  | 5  | 6  | 5         | -  | -  | 7  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**Sep., Angola (Luanda), for SSN = Medium, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 9  | 5  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9  | 8  | 9  | 9+ | -  | -  | 8  | 5         | -  | 2  | 8  | 0   |  |  |  |  |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | 5  | 8  | 9+        | 8  | 8  | 9  | 9+ | -  | 4  | 4  | 5         | -  | 2  | 2  | 1   |  |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 9  | 9+ | -  | 7  | 9+        | 8  | 8  | 9  | 6  | -  | -  | 7  | 5         | 1  | 4  | -  | 2   |  |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 7  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9  | -  | 9+ | 9  | 7         | 9+ | 9+ | 9  | 9  | 9+ | -  | 3  | 9         | 5  | 4  | 7  | 3  | -  | -  | 4  | 5         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 8  | -  | 9  | 9+ | 2  | -  | 8  | 9         | -  | 9  | 9+ | 8  | 5  | 9  | 8  | 8         | 9+ | 2  | 9  | 8  | 9+ | -  | 8  | 6         | 7  | 7  | 3  | 6  | -  | 1  | -  | 5         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 5  | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9  | 5  | 5  | 4  | 9  | 9+ | 6         | 9  | 9+ | 9+ | 9  | 9+ | 5  | 9  | 2*        | 6  | 9+ | 8  | 4  | -  | 4  | -  | 5         | 2  | 1  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 5  | 7  | -  | -  | -  | 7         | -  | 9  | 9+ | 1  | 1  | 8  | 9+ | 3         | 9+ | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 1*        | 5  | 9  | 9  | -  | 1  | 9  | -  | 9         | 9  | 4  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 1  | 1  | -  | -  | -  | 2         | -  | 7  | 8  | -  | -  | 5  | 9+ | 2         | 9+ | 9+ | 8  | 9  | 9  | 9  | 8  | 8         | 9+ | 9+ | 8  | 6  | 3  | 9  | 1  | 5         | 9  | 8  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 2  | 3  | -  | -  | 1  | 9  | 4*        | 9+ | 9+ | 7  | 8  | 8  | 9  | 9  | 5         | 9+ | 9  | 9  | 4  | 4  | 9  | -  | 5         | 8  | 9  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 3         | 9  | 8  | 5  | 2  | 8  | 9  | 8  | 9         | 9+ | 9  | 9  | 1  | 3  | 9  | 2  | 4         | 8  | 9  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 2         | 8  | 9  | 2  | 2  | 5  | 8  | 9  | 9         | 8  | 8  | 8  | 6  | 4  | 9  | 9  | 4         | 8  | 9  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 4  | 5         | 6  | 9  | 6  | 5  | 5  | 8  | 9  | 9+        | 4  | 9  | 9  | 9  | 4  | 9  | 5  | 4         | 8  | 9  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 7         | 5  | 9  | 9  | 7  | 3  | 9  | 9+ | 9         | 4  | 9+ | 9  | 9  | 6  | 9  | 8  | 9         | 9  | 9  | 1  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 5  | 8  | 9+ | 9  | 2  | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 9  | 8  | 9+ | 8  | 4         | 9  | 9  | 2  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | 1         | 4  | -  | -  | 6  | -  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9  | 7  | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 9  | 9  | 9  | 9  | 9+        | 9+ | 8  | 3  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 4         | 7  | -  | -  | 8  | 6  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9  | 9  | 7  | 9  | 5         | 9  | 6  | 5  | 15  |  |  |  |  |
| 16        | -  | 4  | -  | -  | 5  | -  | -  | 8         | 8  | -  | 5  | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9  | 9  | 5  | 9+ | 5         | 8  | 5  | 8  | 16  |  |  |  |  |
| 17        | 5  | 7  | -  | 2  | 6  | 1  | -  | 9         | 9  | 1  | 9+ | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 4  | 9  | 5         | 9  | 2  | 9  | 17  |  |  |  |  |
| 18        | 8  | 8  | -  | 8  | 8  | 7  | -  | 9+        | 9  | 5  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 2  | 9  | 5         | 3  | 1  | 9  | 18  |  |  |  |  |
| 19        | 9  | 8  | 2  | 9+ | 9  | 8  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 9+ | 6  | 1  | 9+ | 5         | -  | 1  | 9  | 19  |  |  |  |  |
| 20        | 9  | 9  | 5  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 8  | 9+ | 1  | -  | 9+ | 5         | -  | 1  | 9  | 20  |  |  |  |  |
| 21        | 8  | 8  | 8  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 6  | 9+        | 9+ | 9+ | 9  | 9+ | 1  | -  | 9  | 5         | -  | 2  | 9  | 21  |  |  |  |  |
| 22        | 9  | 8  | 9  | 9+ | 9  | 8  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 8  | 9+        | 9+ | 9  | 7  | 9+ | -  | -  | 9  | 8         | -  | 5  | 9  | 22  |  |  |  |  |
| 23        | 9  | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9  | 8  | 8  | 9+ | -  | 4  | 9  | 6         | -  | 4  | 9  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**Oct., Angola (Luanda), for SSN = Medium, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |   |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|---|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |   |
| 0         | 9  | 5  | 9  | 9+ | 8  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | -         | 5  | 9  | 5  | 4  | 6  | 5  | 0   |   |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9  | 9         | 9  | 9  | 5  | 9  | 9  | 9  | -         | 7  | 8  | 5  | 1  | 6  | -  | 1   |   |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9  | 9+ | 9  | 9+ | 9  | 9  | 9         | 9  | 9  | 9  | 8  | 9+ | 3  | -         | 2  | 9  | 5  | 1  | 7  | -  | 2   |   |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 8  | 9+        | 1  | 9+ | 9+ | 9  | 1  | 9+ | 9         | 9  | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | -  | 7  | 9+ | 8  | 6  | 8  | 5         | -  | -  | 8  | 5  | -  | 1  | -   | 3 |
| 4         | 8  | -  | 9  | 9  | 2  | -  | 8  | 9+        | -  | 9+ | 9+ | 8  | 5  | 9  | 9         | 7  | 9+ | 2  | 9+ | 9  | 9+ | -         | 9  | 9  | 9  | 6  | 8  | 7  | 5         | -  | 6  | 2  | 5  | 2  | 4  | -   | 4 |
| 5         | 5  | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9  | 9+ | 6  | 5  | 9  | 9+        | 6  | 9+ | 9+ | 9+ | 9  | 9+ | 8         | 9  | 6  | 5  | 9+ | 9  | 5  | -         | 5  | -  | 5  | 3  | 1  | -  | 5   |   |
| 6         | -  | -  | 6  | 6  | -  | -  | -  | 7         | -  | 9  | 9+ | 2  | 1  | 8  | 9+        | 5  | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 9  | 7  | 5  | 9  | 9+ | 4  | 5         | 9  | -  | 9  | 9  | 9  | -  | 6   |   |
| 7         | -  | -  | -  | -  | -  | -  | -  | 2         | -  | 6  | 7  | -  | -  | 6  | 9+        | 5* | 9+ | 9+ | 9  | 8  | 9  | 9+        | 9  | 9  | 9+ | 9  | 9  | 4  | 9+        | 9  | 2  | 8  | 9+ | 8  | -  | 7   |   |
| 8         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 2  | 2  | -  | -  | 1  | 9+        | 4* | 9+ | 9+ | 7  | 6  | 5  | 9+        | 8  | 8  | 9+ | 9+ | 8  | -  | 8         | 9  | -  | 8  | 9  | 9  | -  | 8   |   |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9         | 3  | 9  | 7  | 5  | 1  | 8  | 9+        | 8  | 9+ | 9+ | 9  | 8  | 3  | 7         | 9  | 9  | 9  | 9  | 9  | -  | 9   |   |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5         | 2  | 8  | 9  | 5  | 1  | 7  | 9+        | 8  | 9  | 4  | 9+ | 8  | 9  | 7         | 9  | 8  | 9  | 9  | 9  | -  | 10  |   |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7         | 4  | 6  | 6  | 8  | 2  | 5  | 9+        | 9  | 9  | 4  | 9+ | 8  | 9  | 7         | 9  | 9  | 4  | 9  | 9  | 5  | 11  |   |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7         | 7  | 3  | 8  | 9  | 6  | 4  | 9+        | 9  | 9  | 4  | 9+ | 9  | 9  | 7         | 9  | 9  | 4  | 9  | 9  | 8  | 12  |   |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 8  | 4  | 9+ | 9+ | 8  | 2  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 8         | 9+ | 9  | 4  | 9  | 9  | 9  | 13  |   |
| 14        | -  | -  | -  | -  | -  | -  | -  | 1         | 4  | -  | -  | 5  | -  | -  | 9         | 9  | 2  | 9+ | 9+ | 9  | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 8         | 9  | 9  | 9+ | 9+ | 9  | 9  | 14  |   |
| 15        | -  | -  | -  | -  | -  | -  | -  | 5         | 7  | -  | 1  | 6  | -  | -  | 9+        | 9+ | 5  | 9+ | 9+ | 9+ | 8  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 8         | 9  | 9  | 9+ | 9+ | 9  | 9  | 15  |   |
| 16        | 1  | 1  | -  | -  | 2  | -  | -  | 8         | 8  | -  | 5  | 9  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 5         | 9  | 9  | 9+ | 9+ | 9  | 9  | 16  |   |
| 17        | 6  | 7  | -  | 2  | 7  | -  | -  | 9         | 9  | 1  | 9+ | 9+ | 8  | 1  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8         | 8  | 9+ | 9+ | 9  | 7  | 9  | 17  |   |
| 18        | 9  | 8  | -  | 8  | 9  | 8  | -  | 9+        | 9  | 4  | 9+ | 9+ | 9  | 4  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 7         | 8  | 9+ | 9+ | 8  | 7  | 9+ | 18  |   |
| 19        | 9  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 2         | 7  | 9+ | 5  | 9  | 9  | 9+ | 19  |   |
| 20        | 9  | 9  | 4  | 9+ | 9  | 8  | 4  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | -  | 4         | 9+ | 5  | 9  | 5  | 9+ | 20 |     |   |
| 21        | 9  | 8  | 7  | 9+ | 9  | 8  | 6  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 3         | 1  | 9+ | 5  | 8  | 6  | 9  | 21  |   |
| 22        | 9  | 8  | 8  | 9+ | 9  | 1  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9+ | 6         | -  | 9+ | 9  | 4  | 8  | 9+ | 22  |   |
| 23        | 9  | 8  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 2         | 5  | 9+ | 8  | -  | 8  | 9  | 23  |   |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |   |

**Nov., Angola (Luanda), for SSN = Medium, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |      |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |   |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|------|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|---|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC   | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |   |  |  |  |
| 0         | 9  | 6  | 8  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+   | 9+ | 9+ | 9+ | 5         | 8  | 9+ | 9  | -  | 7  | 9  | 5  | -         | 5  | 2  | 0  |     |   |  |  |  |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9    | 9+ | 9  | 9  | 5         | 8  | 9  | 7  | -  | 8  | 8  | 8  | -         | 5  | -  | 1  |     |   |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9    | 9+ | 9  | 9  | 5         | 9  | 9+ | 2  | -  | 5  | 8  | 5  | 4         | 5  | -  | 2  |     |   |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 8  | 9+        | 1  | 9+ | 9+ | 9  | 2  | 9+ | 9  | 9         | 9+ | 9+ | 9+ | 9+   | 9+ | 9+ | -  | 6         | 9  | 8  | 7  | 8  | 1  | -  | 1  | 6         | 5  | -  | 1  | -   | 3 |  |  |  |
| 4         | 9  | -  | 9  | 9  | 4  | -  | 8  | 9+        | -  | 9+ | 9+ | 9  | 5  | 9  | 8  | 8         | 9+ | 9+ | 9  | 9+   | 9+ | -  | 8  | 9         | 9  | 8  | 7  | -  | -  | 4  | 2  | 5         | 1  | 1  | -  | 4   |   |  |  |  |
| 5         | 6  | -  | 9  | 8  | -  | -  | 6  | 9         | -  | 9  | 9+ | 7  | 5  | 9  | 9+ | 7         | 9+ | 2  | 9+ | 9    | 9+ | 2  | 9  | 8         | 5  | 9  | 9  | 3  | -  | 2  | -  | 5         | -  | 1  | -  | 5   |   |  |  |  |
| 6         | 1  | -  | 3  | 5  | -  | -  | -  | 8         | -  | 8  | 9+ | 4  | 2  | 8  | 9+ | 9         | 9+ | 9+ | 9+ | 9    | 9  | 9+ | 9  | 5         | 5  | 9+ | 9  | 2  | 1  | 6  | -  | 5         | 8  | 7  | -  | 6   |   |  |  |  |
| 7         | -  | -  | -  | -  | -  | -  | -  | 5         | -  | 8  | 7  | -  | -  | 6  | 9+ | 6         | 9+ | 9+ | 9  | 7    | 9  | 9+ | 9  | 8         | 9+ | 9+ | 9  | 3  | 8  | 9  | -  | 5         | 9  | 8  | -  | 7   |   |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 4  | 2  | -  | -  | 2  | 9+ | 3         | 9  | 9+ | 7  | 4* 6 | 9+ | 9  | 9  | 9+        | 9+ | 9  | 2  | 8  | 8  | -  | 8  | 9         | 9  | -  | 8  |     |   |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 3         | 9  | 9+ | 6  | 3    | 8  | 9+ | 8  | 9         | 4  | 9+ | 9  | 1  | 7  | 9  | 3  | 8         | 9  | 9  | -  | 9   |   |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 2         | 7  | 8  | 5  | 1    | 7  | 9+ | 8  | 9         | 4  | 9+ | 8  | 8  | 6  | 9  | 8  | 9         | 9  | 9  | -  | 10  |   |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 4         | 6  | 9  | 6  | 2    | 5  | 9+ | 9  | 9         | 4  | 9+ | 8  | 9  | 6  | 9  | 9  | 9         | 9  | 9  | 2  | 11  |   |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 7         | 5  | 9  | 8  | 5    | 4  | 9+ | 9  | 9         | 4  | 9+ | 9  | 9  | 6  | 9  | 9  | 4         | 9  | 9  | 8  | 12  |   |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | 4  | 9  | 9  | 8    | 3  | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 9  | 6  | 9+ | 9  | 9+        | 9  | 9  | 9  | 13  |   |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 5  | -  | -  | 9  | 9         | 2  | 9+ | 9+ | 9    | 4  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 8  | 9  | 9  | 4  | 9+        | 8  | 9  | 14 |     |   |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 6         | 7  | -  | 1  | 8  | -  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+   | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 4  | 9  | 9  | 4  | 9         | 6  | 9  | 15 |     |   |  |  |  |
| 16        | 1  | 1  | -  | -  | 2  | -  | -  | 8         | 8  | -  | 5  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+   | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 6  | 9  | 9+ | 9+ | 8         | 3  | 9  | 16 |     |   |  |  |  |
| 17        | 7  | 7  | -  | 2  | 7  | -  | -  | 9         | 9  | 1  | 9+ | 9+ | 8  | 1  | 9+ | 9+        | 9  | 9+ | 9+ | 9+   | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 2  | 9  | 9+ | 9+ | 6         | 5  | 9+ | 17 |     |   |  |  |  |
| 18        | 9  | 8  | -  | 8  | 9  | 8  | -  | 9+        | 9  | 3  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+   | 9+ | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | -  | 9  | 9+ | 5         | 6  | 7  | 9+ | 18  |   |  |  |  |
| 19        | 9  | 9  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+   | 9+ | 9  | 9+ | 9+        | 5  | 9+ | 9  | 9+ | -  | 6  | 9+ | 5         | 6  | 4  | 9  | 19  |   |  |  |  |
| 20        | 9  | 9  | 3  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+   | 9+ | 9  | 9+ | 9+        | 5  | 9+ | 9  | 9+ | -  | 2  | 9+ | 5         | 7  | 2  | 9  | 20  |   |  |  |  |
| 21        | 9  | 8  | 6  | 9+ | 9  | 8  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+   | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | -  | -  | 9+ | 5  | 4         | 2  | 9  | 21 |     |   |  |  |  |
| 22        | 9  | 8  | 8  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+   | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 8  | 9+ | -  | 2  | 9+ | 5         | -  | 7  | 9  | 22  |   |  |  |  |
| 23        | 9  | 7  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+   | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 8  | 9+ | -  | 2  | 9+ | 8         | -  | 6  | 6  | 23  |   |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC   | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |   |  |  |  |

Dec., Angola (Luanda), for SSN = Medium, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |     |
| 0         | 9  | 6  | 8  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 4  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 4  | 9  | 9+        | 9  | 3  | 8  | 9  | -  | 2  | 7  | 5         | -  | -  | 1  | 0   | 0  |  |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9+ | 5  | 8  | 9+        | 5  | 1  | 7  | 5  | -  | 1  | 4  | 5         | -  | -  | -  | 1   | 1  |  |  |     |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9  | 1  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 9  | 9+ | 2  | 8  | 9         | 7  | 6  | 8  | 1  | -  | -  | 4  | 5         | -  | 1  | -  | 2   | 2  |  |  |     |
| 3         | 9  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 1  | 9+ | 9+ | 9  | 5  | 9  | 7  | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | -  | 6  | 9         | 5  | 5  | 5  | -  | -  | -  | 2  | 5         | -  | -  | -  | 3   | 3  |  |  |     |
| 4         | 8  | -  | 9  | 9+ | 4  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | 6  | 9  | 7  | 9         | 9+ | 2  | 9+ | 9+ | 9+ | -  | 6  | 8         | 7  | 7  | 5  | -  | -  | -  | -  | 5         | -  | -  | -  | 4   | 4  |  |  |     |
| 5         | 7  | -  | 9  | 9  | -  | -  | 6  | 9         | -  | 9+ | 9+ | 8  | 5  | 8  | 9  | 8         | 9+ | 2  | 9+ | 9  | 9+ | -  | 9  | 5         | 8  | 9  | 8  | 2  | -  | -  | -  | 5         | -  | -  | -  | 5   | 5  |  |  |     |
| 6         | 2  | -  | 5  | 6  | -  | -  | -  | 8         | -  | 9  | 9+ | 4  | 2  | 8  | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9  | 8  | 9  | 3         | 5  | 9+ | 9  | 1  | -  | 1  | -  | 5         | 8  | 1  | -  | 6   | 6  |  |  |     |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 4         | -  | 8  | 8  | -  | -  | 6  | 9+ | 7         | 9+ | 9+ | 9  | 5  | 8  | 9+ | 9  | 6         | 5  | 9+ | 9  | 1  | 7  | 6  | -  | 5         | 9  | 3  | -  | 7   | 7  |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 3  | -  | -  | 3  | 9  | 3         | 9  | 9+ | 8  | 1  | 7  | 9+ | 9  | 7         | 9+ | 9+ | 9  | 1  | 6  | 3  | -  | 7         | 9  | 7  | -  | 8   | 8  |  |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 4         | 9  | 9  | 4  | 2  | 7  | 9+ | 9  | 9         | 4  | 9  | 9  | -  | 6  | 8  | -  | 8         | 8  | 9  | -  | 9   | 9  |  |  |     |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 4         | 8  | 7  | 6  | 1  | 8  | 8  | 8  | 9         | 4  | 9+ | 8  | 2  | 5  | 9  | 5  | 9         | 8  | 9  | -  | 10  | 10 |  |  |     |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 5         | 6  | 9  | 7  | 2  | 6  | 8  | 9  | 9         | 5  | 9+ | 9  | 9  | 6  | 9  | 9  | 9         | 8  | 9  | -  | 11  | 11 |  |  |     |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 7         | 5  | 9  | 8  | 5  | 4  | 9  | 9  | 9         | 7  | 9+ | 9  | 9  | 5  | 9+ | 9  | 9         | 9  | 8  | 4  | 12  | 12 |  |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | 3  | 6  | 9  | 8  | 4  | 9+ | 9+ | 9         | 7  | 9+ | 9+ | 9  | 7  | 9+ | 9  | 9         | 9  | 7  | 8  | 13  | 13 |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | -  | -  | -  | 9  | 9         | 3  | 9+ | 9+ | 9  | 4  | 9+ | 9+ | 9         | 7  | 9+ | 9+ | 9  | 8  | 9  | 9  | 9         | 9+ | 6  | 9  | 14  | 14 |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 6         | 7  | -  | -  | 6  | -  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 8  | 9  | 9+ | 4         | 8  | 3  | 9  | 15  | 15 |  |  |     |
| 16        | 2  | 1  | -  | -  | 2  | -  | -  | 9         | 8  | -  | 9+ | 9  | 8  | 1  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9+ | 5  | 9  | 9+ | 4         | 8  | 1  | 9  | 16  | 16 |  |  |     |
| 17        | 7  | 8  | -  | 2  | 7  | -  | -  | 9         | 9  | 1  | 9+ | 9+ | 8  | 2  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9  | 8  | 9+ | -  | 9  | 9+ | 9         | 4  | 1  | 9  | 17  | 17 |  |  |     |
| 18        | 9  | 8  | -  | 9+ | 9  | 7  | -  | 9+        | 9  | 3  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | -  | 8  | 9+ | 5         | 2  | 4  | 9  | 18  | 18 |  |  |     |
| 19        | 9  | 9  | -  | 9+ | 9  | 8  | 3  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | -  | 6  | 9+ | 5         | 1  | 6  | 9  | 19  | 19 |  |  |     |
| 20        | 9  | 9  | 2  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 5  | 9+ | 9  | 9+ | -  | 1  | 9+ | 5         | 1  | 4  | 9  | 20  | 20 |  |  |     |
| 21        | 9  | 8  | 6  | 9+ | 9  | 6  | 8  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 9  | 9+ | -  | -  | 9+ | 5         | -  | 3  | 9  | 21  | 21 |  |  |     |
| 22        | 9  | 8  | 7  | 9+ | 9  | 3  | 9  | 9+        | 9+ | 9  | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9  | 9  | 9+        | 5  | 9  | 9  | 9+ | -  | 1  | 8  | 7         | -  | 4  | 8  | 22  | 22 |  |  |     |
| 23        | 9  | 8  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+        | 5  | 6  | 9  | 9+ | -  | 1  | 8  | 6         | -  | 3  | 6  | 23  | 23 |  |  |     |

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA

Jan., Angola (Luanda), for SSN = Low, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  | UTC |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |     |
| 0         | 9  | 7  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 4  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 9  | 9  | 9+ | -  | 1         | 9  | 5  | -  | 5  | 6  | -  | -  | 1         | 5  | -  | -  | -   | 0  |  |  |     |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 9+        | 9+ | 9  | 9  | 8  | 9+ | -  | 3  | 8         | 5  | -  | 2  | 1  | -  | -  | -  | 5         | -  | -  | -  | 1   |    |  |  |     |
| 2         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9  | -  | 9+ | 9  | 8         | 9+ | 9+ | 9  | 9  | 9  | -  | -  | 7         | 5  | -  | 4  | -  | -  | -  | 5  | -         | -  | -  | 2  |     |    |  |  |     |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9         | 4  | 9+ | 9+ | 8  | 2  | 9+ | 5  | 5         | 9+ | 9  | 8  | 9+ | 9  | -  | -  | 4         | 5  | -  | 1  | -  | -  | -  | 5  | -         | -  | -  | 3  |     |    |  |  |     |
| 4         | 8  | -  | 9  | 9+ | 5  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | 6  | 9  | 2  | 7         | 9  | 2  | 8  | 8  | 7  | -  | 2  | 1         | 5  | -  | 1  | 1  | -  | -  | -  | 5         | -  | -  | -  | 4   |    |  |  |     |
| 5         | 8  | -  | 9  | 9  | 1  | -  | 7  | 9         | -  | 9  | 5  | 8  | 5  | 9  | 9  | 8         | 9  | 2  | 9+ | 8  | 7  | -  | 1  | -         | 5  | 1  | 2  | -  | -  | -  | 5  | -         | -  | -  | 5  |     |    |  |  |     |
| 6         | 2  | -  | 7  | 8  | -  | -  | -  | 9         | -  | 9  | 9+ | 5  | 2  | 8  | 9+ | 9         | 8  | 2  | 9+ | 8  | 5  | 3  | 9  | -         | 8  | 9  | 9  | -  | -  | -  | 5  | -         | -  | -  | 6  |     |    |  |  |     |
| 7         | -  | -  | -  | 2  | -  | -  | -  | 5         | -  | 8  | 9  | 1  | -  | 7  | 9+ | 6         | 9+ | 9+ | 9  | 7  | 9  | 9+ | 9  | 2         | 5  | 9+ | 9  | 2  | -  | 2  | -  | 5         | 8  | -  | -  | 7   |    |  |  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 5  | -  | -  | 3  | 9+ | 4         | 9  | 9+ | 9  | 6  | 8  | 9  | 9  | -         | 5  | 9  | 9  | 2  | 2  | -  | -  | 4         | 7  | -  | -  | 8   |    |  |  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 1  | -  | -  | -  | 9  | 4         | 9  | 9+ | 9  | 4  | 4  | 9  | 9  | 4         | 4  | 9  | 9  | -  | 3  | 6  | -  | 6         | 5  | 7  | -  | 9   |    |  |  |     |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 4         | 8  | 9  | 8  | 2  | 8  | 8  | 9  | 9         | 4  | 9  | 9  | -  | 2  | 8  | -  | 8         | 6  | 8  | -  | 10  |    |  |  |     |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 5         | 7  | 9  | 6  | 4  | 7  | 8  | 9  | 9         | 4  | 9  | 9  | 6  | 2  | 9  | 6  | 9         | 8  | 7  | -  | 11  |    |  |  |     |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 7         | 6  | 8  | 7  | 6  | 5  | 8  | 9  | 9         | 6  | 9+ | 9  | 9  | 1  | 9  | 9  | 9         | 8  | 6  | -  | 12  |    |  |  |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 6  | 6  | 9+ | 8  | 4  | 9  | 9+ | 9         | 5  | 9+ | 9+ | 9  | 4  | 8  | 9  | 9         | 8  | 2  | 2  | 13  |    |  |  |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 1  | -  | -  | 9+ | 9+        | 5  | 9+ | 9+ | 9  | 4  | 9  | 9+ | 9         | 5  | 9+ | 9  | 9  | 3  | 6  | 9  | 9         | 8  | -  | 6  | 14  |    |  |  |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 6         | 7  | -  | -  | 9  | -  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9         | 5  | 9+ | 8  | 9  | 2  | 7  | 9  | 9         | 5  | -  | 8  | 15  |    |  |  |     |
| 16        | 2  | 1  | -  | -  | 2  | -  | -  | 9         | 8  | -  | 6  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 5  | 9+ | 6  | 9+ | -  | 6  | 9  | 8         | 4  | -  | 8  | 16  |    |  |  |     |
| 17        | 4  | 8  | -  | 3  | 7  | -  | -  | 8         | 9  | 1  | 9+ | 9  | 9  | 2  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 5  | 9+ | 1  | 9+ | 7  | 4  | 9  | 8         | 1  | -  | 6  | 17  |    |  |  |     |
| 18        | 6  | 8  | -  | 8  | 8  | 7  | -  | 9         | 9  | 3  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 5  | 9+ | 9  | 9+ | 3  | 1  | 9  | 8         | -  | -  | 6  | 18  |    |  |  |     |
| 19        | 8  | 9  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 8  | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9  | 9  | 9+ | -  | -  | 9  | 8         | -  | -  | 6  | 19  |    |  |  |     |
| 20        | 8  | 9  | 2  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 8  | 7  | 9+        | 5  | 8  | 9  | 9+ | -  | -  | 8  | 7         | -  | 3  | 5  | 20  |    |  |  |     |
| 21        | 8  | 8  | 6  | 9+ | 9  | 8  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 7  | 2  | 9+        | 5  | 3  | 9  | 9+ | -  | -  | 6  | 5         | -  | -  | 8  | 21  |    |  |  |     |
| 22        | 8  | 8  | 8  | 9+ | 9  | 3  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 5  | 5  | 9+        | 9  | -  | 8  | 9+ | -  | -  | 1  | 5         | -  | -  | 6  | 22  |    |  |  |     |
| 23        | 9  | 8  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 1  | 4         | 9+ | 5  | -  | 7  | 9+ | -  | -  | 3         | 5  | -  | -  | 2   | 23 |  |  |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |  |  |     |

**Feb., Angola (Luanda), for SSN = Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 9  | 6  | 9  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 7  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 5  | 5  | 9+        | 8  | 4  | 9  | 9  | -  | -  | 5  | 5         | -  | -  | 1  | 0   |  |  |  |  |
| 1         | 9  | 1  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 9+ | 4  | 8  | 7  | 7         | 1  | 8  | 7  | -  | 1  | -  | 5  | -         | -  | -  | 1  |     |  |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 9+ | 1  | 5  | 9  | 8         | 3  | 8  | 1  | -  | -  | 1  | 5  | -         | 1  | -  | 2  |     |  |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 4  | 9+ | 9+ | 8  | 1  | 9+ | 8  | 5         | 9+ | 9+ | 9  | 9+ | 9  | -  | -  | 8         | 5  | -  | 6  | -  | -  | -  | 5  | -         | -  | -  | 3  |     |  |  |  |  |
| 4         | 9  | -  | 9  | 9+ | 5  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | 5  | 9  | 2  | 7         | 9+ | 2  | 7  | 9  | 9  | -  | 2  | 3         | 5  | -  | 1  | -  | -  | -  | 5  | -         | -  | -  | 4  |     |  |  |  |  |
| 5         | 7  | -  | 9  | 9+ | -  | -  | 7  | 9         | -  | 9+ | 5  | 7  | 5  | 9  | 9  | 7         | 9  | 2  | 9  | 7  | 8  | -  | 8  | -         | 5  | 3  | 8  | -  | -  | -  | 5  | -         | -  | -  | 5  |     |  |  |  |  |
| 6         | 2  | -  | 8  | 8  | -  | -  | 4  | 8         | -  | 9  | 9+ | 4  | 2  | 8  | 9+ | 6         | 8  | 9+ | 9+ | 9  | 5  | 8  | 9  | -         | 5  | 9+ | 9  | -  | -  | 1  | -  | 5         | 1  | 1  | -  | 6   |  |  |  |  |
| 7         | -  | -  | -  | 2  | -  | -  | -  | 5         | -  | 7  | 9  | 1  | -  | 6  | 9+ | 5         | 9+ | 9+ | 9  | 8  | 9  | 9  | 9  | 6         | 5  | 9+ | 9  | 3  | 1  | 5  | -  | 5         | 8  | 4  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 5  | -  | -  | 4  | 9  | 5*        | 9  | 9+ | 8  | 7  | 9  | 9+ | 9  | -         | 9+ | 9  | 9  | 4  | 5  | 3  | -  | 5         | 8  | 6  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | -  | -  | -  | -  | 8  | 3         | 9  | 9+ | 6  | 2  | 5  | 9  | 9  | 8         | 5  | 9  | 8  | -  | 5  | 8  | -  | 9         | 7  | 9  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 4         | 8  | 9  | 6  | 2  | 7  | 8  | 9  | 9         | 4  | 9+ | 8  | 1  | 6  | 9  | -  | 9         | 8  | 8  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 5         | 5  | 9  | 7  | 3  | 5  | 8  | 9  | 9         | 5  | 9+ | 9  | 8  | 4  | 9  | 6  | 4         | 9  | 8  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 7         | 6  | 9  | 8  | 6  | 4  | 9  | 9  | 9         | 6  | 9+ | 9  | 9  | 3  | 9  | 9  | 4         | 9  | 7  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 4  | 9+ | 9  | 8  | 2  | 9  | 9+ | 9         | 6  | 9+ | 9+ | 9  | 3  | 9  | 9  | 4         | 9  | 6  | 3  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 1  | -  | -  | 9+ | 9+        | 3  | 9+ | 9+ | 9  | 3  | 9  | 9+ | 9         | 7  | 9+ | 9+ | 9  | 7  | 9  | 9  | 4         | 9+ | 5  | 6  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 5         | 7  | -  | -  | 8  | -  | -  | 9+ | 9+        | 4  | 9+ | 9+ | 9+ | 7  | 9  | 9+ | 9         | 6  | 9+ | 9+ | 9  | 8  | 8  | 9  | 4         | 8  | 2  | 8  | 15  |  |  |  |  |
| 16        | 1  | 1  | -  | -  | 6  | -  | -  | 8         | 8  | -  | 6  | 9  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 5  | 8  | 9  | 5         | 4  | 1  | 9  | 16  |  |  |  |  |
| 17        | 5  | 8  | -  | 2  | 8  | -  | -  | 9         | 9  | 1  | 9+ | 9+ | 8  | 1  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 5  | 9+ | 9  | 9+ | 1  | 6  | 9+ | 5         | 1  | -  | 9  | 17  |  |  |  |  |
| 18        | 8  | 8  | -  | 8  | 8  | 8  | -  | 9+        | 9  | 4  | 9+ | 9+ | 9  | 4  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | -  | 4  | 9+ | 5         | 6  | -  | 9  | 18  |  |  |  |  |
| 19        | 9  | 9  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | -  | 3  | 9+ | 5         | 2  | 2  | 9  | 19  |  |  |  |  |
| 20        | 9  | 9  | 4  | 9+ | 9  | 8  | 4  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 9  | 9+ | -  | -  | 9  | 5         | 2  | 2  | 9  | 20  |  |  |  |  |
| 21        | 9  | 8  | 8  | 9+ | 9  | 8  | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 7  | 9+ | 9  | 7  | 9+        | 5  | 9+ | 9  | 9+ | -  | -  | 9  | 5         | -  | 2  | 9  | 21  |  |  |  |  |
| 22        | 9  | 8  | 9  | 9+ | 9  | 1  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 2  | 9+        | 5  | 9  | 9  | 9+ | -  | -  | 9  | 6         | -  | 1  | 9  | 22  |  |  |  |  |
| 23        | 9  | 7  | 9  | 9+ | 9  | -  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 7  | 3  | 9+        | 9  | 6  | 9  | 9+ | -  | -  | 8  | 5         | -  | 1  | 6  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**Mar., Angola (Luanda), for SSN = Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |    |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |    |
| 0         | 9  | 6  | 9  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 8  | 9+ | 9  | 9  | 9  | 9+ | -         | -  | 8  | 5  | 1  | 5  | 5  | 0   |    |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 7         | 8  | 9+ | 9  | 4  | 9  | 9  | -         | 4  | 4  | 5  | -  | 3  | -  | 1   |    |
| 2         | 9+ | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 1         | 7  | 9+ | 9  | 6  | 9  | 5  | -         | -  | 7  | 5  | -  | 4  | -  | 2   |    |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9  | -  | 9+ | 8         | 5  | 9+ | 9+ | 8  | 9  | 9+ | -         | -  | 8  | 8  | -  | 7  | -  | -         | -  | 5  | 5  | -  | 1  | -  | 3   |    |
| 4         | 9  | -  | 9  | 9+ | 5  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | 5  | 9  | 5         | 8  | 9+ | 2  | 8  | 8  | 9+ | -         | 4  | 7  | 6  | 1  | 2  | 1  | -         | -  | -  | 5  | -  | -  | -  | 4   |    |
| 5         | 7  | -  | 9  | 9  | -  | -  | 7  | 9         | -  | 9  | 9+ | 7  | 5  | 9  | 9+        | 7  | 9  | 2  | 9+ | 9  | 9  | -         | 9  | 1  | 7  | 8  | 9  | -  | -         | -  | 5  | -  | -  | -  | 5  |     |    |
| 6         | 1  | -  | 8  | 8  | -  | -  | 4  | 8         | -  | 9+ | 9+ | 4  | 2  | 8  | 9+        | 6  | 8  | 9+ | 9+ | 9+ | 9  | 9         | 9  | 1* | 5  | 9+ | 9  | -  | -         | 6  | -  | 5  | 6  | 4  | -  | 6   |    |
| 7         | -  | -  | 1  | 3  | -  | -  | -  | 4         | -  | 8  | 9  | -  | -  | 6  | 9+        | 4  | 9+ | 9+ | 9  | 9  | 9  | 9         | 9  | 7  | 9+ | 9+ | 9  | 3  | 2         | 8  | 1  | 5  | 7  | 6  | -  | 7   |    |
| 8         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 6  | 8  | -  | -  | 2  | 9+        | 4* | 9+ | 9+ | 8  | 8  | 8  | 9+        | 9  | 1  | 9+ | 9+ | 9  | 3  | 4         | 6  | -  | 5  | 7  | 8  | -  | 8   |    |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 2  | -  | -  | -  | 8         | 3  | 9  | 9+ | 7  | 2  | 8  | 9         | 8  | 8  | 5  | 9+ | 9  | -  | 6         | 9  | -  | 8  | 8  | 9  | -  | 9   |    |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5         | 4  | 8  | 9  | 5  | 2  | 7  | 9         | 9  | 9+ | 4  | 9+ | 9  | 5  | 6         | 9  | 5  | 9  | 9  | 9  | -  | 10  |    |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 5  | 6  | 5  | 5  | 3  | 6  | 9         | 9  | 9  | 4  | 9  | 9  | 8  | 6         | 9  | 9  | 4  | 9  | 9  | -  | 11  |    |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 7  | 4  | 7  | 8  | 6  | 4  | 9         | 9  | 9  | 4  | 9+ | 9  | 9  | 6         | 9  | 9  | 4  | 9  | 9  | -  | 12  |    |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 8  | 4  | 9  | 9  | 8  | 3  | 9+        | 9+ | 9  | 4  | 9+ | 9+ | 9  | 5         | 9+ | 9  | 4  | 9  | 9  | 1  | 13  |    |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 5  | -  | -  | 9         | 9  | 2  | 9+ | 9+ | 9  | 5  | 9+        | 9+ | 9  | 5  | 9+ | 9+ | 8  | 7         | 9  | 9  | 4  | 9+ | 7  | 4  | 14  |    |
| 15        | -  | -  | -  | -  | -  | -  | -  | 4         | 7  | -  | -  | 8  | -  | -  | 9+        | 9+ | 5  | 9+ | 9+ | 9+ | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 7         | 8  | 9  | 5  | 9  | 7  | 8  | 15  |    |
| 16        | -  | 1  | -  | -  | 2  | -  | -  | 8         | 8  | -  | 5  | 8  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8         | 6  | 9  | 5  | 9+ | 7  | 8  | 16  |    |
| 17        | 4  | 7  | -  | 1  | 6  | 1  | -  | 9         | 9  | 1  | 9+ | 9  | 9  | 1  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 6         | 7  | 9+ | 9+ | 8  | 5  | 9  | 17  |    |
| 18        | 8  | 8  | -  | 8  | 8  | 8  | -  | 9+        | 9  | 4  | 9+ | 9+ | 9  | 2  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 4         | 7  | 9  | 9+ | 7  | 6  | 9  | 18  |    |
| 19        | 9  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9  | 6  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | -         | 8  | 9+ | 5  | 5  | 2  | 9  | 19  |    |
| 20        | 9  | 9  | 3  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 5  | 9+ | 9  | 9+        | -  | 5  | 9+ | 5  | 6  | 5  | 9   | 20 |
| 21        | 9  | 8  | 8  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 8  | 9+ | 5  | 9+ | 8  | 9+ | 1         | -  | 9  | 9  | 4  | 2  | 9  | 21  |    |
| 22        | 8  | 8  | 9  | 9+ | 9  | 8  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 4  | 9+ | 5  | 9+ | 8  | 9+ | 1         | -  | 9  | 8  | 1  | 5  | 9  | 22  |    |
| 23        | 8  | 8  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9         | 8  | 9+ | 9+ | 9+ | 8  | 9+ | -         | -  | 9  | 7  | -  | 5  | 9  | 23  |    |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |    |

**Apr., Angola (Luanda), for SSN = Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 9  | 5  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 8  | 9  | 9+        | 8  | 7  | 8  | 9+ | -  | 2  | 6  | 5         | -  | 2  | 5  | 0   |  |  |  |  |
| 1         | 8  | 2  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 8  | 9+ | 5  | 8  | 9+        | 8  | 8  | 8  | 9+ | -  | 4  | 2  | 5         | -  | -  | 5  | 1   |  |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 8  | 9+ | -  | 6  | 9         | 7  | 6  | 8  | 8  | -  | -  | 6  | 5         | -  | 1  | -  | 2   |  |  |  |  |
| 3         | 8  | -  | 9  | 9+ | 6  | -  | 9  | 9         | 3  | 9+ | 9+ | 9  | -  | 9+ | 8  | 6         | 9+ | 9+ | 8  | 9  | 9+ | -  | 1  | 9         | 6  | 2  | 4  | 8  | -  | -  | 2  | 5         | -  | -  | 2  | 3   |  |  |  |  |
| 4         | 8  | -  | 8  | 9+ | 3  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 2  | 9  | 6  | 8         | 9+ | 3  | 9  | 6  | 9+ | -  | 5  | 3         | 6  | 5  | 4  | 3  | -  | -  | -  | 5         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 5  | -  | 9  | 9  | -  | -  | 7  | 9         | -  | 9  | 5  | 6  | 5  | 9  | 9+ | 7         | 8  | 2  | 9+ | 8  | 9  | 1  | 9  | -         | 8  | 9  | 8  | 2  | -  | -  | -  | 5         | -  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 6  | 8  | -  | -  | 3  | 7         | -  | 9  | 9+ | 2  | 2  | 8  | 9+ | 5         | 9  | 9+ | 9+ | 9+ | 9  | 8  | 9  | -         | 5  | 9  | 9  | -  | -  | 8  | -  | 5         | 8  | 6  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 1  | 2  | -  | -  | -  | 2         | -  | 8  | 9  | -  | -  | 6  | 9+ | 5*        | 9+ | 9+ | 9  | 9  | 9  | 9  | 9  | 6         | 9+ | 9+ | 9  | 4  | 1  | 9  | -  | 9         | 8  | 8  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 5  | -  | -  | 1  | 9  | 5*        | 9  | 9+ | 7  | 8  | 9  | 9+ | 9  | 3         | 9+ | 9  | 9  | 4  | 1  | 9  | -  | 8         | 9  | 9  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 2  | -  | -  | -  | 8  | 4*        | 9  | 9+ | 4  | 4  | 9  | 9  | 9  | 7         | 9+ | 9  | 9  | 1  | 2  | 9  | -  | 9         | 8  | 9  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 4         | 8  | 4  | 7  | 4  | 7  | 9  | 9  | 9+        | 5  | 9  | 9  | 6  | 4  | 9  | 7  | 4         | 8  | 9  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 5         | 7  | 6  | 7  | 5  | 5  | 9  | 9  | 9         | 4  | 9  | 9  | 6  | 4  | 9  | 8  | 4         | 8  | 9  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 7         | 5  | 7  | 8  | 7  | 4  | 9  | 9  | 9         | 4  | 9+ | 9  | 8  | 4  | 9  | 8  | 4         | 9  | 9  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | 4  | 9  | 9  | 8  | 4  | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 8  | 5  | 9  | 9  | 4         | 9  | 9  | -  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 5  | -  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9  | 4  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 8  | 9  | 9  | 9  | 5         | 9+ | 7  | -  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 4         | 7  | -  | -  | 8  | 6  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 9  | 9  | 8  | 9  | 5         | 9  | 6  | -  | 15  |  |  |  |  |
| 16        | -  | 4  | -  | -  | 2  | -  | -  | 7         | 8  | -  | 6  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9  | 8  | 9  | 9+        | 9+ | 5  | 4  | 16  |  |  |  |  |
| 17        | 3  | 7  | -  | 1  | 6  | 4  | -  | 9         | 9  | 1  | 9+ | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9  | 5  | 9+ | 9+        | 9  | 5  | 9  | 17  |  |  |  |  |
| 18        | 7  | 8  | -  | 7  | 8  | 7  | -  | 9         | 9  | 3  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 8  | 4  | 9  | 5         | 2  | 4  | 9  | 18  |  |  |  |  |
| 19        | 8  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 4  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 9  | 5  | 4  | 9  | 5         | -  | -  | 9  | 19  |  |  |  |  |
| 20        | 9  | 9  | 3  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9  | 9+        | 9+ | 9  | 8  | 9+ | 1  | -  | 9  | 8         | -  | -  | 9  | 20  |  |  |  |  |
| 21        | 8  | 8  | 7  | 9+ | 9  | 8  | 4  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 8  | 8  | 9+        | 9+ | 9+ | 8  | 9+ | -  | -  | 9  | 7         | -  | 1  | 9  | 21  |  |  |  |  |
| 22        | 8  | 8  | 9  | 9+ | 9  | 8  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 8  | 8  | 9+        | 5  | 9+ | 9  | 9+ | -  | -  | 9  | 7         | -  | 5  | 9  | 22  |  |  |  |  |
| 23        | 8  | 8  | 9  | 9+ | 9  | 1  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9  | 9  | 8  | 9+ | -  | 4  | 8  | 6         | -  | 4  | 8  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**May, Angola (Luanda), for SSN = Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |   |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|---|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |   |  |  |  |
| 0         | 8  | 5  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 1  | 8  | 8         | 5  | 6  | 2  | 8  | -  | -  | -  | 5         | -  | -  | -  | 0   |   |  |  |  |
| 1         | 8  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 6  | 9+ | 1  | 6  | 6         | 6  | 7  | 1  | 7  | -  | -  | -  | 5         | -  | -  | -  | 1   |   |  |  |  |
| 2         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9+ | 1  | 9  | 8  | 6         | 9+ | 9  | 9  | 8  | 9+ | -  | 1  | 8         | 6  | 2  | 2  | 8  | -  | -  | -  | 5         | -  | -  | -  | 2   |   |  |  |  |
| 3         | 8  | -  | 9  | 9+ | 2  | -  | 9  | 9         | 1  | 9+ | 9+ | 9  | -  | 9  | 4  | 3         | 9+ | 4  | 7  | 5  | 9+ | -  | -  | 4         | 6  | -  | -  | 4  | -  | -  | -  | 6         | -  | -  | -  | 3   |   |  |  |  |
| 4         | 7  | -  | 9  | 9+ | 2  | -  | 8  | 8         | -  | 9+ | 5  | 8  | 2  | 9  | 5  | 8         | 9  | 3  | 9+ | 4  | 9  | -  | 5  | -         | 6  | 4  | 3  | -  | -  | -  | -  | 6         | -  | -  | -  | 4   |   |  |  |  |
| 5         | 4  | -  | 9  | 9  | -  | -  | 7  | 9         | -  | 9  | 5  | 6  | 4  | 9  | 9+ | 7         | 8  | 2  | 9+ | 8  | 9  | 1  | 9  | -         | 7  | 9+ | 9  | 1  | -  | -  | -  | 5         | -  | -  | -  | 5   |   |  |  |  |
| 6         | -  | -  | 7  | 8  | -  | -  | 2  | 6         | -  | 9  | 9+ | 1  | 1  | 8  | 9+ | 4         | 9  | 9+ | 9+ | 9+ | 9+ | 8  | 8  | -         | 5  | 9  | 9  | -  | -  | 8  | -  | 5         | 5  | 2  | -  | 6   |   |  |  |  |
| 7         | -  | -  | 1  | 1  | -  | -  | -  | 1         | -  | 8  | 9  | -  | -  | 6  | 9+ | 2         | 9+ | 9+ | 7  | 9  | 9+ | 9  | 8  | 7         | 5  | 9  | 9  | 2  | -  | 9  | 1  | 8         | 9  | 7  | -  | 7   |   |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 5  | 5  | -  | -  | 1  | 9  | 5*        | 9  | 9+ | 6  | 8  | 9  | 8  | 9  | 6         | 5  | 9  | 9  | 4  | -  | 9  | -  | 9         | 9  | 8  | -  | 8   |   |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 1  | -  | -  | -  | 8  | 4*        | 9+ | 9  | 3  | 6  | 8  | 8  | 9  | 8         | 9  | 9+ | 9  | 9  | 2  | -  | 9  | -         | 9  | 8  | 8  | -   | 9 |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 3         | 9  | 9  | 3  | 5  | 7  | 9  | 9  | 9         | 5  | 9  | 9  | 7  | -  | 9  | 2  | 9         | 8  | 9  | -  | 10  |   |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 5         | 7  | 9  | 4  | 6  | 5  | 8  | 9  | 9         | 5  | 9  | 9  | 6  | 1  | 9  | 6  | 4         | 9  | 9  | -  | 11  |   |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 7         | 6  | 1  | 7  | 8  | 4  | 8  | 9  | 9         | 5  | 9  | 9  | 7  | 1  | 9  | 8  | 4         | 9  | 9  | -  | 12  |   |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | 4  | 6  | 8  | 8  | 4  | 8  | 9+ | 9         | 5  | 9+ | 9+ | 6  | 1  | 9  | 8  | 5         | 9  | 8  | -  | 13  |   |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 1  | -  | -  | 9  | 9         | 5  | 9+ | 9  | 9  | 6  | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 6  | 2  | 9  | 8  | 5         | 9+ | 2  | -  | 14  |   |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 2         | 7  | -  | -  | 5  | 7  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 8  | 4  | 6  | 9  | 9+        | 9+ | -  | -  | 15  |   |  |  |  |
| 16        | -  | 4  | -  | -  | 3  | -  | -  | 6         | 8  | -  | 5  | 8  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 9  | 5  | 1  | 9  | 9+        | 9+ | -  | 1  | 16  |   |  |  |  |
| 17        | 2  | 7  | -  | 1  | 6  | 7  | -  | 8         | 9  | 1  | 8  | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 8  | 9         | 9+ | 9+ | 7  | 9  | 7  | -  | 9  | 9         | 8  | -  | 6  | 17  |   |  |  |  |
| 18        | 6  | 8  | -  | 7  | 8  | 7  | -  | 9         | 9+ | 4  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 8  | 9+        | 9+ | 9+ | 8  | 9  | 8  | -  | 9  | 5         | 1  | -  | 9  | 18  |   |  |  |  |
| 19        | 7  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 6  | 9+        | 9+ | 8  | 6  | 9  | 6  | -  | 9  | 5         | -  | -  | 9  | 19  |   |  |  |  |
| 20        | 8  | 9  | 4  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 5  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 1  | 9+        | 9+ | 8  | 5  | 9+ | 2  | -  | 6  | 5         | -  | -  | 8  | 20  |   |  |  |  |
| 21        | 8  | 8  | 8  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 7  | 9+ | 8  | 6  | 9+        | 8  | 5  | 8  | 9+ | 1  | -  | 3  | 5         | -  | -  | 8  | 21  |   |  |  |  |
| 22        | 8  | 8  | 9  | 9+ | 9  | 8  | 5  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 6  | 9  | 9+        | 5  | 4  | 5  | 9+ | -  | 1  | 2  | 5         | -  | -  | 4  | 22  |   |  |  |  |
| 23        | 8  | 8  | 9  | 9+ | 9  | 8  | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 3  | 8  | 9         | 5  | 2  | 4  | 9  | -  | -  | -  | 5         | -  | -  | -  | 23  |   |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |   |  |  |  |

**Jun., Angola (Luanda), for SSN = Low, Sigs in S-Units. By N6BV, ARRL.**

|     | 80 Meters |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |
|-----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|
| UTC | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |
| 0   | 7         | 5  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 7  | 9+ | -         | 4  | 8  | 5  | 4  | 3  | 8  | -         | -  | -  | 5  | -  | -  | -  | 0   |
| 1   | 8         | 1  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9         | 8  | 9+ | 2  | 9+ | 5  | 9+ | -         | 3  | 5  | 6  | 4  | 1  | 6  | -         | -  | -  | 5  | -  | -  | -  | 1   |
| 2   | 8         | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 4  | 9+ | 9+ | 9  | 7  | 9  | 6         | 5  | 9+ | 8  | 8  | 5  | 9+ | -         | -  | 5  | 6  | -  | 1  | 6  | -         | -  | -  | 5  | -  | -  | -  | 2   |
| 3   | 8         | -  | 9  | 9+ | 5  | -  | 9  | 9         | -  | 9+ | 9+ | 9  | -  | 9  | 2         | 2  | 9  | 3  | 5  | 2  | 9  | -         | -  | 1  | 6  | -  | -  | 1  | -         | -  | -  | 6  | -  | -  | -  | 3   |
| 4   | 7         | -  | 9  | 9+ | 2  | -  | 8  | 8         | -  | 9+ | 9+ | 8  | 1  | 9  | 4         | 6  | 7  | 9  | 9  | 1  | 5  | -         | 1  | -  | 6  | 2  | -  | -  | -         | -  | -  | 6  | -  | -  | -  | 4   |
| 5   | 3         | -  | 9  | 9  | -  | -  | 7  | 8         | -  | 9  | 5  | 6  | 5  | 9  | 9+        | 7  | 4  | 2  | 9+ | 9  | 7  | 1         | 8  | -  | 6  | 9  | 4  | -  | -         | -  | -  | 5  | -  | -  | -  | 5   |
| 6   | -         | -  | 7  | 8  | -  | -  | 2  | 6         | -  | 9  | 9+ | -  | 1  | 8  | 9+        | 6  | 8  | 9+ | 9  | 9+ | 9  | 8         | 9  | -  | 5  | 9+ | 9  | -  | -         | 5  | -  | 5  | 1  | 3  | -  | 6   |
| 7   | -         | -  | 2  | 1  | -  | -  | -  | 1         | -  | 8  | 8  | -  | -  | 6  | 9+        | 4  | 9+ | 9+ | 9  | 9  | 9+ | 8         | 8  | 5  | 5  | 9  | 9  | 4  | -         | 8  | -  | 8  | 6  | 5  | -  | 7   |
| 8   | -         | -  | -  | -  | -  | -  | -  | -         | -  | 7  | 5  | -  | -  | 1  | 9         | 3  | 9+ | 9+ | 7  | 8  | 9  | 8         | 8  | 6  | 5  | 9  | 9  | 1  | -         | 8  | -  | 8  | 8  | 4  | -  | 8   |
| 9   | -         | -  | -  | -  | -  | -  | -  | -         | -  | 1  | -  | -  | -  | -  | 8         | 4  | 9+ | 9  | 5  | 8  | 8  | 8         | 9  | 6  | 5  | 8  | 9  | 4  | 1         | 8  | -  | 7  | 9  | 5  | -  | 9   |
| 10  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 4  | 9  | 9  | 6  | 6  | 7  | 8         | 9  | 7  | 5  | 9  | 9  | 7  | 2         | 9  | -  | 8  | 9  | 7  | -  | 10  |
| 11  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 5  | 8  | 9  | 7  | 8  | 6  | 8         | 9  | 9  | 5  | 9  | 9  | 6  | 2         | 9  | 4  | 8  | 9  | 9  | -  | 11  |
| 12  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7         | 8  | 6  | 9  | 8  | 8  | 5  | 8         | 9+ | 9  | 5  | 9  | 9  | 7  | 1         | 9  | 5  | 9  | 9  | 9  | -  | 12  |
| 13  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9         | 9  | 5  | 9  | 9  | 8  | 3  | 8         | 9+ | 9  | 5  | 9+ | 9+ | 7  | 1         | 9  | 4  | 9  | 9  | 7  | 1  | 13  |
| 14  | -         | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 2  | -  | -  | 9         | 9+ | 6  | 9+ | 9  | 9  | 5  | 9         | 9+ | 9  | 5  | 9+ | 9  | 7  | 1         | 7  | 6  | 9  | 9  | 1  | 1  | 14  |
| 15  | -         | -  | -  | -  | -  | -  | -  | 2         | 8  | -  | -  | 5  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 5  | 9+ | 7  | 8  | 1         | 3  | 9  | 8  | 9  | -  | 2  | 15  |
| 16  | -         | 5  | -  | -  | 3  | -  | -  | 5         | 8  | -  | 2  | 8  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 9+        | 9  | 9  | 9+ | 9+ | 4  | 9  | 2         | -  | 9  | 9  | 6  | -  | 4  | 16  |
| 17  | 1         | 7  | -  | 1  | 6  | 7  | -  | 8         | 9  | 2  | 8  | 9  | 9  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9+        | 8  | 9  | 9+ | 9+ | 6  | 9  | 3         | -  | 9  | 9  | 2  | -  | 5  | 17  |
| 18  | 4         | 8  | -  | 7  | 8  | 8  | -  | 9         | 9+ | 6  | 9+ | 9+ | 9  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 5  | 9+ | 9+ | 9  | 8  | 9  | 5         | -  | 9  | 9+ | -  | -  | 7  | 18  |
| 19  | 6         | 8  | 2  | 9+ | 9  | 8  | -  | 9         | 9+ | 9  | 9+ | 9+ | 9  | 1  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 2  | 9+ | 9+ | 8  | 6  | 9  | 2         | -  | 8  | 5  | -  | -  | 8  | 19  |
| 20  | 7         | 9  | 5  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 4  | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9         | -  | 9+ | 9  | 6  | 5  | 9  | -         | -  | 5  | 5  | -  | -  | 3  | 20  |
| 21  | 8         | 8  | 8  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 2  | 9+ | 7         | 1  | 9  | 5  | 2  | 6  | 9+ | -         | -  | -  | 5  | -  | -  | 1  | 21  |
| 22  | 8         | 8  | 9  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 6  | 9+ | 4         | 8  | 8  | 9  | 1  | 6  | 9  | -         | -  | -  | 5  | -  | -  | 2  | 22  |
| 23  | 8         | 8  | 9  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 2         | 7  | 9  | 5  | 4  | 5  | 9  | -         | -  | -  | 5  | -  | -  | 1  | 23  |
|     | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |

**Jul., Angola (Luanda), for SSN = Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 8  | 5  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9  | 9         | 9+ | 9  | 9+ | 6  | 9+ | -  | 3  | 6         | 6  | 1  | -  | 7  | -  | -  | -  | 5         | -  | -  | -  | 0   |  |  |  |  |
| 1         | 8  | -  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 7  | 9         | 9+ | 9  | 9+ | 6  | 9+ | -  | 2  | 4         | 6  | 2  | -  | 5  | -  | -  | -  | 5         | -  | -  | -  | 1   |  |  |  |  |
| 2         | 7  | -  | 9  | 9+ | 9  | -  | 9  | 9         | 4  | 9+ | 9+ | 9  | -  | 9+ | 5  | 5         | 9+ | 7  | 8  | 5  | 9+ | -  | -  | 6         | 6  | -  | -  | 4  | -  | -  | -  | 5         | -  | -  | -  | 2   |  |  |  |  |
| 3         | 6  | -  | 9  | 9+ | 3  | -  | 9  | 9         | 1  | 9+ | 9+ | 8  | -  | 9+ | 2  | 2         | 9  | 3  | 5  | 2  | 9  | -  | -  | 1         | 6  | -  | -  | 1  | -  | -  | -  | 6         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 6  | -  | 9  | 9+ | 1  | -  | 8  | 8         | -  | 9+ | 9  | 8  | 3  | 9  | 4  | 7         | 7  | 9  | 8  | 1  | 8  | -  | 1  | -         | 6  | 1  | -  | -  | -  | -  | -  | 6         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 2  | -  | 8  | 9  | -  | -  | 7  | 8         | -  | 9  | 5  | 5  | 4  | 9  | 9+ | 7         | 5  | 2  | 9+ | 8  | 8  | -  | 8  | -         | 6  | 9  | 3  | -  | -  | -  | -  | 5         | -  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 7  | 7  | -  | -  | 2  | 7         | -  | 9  | 9+ | -  | 1  | 8  | 9+ | 4         | 8  | 9+ | 9+ | 9+ | 9  | 8  | 9  | -         | 5  | 9  | 8  | -  | -  | 3  | -  | 5         | 1  | 2  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 3  | 1  | -  | -  | -  | 1         | -  | 8  | 8  | -  | -  | 6  | 9+ | 4         | 9+ | 9+ | 8  | 9  | 9  | 7  | 9  | 5         | 5  | 9  | 9  | 1  | -  | 8  | -  | 8         | 6  | 3  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 6  | 4  | -  | -  | 1  | 9  | 3         | 9  | 9+ | 7  | 8  | 9  | 7  | 9  | 4         | 5  | 9  | 9  | 1  | -  | 8  | -  | 7         | 7  | 5  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 2  | -  | -  | -  | -  | 9  | 4         | 9  | 9  | 6  | 7  | 8  | 8  | 9  | 3         | 5  | 8  | 9  | 1  | -  | 9  | -  | 5         | 8  | 3  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 4         | 9  | 9  | 5  | 6  | 8  | 8  | 9  | 5         | 5  | 9  | 9  | 6  | -  | 9  | -  | 7         | 8  | 5  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 6         | 7  | 9  | 6  | 8  | 6  | 8  | 9  | 8         | 5  | 9  | 9  | 7  | 1  | 9  | 1  | 8         | 9  | 5  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 8         | 5  | 9  | 8  | 9  | 5  | 8  | 9+ | 8         | 5  | 9  | 9  | 7  | -  | 9  | 2  | 7         | 9  | 6  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 6  | 2  | 9  | 8  | 5  | 8  | 9+ | 9         | 5  | 9+ | 9+ | 6  | -  | 8  | 1  | 6         | 9  | 5  | -  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 3  | -  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9  | 6  | 8  | 9+ | 9         | 5  | 9+ | 9  | 7  | -  | 8  | 4  | 7         | 9  | -  | -  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 2         | 8  | -  | -  | 6  | 8  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9         | 5  | 9+ | 6  | 7  | -  | 2  | 7  | 8         | 9  | -  | 1  | 15  |  |  |  |  |
| 16        | -  | 5  | -  | -  | 3  | -  | -  | 6         | 8  | -  | 3  | 8  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9  | 9+        | 5  | 9+ | 3  | 8  | -  | -  | 8  | 8         | 5  | -  | 2  | 16  |  |  |  |  |
| 17        | 1  | 7  | -  | 1  | 6  | 7  | -  | 8         | 9  | 1  | 8  | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 6  | 9+        | 5  | 9+ | 5  | 9  | 1  | -  | 9  | 9         | 1  | -  | 4  | 17  |  |  |  |  |
| 18        | 5  | 8  | -  | 6  | 8  | 7  | -  | 9         | 9+ | 3  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 2  | 9+        | 9+ | 9  | 6  | 9  | 1  | -  | 9  | 7         | -  | -  | 6  | 18  |  |  |  |  |
| 19        | 6  | 8  | 1  | 9+ | 9  | 8  | -  | 9         | 9+ | 8  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 9  | 1  | 9+        | 9  | 7  | 6  | 9  | 1  | -  | 8  | 5         | -  | -  | 5  | 19  |  |  |  |  |
| 20        | 8  | 9  | 3  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 5  | 9+ | 9+        | 9+ | 9+ | 9+ | 6  | 9+ | 7  | -  | 9+        | 8  | 1  | 5  | 9  | -  | -  | 5  | 5         | -  | -  | 4  | 20  |  |  |  |  |
| 21        | 8  | 8  | 6  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 1  | 9+ | 3  | 1  | 9         | 6  | -  | 4  | 9  | -  | -  | 1  | 5         | -  | -  | 1  | 21  |  |  |  |  |
| 22        | 8  | 8  | 8  | 9+ | 9  | 8  | 5  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 6  | 9+ | 1  | 7  | 9         | 6  | -  | 3  | 9  | -  | -  | 1  | 5         | -  | -  | 1  | 22  |  |  |  |  |
| 23        | 8  | 8  | 9  | 9+ | 9  | 8  | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | -  | 6  | 8         | 6  | 3  | 1  | 8  | -  | -  | -  | 5         | -  | -  | -  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**Aug., Angola (Luanda), for SSN = Low, Sigs in S-Units. By N6BV, ARRL.**

|     | 80 Meters |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |
|-----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|
| UTC | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |
| 0   | 8         | 5  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | -         | 6  | 8  | 6  | 3  | 3  | 8  | -         | -  | -  | 5  | -  | -  | -  | 0   |
| 1   | 8         | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9  | 9         | 9  | 9+ | 2  | 9+ | 7  | 9+ | -         | 4  | 6  | 6  | 3  | 2  | 6  | -         | -  | -  | 5  | -  | -  | -  | 1   |
| 2   | 8         | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9  | -  | 9+ | 8         | 7  | 9+ | 9  | 9  | 9  | 9+ | -         | -  | 6  | 6  | -  | 3  | 6  | -         | -  | -  | 5  | -  | -  | -  | 2   |
| 3   | 7         | -  | 9  | 9+ | 4  | -  | 9  | 9         | 1  | 9+ | 9+ | 9  | -  | 9+ | 3         | 3  | 9+ | 5  | 6  | 7  | 9+ | -         | -  | 2  | 6  | -  | -  | 2  | -         | -  | -  | 6  | -  | -  | -  | 3   |
| 4   | 7         | -  | 9  | 9+ | 1  | -  | 8  | 8         | -  | 9+ | 9  | 8  | 4  | 9  | 5         | 6  | 8  | 9  | 9  | 2  | 8  | -         | 2  | -  | 6  | 2  | -  | -  | -         | -  | -  | 6  | -  | -  | -  | 4   |
| 5   | 3         | -  | 8  | 9  | -  | -  | 7  | 9         | -  | 9+ | 5  | 5  | 5  | 9  | 9+        | 7  | 6  | 2  | 9+ | 8  | 8  | -         | 9  | -  | 6  | 9  | 5  | -  | -         | -  | 5  | -  | -  | -  | 5  |     |
| 6   | -         | -  | 6  | 8  | -  | -  | 2  | 7         | -  | 9  | 9+ | -  | 1  | 8  | 9+        | 4  | 9  | 9+ | 9+ | 9+ | 9  | 8         | 9  | -  | 5  | 9  | 8  | -  | -         | 8  | -  | 5  | 1  | 5  | -  | 6   |
| 7   | -         | -  | 1  | 2  | -  | -  | -  | 3         | -  | 8  | 9  | -  | -  | 6  | 9+        | 4  | 9+ | 9+ | 9  | 9  | 9  | 8         | 8  | 3  | 5  | 9  | 9  | 1  | -         | 9  | -  | 9  | 7  | 5  | -  | 7   |
| 8   | -         | -  | -  | -  | -  | -  | -  | -         | -  | 5  | 5  | -  | -  | 1  | 9         | 3  | 9  | 9+ | 8  | 8  | 7  | 8         | 9  | 2  | 5  | 9  | 9  | 1  | -         | 9  | -  | 8  | 9  | 7  | -  | 8   |
| 9   | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 7         | 4* | 9  | 9  | 6  | 5  | 8  | 8         | 9  | 8  | 5  | 8  | 9  | -  | -         | 9  | -  | 8  | 9  | 7  | -  | 9   |
| 10  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 4  | 8  | 9  | 5  | 5  | 7  | 8         | 9  | 9  | 5  | 9  | 9  | 4  | 1         | 9  | 1  | 8  | 9  | 8  | -  | 10  |
| 11  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 5  | 7  | 9  | 6  | 6  | 5  | 8         | 9  | 9  | 5  | 9  | 9  | 7  | 1         | 9  | 4  | 8  | 9  | 9  | -  | 11  |
| 12  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 8  | 5  | 9  | 8  | 9  | 4  | 8         | 9+ | 8  | 5  | 9+ | 9  | 7  | 1         | 9  | 5  | 8  | 9  | 9  | -  | 12  |
| 13  | -         | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9         | 9  | 5  | 9+ | 9  | 8  | 6  | 8         | 9+ | 9  | 5  | 9+ | 9+ | 7  | -         | 9  | 3  | 8  | 9  | 6  | 1  | 13  |
| 14  | -         | -  | -  | -  | -  | -  | -  | -         | 4  | -  | -  | 2  | -  | -  | 9+        | 9+ | 6  | 9+ | 9+ | 9  | 5  | 8         | 9+ | 9  | 5  | 9+ | 9+ | 7  | -         | 5  | 5  | 8  | 9  | 1  | 1  | 14  |
| 15  | -         | -  | -  | -  | -  | -  | -  | 5         | 8  | -  | -  | 8  | 7  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9+ | 9  | 9         | 9+ | 9  | 5  | 9+ | 8  | 8  | -         | 5  | 8  | 8  | 9  | -  | 1  | 15  |
| 16  | 1         | 5  | -  | -  | 4  | -  | -  | 8         | 8  | -  | 4  | 9  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9         | 9  | 9  | 5  | 9+ | 7  | 8  | -         | -  | 9  | 8  | 5  | -  | 2  | 16  |
| 17  | 3         | 7  | -  | 2  | 6  | 7  | -  | 9         | 9  | 1  | 9  | 9  | 9  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9  | 9+ | 5  | 9+ | 4  | 9  | 1         | -  | 9  | 9  | 7  | -  | 5  | 17  |
| 18  | 6         | 8  | -  | 8  | 8  | 7  | -  | 9         | 9  | 5  | 9+ | 9+ | 9  | 1  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 7  | 9+ | 9+ | 9+ | 6  | 9  | 3         | -  | 9  | 9  | -  | -  | 6  | 18  |
| 19  | 7         | 9  | 1  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 3  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 3  | 2  | 9  | 2         | -  | 8  | 8  | -  | -  | 7  | 19  |
| 20  | 8         | 9  | 3  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 8         | 1  | 9+ | 6  | -  | 4  | 9  | -         | -  | 7  | 5  | -  | -  | 7  | 20  |
| 21  | 8         | 8  | 7  | 9+ | 9  | 8  | 4  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 2  | 9+ | 5         | -  | 9+ | 8  | -  | -  | 9+ | -         | -  | 4  | 5  | -  | -  | 4  | 21  |
| 22  | 8         | 8  | 9  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9  | 7  | 9+ | -         | 7  | 9  | 6  | -  | 4  | 9  | -         | -  | 3  | 5  | -  | -  | 3  | 22  |
| 23  | 8         | 8  | 9  | 9+ | 9  | 1  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | -         | 8  | 9  | 6  | -  | 5  | 8  | -         | -  | 1  | 5  | -  | -  | 1  | 23  |
|     | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |

Sep., Angola (Luanda), for SSN = Low, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 9  | 6  | 9  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | -  | 7  | 9+        | 6  | 3  | 8  | 9+ | -  | -  | 2  | 5         | -  | 1  | 3  | 0   |  |  |  |  |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 1  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | -  | 8  | 8         | 5  | 7  | 8  | 8  | -  | 1  | -  | 5         | 1  | -  | -  | 1   |  |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9  | -  | 9+ | 9  | 8         | 9+ | 9+ | 9+ | 9  | 9+ | -  | 4  | 9         | 6  | 5  | 8  | 2  | -  | -  | 2  | 5         | -  | 1  | -  | 2   |  |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 7  | -  | 9  | 9+        | 3  | 9+ | 9+ | 9  | 1  | 9+ | 7  | 6         | 9+ | 9+ | 8  | 9  | 9+ | -  | -  | 8         | 6  | 1  | 4  | -  | -  | -  | 1  | 5         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 8  | -  | 9  | 9+ | 3  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 5  | 9  | 6  | 8         | 9  | 2  | 9+ | 6  | 9  | -  | 6  | 1         | 6  | 5  | 5  | 2  | -  | -  | -  | 5         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 5  | -  | 9  | 9  | -  | -  | 7  | 9         | -  | 9  | 5  | 6  | 6  | 9  | 9+ | 7         | 8  | 2  | 9+ | 9  | 9  | 1  | 9  | -         | 6  | 9+ | 9  | 1  | -  | 1  | -  | 5         | -  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 5  | 7  | -  | -  | 3  | 7         | -  | 9  | 9+ | 1  | 2  | 8  | 9+ | 6         | 9+ | 9+ | 9  | 9+ | 9+ | 8  | 9  | -         | 5  | 9+ | 9  | -  | -  | 9  | -  | 7         | 7  | -  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 1  | 1  | -  | -  | -  | 3         | -  | 8  | 8  | -  | -  | 6  | 9+ | 3         | 9+ | 9+ | 8  | 9  | 9  | 9  | 8  | 5         | 5  | 9  | 8  | 3  | -  | 9  | -  | 9         | 9  | 5  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 5  | 4  | -  | -  | 2  | 9  | 4*        | 9+ | 9+ | 5  | 8  | 6  | 9+ | 8  | -         | 9+ | 9  | 8  | 2  | -  | 9  | -  | 9         | 8  | 9  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 8  | 4         | 9  | 9  | 2  | 3  | 8  | 9  | 9  | 7         | 5  | 9  | 8  | -  | -  | 9  | -  | 9         | 9  | 9  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 4         | 8  | 9  | 3  | 4  | 7  | 8  | 9  | 9+        | 4  | 9  | 8  | 5  | 1  | 9  | 6  | 9         | 9  | 9  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 6         | 7  | 9  | 7  | 5  | 6  | 8  | 9  | 9         | 4  | 9  | 9  | 7  | 1  | 9  | 8  | 9         | 9  | 9  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 8         | 6  | 9  | 9  | 8  | 5  | 9  | 9+ | 9         | 4  | 9+ | 9  | 9  | 2  | 9  | 9  | 9         | 9  | 9  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | 7  | 9+ | 9+ | 9  | 4  | 9  | 9+ | 9         | 5  | 9+ | 9+ | 9  | 4  | 9  | 4  | 4         | 9  | 8  | -  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | 1         | 5  | -  | -  | 7  | -  | -  | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 5  | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 9  | 6  | 9  | 8  | 5         | 9+ | 6  | -  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | 1  | -  | -  | 5         | 8  | -  | -  | 9  | 7  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9  | 6  | 7  | 9  | 5         | 8  | 3  | 1  | 15  |  |  |  |  |
| 16        | 1  | 5  | -  | -  | 5  | -  | -  | 8         | 8  | -  | 6  | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 5  | 9+ | 9+ | 9  | 6  | 4  | 9  | 5         | 8  | 1  | 5  | 16  |  |  |  |  |
| 17        | 4  | 7  | -  | 2  | 7  | 4  | -  | 9         | 9  | 2  | 9+ | 9  | 8  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 6  | 1  | 9  | 5         | 9  | -  | 9  | 17  |  |  |  |  |
| 18        | 8  | 8  | -  | 8  | 8  | 7  | -  | 9+        | 9  | 5  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9+ | 6  | -  | 9  | 5         | 1  | -  | 9  | 18  |  |  |  |  |
| 19        | 8  | 8  | 2  | 9  | 9  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9+        | 9+ | 9+ | 8  | 9+ | 3  | -  | 9  | 5         | -  | -  | 9  | 19  |  |  |  |  |
| 20        | 8  | 9  | 5  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 4  | 9+        | 9+ | 9  | 8  | 9+ | 1  | -  | 9  | 5         | -  | -  | 9  | 20  |  |  |  |  |
| 21        | 8  | 8  | 8  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 6  | 9+ | 8  | -  | 9+        | 9+ | 8  | 8  | 9+ | -  | -  | 9  | 9         | -  | -  | 9  | 21  |  |  |  |  |
| 22        | 9  | 8  | 9  | 9+ | 8  | 7  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 5  | 5  | 9+        | 9  | 3  | 9  | 9+ | -  | -  | 8  | 5         | -  | 3  | 8  | 22  |  |  |  |  |
| 23        | 9  | 8  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 1  | 7  | 9+        | 8  | 1  | 9  | 9+ | -  | -  | 6  | 5         | -  | 2  | 7  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**Oct., Angola (Luanda), for SSN = Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |   |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|---|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |   |
| 0         | 9  | 6  | 9  | 9+ | 8  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 6         | 7  | 9+ | 9  | 9  | 9  | 9  | -         | 1  | 8  | 5  | 1  | 4  | 1  | 0   |   |
| 1         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 4         | 9  | 9+ | 9  | 7  | 9  | 7  | -         | 3  | 4  | 5  | -  | 2  | -  | 1   |   |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9  | 9  | 9+ | -         | 7  | 9+ | 8  | 7  | 9  | -  | -         | -  | 7  | 5  | -  | 2  | -  | 2   |   |
| 3         | 8  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 1  | 9+ | 9+ | 9  | 2  | 9+ | 7         | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9         | -  | 4  | 9  | 6  | 3  | 7  | 2         | -  | -  | 4  | 5  | -  | -  | -   | 3 |
| 4         | 8  | -  | 9  | 9  | 2  | -  | 8  | 9         | -  | 9+ | 9+ | 8  | 5  | 9  | 6         | 8  | 9+ | 2  | 9  | 8  | 9  | -         | 8  | 7  | 9  | 7  | 7  | 2  | -         | 3  | -  | 5  | 1  | 2  | -  | 4   |   |
| 5         | 5  | -  | 9  | 9  | -  | -  | 7  | 9         | -  | 9  | 8  | 6  | 6  | 9  | 9+        | 7  | 9  | 9+ | 9+ | 9  | 9  | 2         | 9  | 4* | 6  | 9+ | 9  | 1  | -         | 4  | -  | 5  | -  | 2  | -  | 5   |   |
| 6         | 1  | -  | 4  | 6  | -  | -  | 3  | 7         | -  | 9  | 9+ | 2  | 3  | 8  | 9+        | 6  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9  | 5  | 5  | 9+ | 9  | 1  | 1         | 7  | -  | 7  | 8  | 6  | -  | 6   |   |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 2         | -  | 6  | 7  | -  | -  | 6  | 9+        | 6* | 9+ | 9+ | 9  | 8  | 8  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 2  | 9+        | 8  | -  | 5  | 9  | 8  | -  | 7   |   |
| 8         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 5  | 2  | -  | -  | 2  | 9+        | 4  | 9+ | 9+ | 8  | 7  | 7  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 1  | 5         | 9  | -  | 9  | 8  | 9  | -  | 8   |   |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 7         | 4  | 9  | 9+ | 6  | 2  | 8  | 9         | 9  | 9+ | 5  | 9+ | 8  | -  | 6         | 9  | 5  | 8  | 9  | 9  | -  | 9   |   |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5         | 4  | 8  | 7  | 5  | 2  | 8  | 9         | 9  | 9  | 4  | 9+ | 8  | 8  | 6         | 9  | 5  | 9  | 9  | 9  | -  | 10  |   |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6         | 6  | 7  | 8  | 6  | 4  | 6  | 9         | 9  | 9  | 4  | 9+ | 9  | 9  | 6         | 9  | 8  | 9  | 9  | 9  | 1  | 11  |   |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7         | 8  | 5  | 6  | 9  | 7  | 5  | 9+        | 9+ | 9  | 4  | 9+ | 9  | 9  | 6         | 9+ | 9  | 4  | 9  | 9  | 4  | 12  |   |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 9  | 4  | 9+ | 9+ | 9  | 4  | 9+        | 9+ | 9  | 4  | 9+ | 9+ | 9  | 8         | 9+ | 9  | 4  | 9  | 9  | 6  | 13  |   |
| 14        | -  | -  | -  | -  | -  | -  | -  | 1         | 5  | -  | -  | 6  | -  | -  | 9         | 9+ | 4  | 9+ | 9+ | 9  | 5  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 8         | 9  | 9  | 4  | 9+ | 9  | 9  | 14  |   |
| 15        | -  | -  | -  | -  | -  | -  | -  | 6         | 8  | -  | 2  | 9  | 6  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9+ | 7  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 5         | 8  | 9  | 5  | 9  | 9  | 9  | 15  |   |
| 16        | 1  | 5  | -  | -  | 2  | -  | -  | 8         | 8  | -  | 6  | 8  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 2         | 7  | 9  | 5  | 9+ | 6  | 9  | 16  |   |
| 17        | 6  | 7  | -  | 2  | 7  | 1  | -  | 9         | 9  | 1  | 9+ | 9+ | 9  | 1  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 7         | 6  | 9+ | 5  | 9  | 3  | 9  | 17  |   |
| 18        | 8  | 8  | -  | 8  | 8  | 8  | -  | 9+        | 9  | 4  | 9+ | 9+ | 9  | 4  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 3         | 3  | 9+ | 9+ | 8  | 3  | 9  | 18  |   |
| 19        | 9  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | -         | 2  | 9+ | 5  | 7  | 6  | 9  | 19  |   |
| 20        | 9  | 9  | 4  | 9+ | 9  | 8  | 4  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 5         | -  | 9+ | 5  | 8  | 8  | 9+ | 20  |   |
| 21        | 9  | 8  | 7  | 9+ | 9  | 8  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | 9  | 9+ | 1         | -  | 9+ | 5  | 5  | 5  | 9  | 21  |   |
| 22        | 9  | 8  | 8  | 9+ | 9  | 4  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9         | 3  | 9+ | 9+ | 9+ | 9  | 9+ | -         | -  | 9+ | 8  | -  | 6  | 9+ | 22  |   |
| 23        | 9  | 8  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8         | 9  | 9+ | 9+ | 9  | 9  | 9+ | -         | 2  | 9  | 5  | -  | 6  | 7  | 23  |   |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |   |

Nov., Angola (Luanda), for SSN = Low, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |  |
| 0         | 9  | 6  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 4  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 6  | 9+        | 9+ | 5  | 5  | 9  | 8  | -  | 2  | 8         | 5  | -  | 1  | -   | 0  |  |  |  |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 5  | 9         | 9+ | 5  | 7  | 8  | 1  | -  | 6  | 2         | 5  | -  | 2  | -   | 1  |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 9  | 1  | 8  | 9         | 9  | 8  | 8  | -  | -  | 2  | 4  | 5         | 1  | 2  | -  | 2   |    |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 7  | -  | 8  | 9+        | 1  | 9+ | 9+ | 9  | 5  | 9+ | 8  | 9         | 9+ | 9+ | 9+ | 9+ | 9  | -  | 5  | 9         | 6  | 5  | 4  | -  | -  | -  | 2  | 5         | -  | -  | -  | 3   |    |  |  |  |
| 4         | 8  | -  | 9  | 9  | 4  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | 6  | 9  | 5  | 8         | 9+ | 2  | 9  | 8  | 9  | -  | 8  | 7         | 9  | 6  | 7  | -  | -  | 2  | -  | 5         | -  | 1  | -  | 4   |    |  |  |  |
| 5         | 7  | -  | 9  | 8  | -  | -  | 7  | 9         | -  | 9  | 7  | 7  | 5  | 9  | 9+ | 8         | 9+ | 2  | 9+ | 8  | 8  | -  | 9  | 4         | 5  | 9  | 9  | 1  | -  | -  | -  | 5         | -  | -  | -  | 5   |    |  |  |  |
| 6         | 1  | -  | 4  | 6  | -  | -  | -  | 8         | -  | 9  | 9+ | 4  | 2  | 8  | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9  | 9  | 9  | 2         | 5  | 9+ | 9  | 1  | -  | 3  | -  | 5         | 5  | 3  | -  | 6   |    |  |  |  |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 6         | -  | 8  | 7  | 1  | -  | 7  | 9+ | 6         | 9+ | 9+ | 9  | 7  | 9  | 9+ | 9  | 6         | 9+ | 9+ | 9  | 2  | 1  | 8  | -  | 8         | 9  | 6  | -  | 7   |    |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | 2         | -  | 5  | 3  | -  | -  | 3  | 9+ | 4         | 9+ | 9+ | 8  | 6  | 7  | 9+ | 9  | 7         | 9+ | 9+ | 9  | 1  | 5  | 7  | -  | 5         | 8  | 8  | -  | 8   |    |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 9  | 4         | 9  | 9+ | 8  | 2  | 9  | 9  | 8  | 9         | 4  | 9+ | 9  | -  | 5  | 9  | 1  | 5         | 7  | 9  | -  | 9   |    |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 4         | 8  | 7  | 6  | 1  | 7  | 9  | 8  | 9+        | 4  | 9+ | 8  | 6  | 5  | 9  | 4  | 8         | 8  | 9  | -  | 10  |    |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 5  | 6         | 7  | 9  | 7  | 3  | 5  | 9  | 9  | 9         | 4  | 9+ | 9  | 9  | 3  | 9  | 9  | 9         | 9  | 9  | -  | 11  |    |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 6  | 8         | 6  | 8  | 8  | 6  | 4  | 9  | 9  | 9         | 4  | 9+ | 9  | 9  | 5  | 9  | 9  | 4         | 9  | 9  | 2  | 12  |    |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | 5  | 9+ | 9  | 8  | 5  | 9+ | 9+ | 9         | 4  | 9+ | 9+ | 9  | 5  | 9  | 9  | 4         | 9+ | 8  | 8  | 13  |    |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 5  | -  | -  | 9+ | 9+        | 3  | 8  | 9+ | 9  | 4  | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 9  | 5  | 9  | 9  | 4         | 9  | 5  | 9  | 14  |    |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 6         | 7  | -  | -  | 8  | -  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | -  | 7  | 9  | 4         | 5  | 2  | 9  | 15  |    |  |  |  |
| 16        | 1  | 1  | -  | -  | 2  | -  | -  | 8         | 8  | -  | 5  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 4  | 8  | 9  | 5         | 8  | 1  | 9  | 16  |    |  |  |  |
| 17        | 7  | 7  | -  | 2  | 7  | -  | -  | 9         | 9  | 1  | 9+ | 9+ | 8  | 2  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9+ | -  | 8  | 9+ | 5         | 3  | 1  | 9  | 17  |    |  |  |  |
| 18        | 9  | 8  | -  | 8  | 9  | 7  | -  | 9+        | 9  | 3  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 5  | 9+ | 9+ | 9+ | -  | 7  | 9+        | 5  | 1  | 6  | 9   | 18 |  |  |  |
| 19        | 9  | 9  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | -  | 2  | 9+ | 5         | 1  | 8  | 9  | 19  |    |  |  |  |
| 20        | 9  | 9  | 3  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 9  | 9+ | -  | -  | 9+ | 5         | 2  | -  | 9  | 20  |    |  |  |  |
| 21        | 9  | 8  | 6  | 9+ | 9  | 7  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 7  | 9+        | 5  | 9+ | 9  | 9+ | -  | -  | 9+ | 5         | -  | 1  | 8  | 21  |    |  |  |  |
| 22        | 9  | 8  | 8  | 9+ | 9  | 1  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9  | 8  | 9+        | 5  | 9  | 9  | 9+ | -  | -  | 9  | 9         | -  | 5  | 6  | 22  |    |  |  |  |
| 23        | 9  | 8  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 8         | 9+ | 5  | 7  | 9  | 9+ | -  | -  | 8         | 5  | -  | 4  | 3   | 23 |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |  |  |  |

Dec., Angola (Luanda), for SSN = Low, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |       |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-------|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC    | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 9  | 6  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 4  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+    | 9+ | -  | 5  | 9+        | 5  | -  | 7  | 7  | -  | -  | 1  | 5         | -  | -  | -  | 0   |  |  |  |  |
| 1         | 9  | -  | 8  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9     | 9+ | 1  | 7  | 9         | 8  | 1  | 5  | -  | -  | -  | -  | 5         | -  | -  | -  | 1   |  |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9  | 1  | 9+ | 9  | 9         | 9+ | 9+ | 9+ | 9     | 9  | -  | 4  | 9         | 5  | 3  | 4  | -  | -  | -  | 1  | 5         | -  | -  | -  | 2   |  |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9         | 2  | 9+ | 9+ | 8  | 5  | 9+ | 6  | 8         | 9+ | 2  | 9  | 9+    | 9  | -  | 2  | 8         | 5  | 1  | 1  | -  | -  | -  | -  | 5         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 8  | -  | 9  | 9+ | 5  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | 6  | 9  | 5  | 9         | 9+ | 2  | 9+ | 8     | 8  | -  | 5  | 4         | 5  | 5  | 3  | -  | -  | -  | -  | 5         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 7  | -  | 9  | 9  | 1  | -  | 7  | 9         | -  | 9+ | 9+ | 8  | 5  | 9  | 9  | 8         | 9  | 2  | 9+ | 8     | 8  | -  | 7  | 1         | 5  | 7  | 8  | -  | -  | -  | -  | 5         | -  | -  | -  | 5   |  |  |  |  |
| 6         | 2  | -  | 6  | 6  | -  | -  | -  | 8         | -  | 9  | 9+ | 5  | 2  | 8  | 9+ | 9         | 9+ | 9+ | 9+ | 8     | 9  | 4  | 9+ | 1         | 5  | 9+ | 9  | 1  | -  | 6  | -  | 5         | 6  | -  | -  | 6   |  |  |  |  |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 5         | -  | 8  | 8  | 1  | -  | 7  | 9+ | 7         | 9+ | 9+ | 9  | 5     | 8  | 9  | 9  | 7         | 5  | 9+ | 9  | -  | 1  | 2  | -  | 5         | 7  | 1  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 3  | 4  | -  | -  | 5  | 9+ | 5         | 9  | 9+ | 9  | 4* 6  | 9+ | 9  | 4  | 5         | 9+ | 9  | 1  | 1  | 1  | -  | 5  | 7         | 5  | -  | 8  |     |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 9  | 4         | 9  | 9+ | 6  | 4 4   | 9  | 9  | 9  | 4         | 9  | 9  | -  | 4  | 8  | -  | 9  | 7         | 9  | -  | 9  |     |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 4         | 8  | 9  | 5  | 1 7   | 8  | 9  | 9  | 4         | 9  | 9  | -  | 5  | 9  | 2  | 9  | 7         | 9  | -  | 10 |     |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 5         | 7  | 9  | 7  | 3 5   | 8  | 9  | 9  | 4         | 9+ | 9  | 6  | 4  | 9  | 8  | 9  | 8         | 8  | -  | 11 |     |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 8         | 6  | 9  | 8  | 6 4   | 8  | 9  | 9  | 6         | 9+ | 9  | 9  | 5  | 9  | 9  | 9  | 8         | 7  | -  | 12 |     |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | 5  | 9+ | 9  | 8 4   | 9  | 9+ | 9  | 6         | 9+ | 9+ | 9  | 5  | 9  | 9  | 9  | 8         | 4  | 3  | 13 |     |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 1  | -  | -  | 9+ | 9+        | 5  | 9+ | 9+ | 9 5   | 9  | 9+ | 9  | 6         | 9+ | 9+ | 9  | 5  | 9  | 9  | 4  | 8         | 3  | 9  | 14 |     |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 7         | 7  | -  | -  | 7  | -  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ 8  | 9+ | 9+ | 9  | 6         | 9+ | 9  | 9  | 4  | 9  | 9+ | 4  | 4         | -  | 9  | 15 |     |  |  |  |  |
| 16        | 2  | 1  | -  | -  | 2  | -  | -  | 9         | 8  | -  | 9+ | 8  | 8  | 1  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ 9  | 9+ | 9+ | 9+ | 9+        | 9+ | 5  | 9+ | 1  | 9  | 9+ | 5  | 2         | -  | 9  | 16 |     |  |  |  |  |
| 17        | 7  | 8  | -  | 2  | 7  | -  | -  | 9         | 9  | 1  | 9+ | 9+ | 8  | 6  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 8  | 9+ | -  | 8  | 9+ | 9  | -         | -  | 9  | 17 |     |  |  |  |  |
| 18        | 7  | 8  | -  | 8  | 8  | 7  | -  | 9         | 9  | 3  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9  | 9+ | 8  | 6  | 9+ | 9  | -         | 2  | 8  | 18 |     |  |  |  |  |
| 19        | 8  | 9  | -  | 9+ | 9  | 8  | 4  | 9+        | 9  | 7  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ 9+ | 9+ | 9+ | 9+ | 5         | 9+ | 9+ | 9+ | 5  | 1  | 9+ | 5  | -         | 1  | 8  | 19 |     |  |  |  |  |
| 20        | 9  | 9  | 2  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ 9+ | 9  | 9  | 9+ | 5         | 9  | 9+ | 9+ | -  | -  | 9  | 5  | -         | 4  | 9  | 20 |     |  |  |  |  |
| 21        | 9  | 8  | 6  | 9+ | 9  | 6  | 8  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9 9   | 9+ | 7  | 9+ | 5         | 7  | 9  | 9+ | -  | -  | 9  | 5  | -         | 1  | 8  | 21 |     |  |  |  |  |
| 22        | 9  | 8  | 7  | 9+ | 9  | 4  | 9  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9 9   | 9+ | 8  | 8  | 9+        | 5  | 4  | 9  | 9+ | -  | -  | 8  | 5         | -  | 1  | 5  | 22  |  |  |  |  |
| 23        | 9  | 8  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9 9   | 9+ | 5  | 7  | 9+        | 8  | 1  | 9  | 9+ | -  | -  | 6  | 5         | -  | 1  | 2  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC    | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

Jan., Angola (Luanda), for SSN = Very Low, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 9  | 7  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 7  | 9+ | 8  | 8         | 9+ | 9+ | 7  | 8  | 9+ | -  | -  | 4         | 5  | -  | 1  | 2  | -  | -  | -  | 5         | -  | -  | -  | 0   |  |  |  |  |
| 1         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9  | -  | 9+ | 8  | 8         | 9+ | 2  | 7  | 9  | 9  | -  | -  | 1         | 5  | -  | -  | -  | -  | -  | -  | 5         | -  | -  | -  | 1   |  |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9  | -  | 9+ | 5  | 5         | 9+ | 8  | 6  | 9  | 7  | -  | -  | 1         | 5  | -  | -  | -  | -  | -  | -  | 5         | -  | -  | -  | 2   |  |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 7  | -  | 9  | 9         | 2  | 9+ | 9+ | 8  | 5  | 9+ | -  | 4         | 9  | 7  | 3  | 8  | 9  | -  | -  | -         | 6  | -  | -  | -  | -  | -  | -  | 5         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 8  | -  | 9  | 9+ | 6  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | 6  | 9+ | -  | 7         | 8  | 9  | 7  | 6  | 7  | -  | 1  | -         | 6  | -  | -  | -  | -  | -  | -  | 5         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 8  | -  | 9  | 9  | 1  | -  | 7  | 9         | -  | 9  | 5  | 8  | 6  | 9  | 7  | 8         | 6  | 2  | 9+ | 6  | 3  | -  | -  | -         | 5  | -  | -  | -  | -  | -  | -  | 5         | -  | -  | -  | 5   |  |  |  |  |
| 6         | 2  | -  | 8  | 8  | -  | -  | 4  | 9         | -  | 9  | 9  | 5  | 4  | 8  | 9+ | 9         | 1  | 2  | 9+ | 9  | 3  | -  | 8  | -         | 5  | 9  | 7  | -  | -  | -  | -  | 5         | -  | -  | -  | 6   |  |  |  |  |
| 7         | -  | -  | -  | 2  | -  | -  | -  | 5         | -  | 8  | 9  | 1  | -  | 7  | 9+ | 9         | 9  | 9+ | 9  | 8  | 9  | 8  | 9  | -         | 8  | 9+ | 9  | 2  | -  | -  | -  | 5         | 5  | -  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 6  | -  | -  | 4  | 9+ | 5         | 8  | 9+ | 9  | 6  | 9  | 9  | 9  | -         | 8  | 9  | 9  | 1  | -  | -  | -  | 5         | 4  | -  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 1  | -  | -  | -  | 9  | 5         | 9  | 9+ | 9  | 5  | 4  | 9  | 9  | 1         | 4  | 9  | 9  | -  | 1  | 6  | -  | 4         | 4  | 5  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 5         | 8  | 6  | 9  | 4  | 8  | 8  | 9  | 8         | 4  | 9  | 9  | -  | -  | 8  | -  | 7         | 6  | 5  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 6         | 8  | 8  | 9  | 5  | 8  | 7  | 9  | 9         | 4  | 9  | 9  | 1  | -  | 9  | 4  | 9         | 7  | 6  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 8         | 7  | 9  | 9  | 8  | 6  | 7  | 9  | 9         | 5  | 9  | 9  | 6  | -  | 9  | 8  | 9         | 8  | 1  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 6  | 9+ | 9+ | 9  | 6  | 8  | 9+ | 9         | 4  | 9+ | 9  | 9  | -  | 8  | 9  | 9         | 8  | -  | -  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 3  | -  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 6  | 7  | 9+ | 9         | 5  | 9+ | 8  | 9  | -  | 4  | 8  | 9         | 3  | -  | 1  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | 2  | -  | -  | 7         | 7  | -  | -  | 9  | -  | -  | 9+ | 9+        | 5  | 9+ | 9+ | 9+ | 8  | 6  | 9+ | 9         | 5  | 9  | 5  | 9+ | -  | 4  | 9  | 8         | -  | -  | 3  | 15  |  |  |  |  |
| 16        | 1  | 5  | -  | -  | 2  | -  | -  | 7         | 8  | -  | 9+ | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 5  | 9+ | -  | 9+ | 5  | 2  | 9  | 8         | 1  | -  | 3  | 16  |  |  |  |  |
| 17        | 5  | 8  | -  | 4  | 7  | -  | -  | 9         | 9  | 1  | 9+ | 9  | 9  | 6  | 9+ | 9+        | 9  | 9+ | 9+ | 9  | 9  | 9  | 9+ | 9+        | 5  | 9+ | -  | 9+ | 1  | -  | 8  | 5         | -  | -  | 3  | 17  |  |  |  |  |
| 18        | 6  | 8  | -  | 8  | 8  | 7  | -  | 9         | 9  | 3  | 9+ | 9+ | 9  | 5  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 7  | 9  | 9+        | 5  | 9  | 6  | 9+ | -  | -  | 8  | 5         | -  | -  | 2  | 18  |  |  |  |  |
| 19        | 8  | 9  | 1  | 9+ | 9  | 8  | -  | 9+        | 9+ | 7  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 2  | 6  | 9+        | 5  | 5  | 9  | 9+ | -  | -  | 9  | 5         | -  | -  | 1  | 19  |  |  |  |  |
| 20        | 8  | 9  | 3  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | -  | 1  | 9+        | 5  | 1  | 9  | 9+ | -  | -  | 4  | 5         | -  | -  | 2  | 20  |  |  |  |  |
| 21        | 8  | 9  | 6  | 9+ | 9  | 8  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | -  | -  | 9+        | 5  | -  | 7  | 9+ | -  | -  | 1  | 5         | -  | -  | 5  | 21  |  |  |  |  |
| 22        | 8  | 9  | 8  | 9+ | 9  | 4  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 6  | 9+ | -  | 1  | 9         | 5  | -  | 5  | 9  | -  | -  | -  | 5         | -  | -  | 2  | 22  |  |  |  |  |
| 23        | 9  | 8  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9  | 9         | 9+ | 9+ | 8  | 8  | 9+ | -  | -  | 8         | 5  | -  | 3  | 6  | -  | -  | -  | 5         | -  | -  | -  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**Feb., Angola (Luanda), for SSN = Very Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 9  | 7  | 9  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | -  | -  | 8         | 5  | -  | 6  | 7  | -  | -  | -  | 5         | -  | -  | -  | 0   |  |  |  |  |
| 1         | 9  | 1  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9  | 8  | 9+ | -  | 5  | 5  | 5         | -  | 5  | 1  | -  | -  | -  | 5  | -         | -  | -  | 1  |     |  |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9  | -  | 9+ | 9  | 7         | 9+ | 9+ | 8  | 9  | 8  | -  | 1  | 5         | 5  | -  | 6  | -  | -  | -  | 5  | -         | -  | -  | 2  |     |  |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 2  | 9+ | 9+ | 8  | 2  | 9+ | 6  | 2         | 9+ | 9+ | 6  | 9+ | 8  | -  | -  | 3         | 5  | -  | 1  | -  | -  | -  | 5  | -         | -  | -  | 3  |     |  |  |  |  |
| 4         | 8  | -  | 9  | 9+ | 5  | -  | 8  | 8         | -  | 9+ | 9+ | 8  | 5  | 9  | -  | 7         | 8  | 9  | 5  | 6  | 9  | -  | 1  | -         | 5  | -  | -  | -  | -  | -  | 5  | -         | -  | -  | 4  |     |  |  |  |  |
| 5         | 8  | -  | 9  | 9+ | 1  | -  | 7  | 9         | -  | 9  | 5  | 8  | 6  | 9  | 8  | 7         | 6  | 2  | 9+ | 8  | 2  | -  | 5  | -         | 5  | -  | 5  | -  | -  | -  | 5  | -         | -  | -  | 5  |     |  |  |  |  |
| 6         | 2  | -  | 8  | 8  | -  | -  | 4  | 9         | -  | 9+ | 9  | 5  | 3  | 8  | 9+ | 9         | 1  | 2  | 9+ | 9  | 2  | 2  | 9  | -         | 5  | 9+ | 9  | -  | -  | -  | 5  | 1         | -  | -  | 6  |     |  |  |  |  |
| 7         | -  | -  | 1  | 2  | -  | -  | -  | 5         | -  | 8  | 9  | 1  | -  | 7  | 9+ | 9         | 9+ | 9+ | 9  | 9  | 9  | 9+ | 9  | 2         | 5  | 9+ | 9  | 2  | -  | 2  | -  | 5         | 4  | 1  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 6  | -  | -  | 3  | 9+ | 4         | 9  | 9+ | 9  | 7  | 9  | 9+ | 9  | -         | 9+ | 9  | 9  | 4  | 1  | 1  | -  | 5         | 5  | 2  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 1  | -  | -  | -  | 9  | 5         | 9  | 9+ | 9  | 6  | 5  | 9  | 9  | 6         | 5  | 9  | 9  | -  | 1  | 8  | -  | 8         | 6  | 7  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 4         | 9  | 8  | 8  | 3  | 8  | 8  | 9  | 8         | 4  | 9  | 9  | -  | 2  | 9  | -  | 9         | 7  | 8  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 5         | 7  | 8  | 7  | 5  | 8  | 8  | 9  | 9         | 4  | 9  | 9  | 2  | 1  | 9+ | 1  | 4         | 8  | 7  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 8         | 6  | 9  | 9  | 8  | 6  | 8  | 9  | 9         | 5  | 9  | 9  | 7  | 1  | 9  | 6  | 4         | 8  | 7  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 4  | 9+ | 9+ | 9  | 5  | 9  | 9+ | 9         | 5  | 9+ | 9+ | 9  | 1  | 9  | 9  | 4         | 9+ | 4  | -  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 1  | -  | -  | 9+ | 9+        | 4  | 9+ | 9+ | 9  | 7  | 9  | 9+ | 9         | 6  | 9+ | 9  | 9  | 3  | 8  | 9  | 4         | 8  | 2  | 1  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 6         | 7  | -  | -  | 9  | 6  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 7  | 9  | 9+ | 9         | 5  | 9+ | 8  | 9  | 3  | 5  | 9  | 5         | 4  | -  | 5  | 15  |  |  |  |  |
| 16        | 1  | 5  | -  | -  | 6  | -  | -  | 8         | 8  | -  | 6  | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 5  | 9+ | 8  | 9  | 1  | 3  | 9  | 5         | 1  | -  | 6  | 16  |  |  |  |  |
| 17        | 5  | 8  | -  | 3  | 8  | -  | -  | 9         | 9  | 1  | 9+ | 9+ | 9  | 4  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 5  | 9+ | 4  | 9  | -  | 1  | 9  | 9         | -  | -  | 6  | 17  |  |  |  |  |
| 18        | 6  | 8  | -  | 8  | 8  | 8  | -  | 9         | 9  | 4  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 5  | 9+ | 8  | 9+ | 4  | -  | 9+ | 9         | 2  | -  | 7  | 18  |  |  |  |  |
| 19        | 8  | 9  | 1  | 9+ | 9  | 9  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+        | 5  | 9+ | 9+ | 9+ | -  | -  | 9  | 8         | -  | -  | 8  | 19  |  |  |  |  |
| 20        | 8  | 9  | 4  | 9+ | 9  | 9  | 4  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 7  | 6  | 9+        | 5  | 9  | 9+ | 9+ | -  | -  | 8  | 8         | -  | -  | 8  | 20  |  |  |  |  |
| 21        | 9  | 9  | 8  | 9+ | 9  | 8  | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 4  | 9+ | 5  | 2  | 9+        | 5  | 8  | 9  | 9+ | -  | -  | 8  | 7         | -  | -  | 9  | 21  |  |  |  |  |
| 22        | 9  | 8  | 9  | 9+ | 9  | 3  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9         | 9+ | 9+ | 9+ | 6  | 9+ | 3  | -  | 9+        | 9  | 4  | 8  | 9+ | -  | -  | 8  | 5         | -  | -  | 8  | 22  |  |  |  |  |
| 23        | 9  | 8  | 9  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 3  | 9+ | -  | 1  | 9+        | 6  | -  | 8  | 9+ | -  | -  | 4  | 5         | -  | -  | 1  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**Mar., Angola (Luanda), for SSN = Very Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 8  | 7  | 9  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 1  | 5  | 9+        | 9  | 7  | 9  | 9+ | -  | -  | 2  | 5         | -  | 2  | -  | 0   |  |  |  |  |
| 1         | 9  | 1  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 1  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 9+ | -  | 7  | 8         | 7  | 1  | 9  | 6  | -  | 1  | -  | 5         | -  | -  | -  | 1   |  |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9  | -  | 9+ | 9  | 8         | 9+ | 9+ | 9  | 9  | 9  | -  | 2  | 8         | 8  | 2  | 6  | -  | -  | -  | -  | 5         | -  | 1  | -  | 2   |  |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9+        | 4  | 9+ | 9+ | 8  | 1  | 9+ | 6  | 2         | 9+ | 9+ | 7  | 9  | 8  | -  | -  | 7         | 6  | -  | 5  | 1  | -  | -  | -  | 5         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 9  | -  | 9  | 9+ | 5  | -  | 8  | 8         | -  | 9+ | 9+ | 8  | 5  | 9  | 1  | 7         | 9+ | 9  | 6  | 6  | 8  | -  | 2  | 3         | 6  | -  | 1  | -  | -  | -  | -  | 5         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 7  | -  | 9  | 9  | -  | -  | 8  | 9         | -  | 9  | 5  | 8  | 6  | 9  | 9  | 8         | 8  | 2  | 9  | 8  | 7  | -  | 8  | -         | 5  | 3  | 8  | -  | -  | -  | -  | 5         | -  | -  | -  | 5   |  |  |  |  |
| 6         | 1  | -  | 7  | 8  | -  | -  | 4  | 8         | -  | 9  | 9+ | 4  | 2  | 8  | 9+ | 6         | 3  | 9+ | 9+ | 9  | 6  | 8  | 9  | -         | 5  | 9+ | 9  | -  | -  | 2  | -  | 5         | 3  | 1  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 1  | 4  | -  | -  | -  | 4         | -  | 8  | 9  | 1  | -  | 7  | 9+ | 9         | 9+ | 9+ | 9  | 9  | 9  | 9  | 9  | 5         | 5  | 9+ | 9  | 1  | -  | 4  | -  | 5         | 4  | 3  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 8  | -  | -  | 4  | 9  | 5         | 8  | 9+ | 9  | 7  | 5  | 9  | 9  | -         | 5  | 9  | 9  | 1  | 1  | 2  | -  | 5         | 6  | 5  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 3  | -  | -  | -  | 9  | 5         | 9  | 9+ | 7  | 5  | 6  | 9  | 9  | 8         | 5  | 9  | 9  | -  | 1  | 8  | -  | 4         | 7  | 9  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 4         | 9  | 8  | 8  | 4  | 8  | 9  | 9  | 7         | 4  | 9+ | 9  | 1  | 1  | 9  | -  | 8         | 8  | 9  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 5         | 7  | 8  | 7  | 5  | 5  | 9  | 9  | 9         | 4  | 9+ | 9  | 4  | 1  | 9  | 4  | 9         | 9  | 9  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 8         | 6  | 5  | 8  | 8  | 4  | 9  | 9  | 9         | 4  | 9+ | 9  | 7  | 1  | 9  | 6  | 4         | 9  | 9  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | 5  | 9+ | 9  | 9  | 5  | 9  | 9+ | 9         | 5  | 9+ | 9+ | 8  | 1  | 9  | 8  | 4         | 9  | 8  | -  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 5  | -  | -  | 9+ | 9+        | 4  | 9  | 9+ | 9  | 4  | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 8  | 7  | 8  | 9  | 4         | 9+ | 6  | 1  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 5         | 7  | -  | -  | 6  | 6  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9         | 9+ | 9+ | 9  | 9  | 6  | 7  | 9  | 5         | 9+ | 5  | 3  | 15  |  |  |  |  |
| 16        | 1  | 5  | -  | -  | 2  | -  | -  | 8         | 8  | -  | 6  | 8  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 5  | 5  | 9  | 5         | 9  | 3  | 3  | 16  |  |  |  |  |
| 17        | 4  | 8  | -  | 2  | 6  | 1  | -  | 9         | 9  | 1  | 9+ | 9+ | 8  | 4  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 1  | 4  | 9+ | 5         | 8  | 1  | 8  | 17  |  |  |  |  |
| 18        | 6  | 8  | -  | 8  | 8  | 8  | -  | 9         | 9  | 4  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 3  | 9  | 9+        | 5  | 1  | 9  | 18  |  |  |  |  |
| 19        | 7  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+        | 9+ | 9+ | 9  | 9+ | 4  | 4  | 9+ | 9         | 1  | -  | 9  | 19  |  |  |  |  |
| 20        | 8  | 9  | 4  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 9  | 9+ | -  | -  | 9  | 8         | 2  | -  | 9  | 20  |  |  |  |  |
| 21        | 8  | 9  | 8  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 7  | 9+ | 7  | 8  | 9+        | 5  | 9+ | 9  | 9+ | -  | -  | 9  | 5         | -  | 1  | 9  | 21  |  |  |  |  |
| 22        | 8  | 8  | 9  | 9+ | 9  | 8  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 5  | 1  | 9+        | 9  | 9  | 9  | 9+ | -  | -  | 8  | 6         | -  | 5  | 9  | 22  |  |  |  |  |
| 23        | 8  | 8  | 9  | 9+ | 9  | -  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 2  | 4  | 9+        | 9  | 8  | 9  | 9+ | -  | -  | 6  | 5         | -  | 3  | 6  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**Apr., Angola (Luanda), for SSN = Very Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 9  | 6  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | -  | 7  | 8         | 5  | 1  | 7  | 9  | -  | -  | -  | 5         | -  | -  | -  | 0   |  |  |  |  |
| 1         | 8  | 2  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 8         | 9+ | 9+ | 9+ | 8  | 9+ | -  | 6  | 6         | 6  | 5  | 6  | 8  | -  | -  | -  | 5         | -  | -  | -  | 1   |  |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9  | 1  | 9+ | 8  | 8         | 9+ | 9+ | 9+ | 9  | 9+ | -  | 1  | 8         | 6  | 2  | 5  | 8  | -  | -  | 1  | 5         | -  | -  | 1  | 2   |  |  |  |  |
| 3         | 8  | -  | 9  | 9+ | 6  | -  | 9  | 9         | 4  | 9+ | 9+ | 9  | -  | 9+ | 2  | 5         | 9+ | 9  | 8  | 7  | 9+ | -  | -  | 5         | 6  | -  | 1  | 5  | -  | -  | -  | 6         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 8  | -  | 8  | 9+ | 3  | -  | 8  | 8         | -  | 9+ | 9+ | 8  | 2  | 9+ | 5  | 8         | 8  | 9  | 9  | 4  | 9  | -  | 2  | -         | 6  | 2  | 1  | -  | -  | -  | -  | 6         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 5  | -  | 8  | 9  | -  | -  | 7  | 9         | -  | 9  | 5  | 6  | 5  | 9  | 9+ | 7         | 6  | 2  | 9+ | 8  | 7  | -  | 8  | -         | 6  | 9  | 7  | -  | -  | -  | -  | 5         | -  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 6  | 8  | -  | -  | 3  | 7         | -  | 9  | 9+ | 3  | 2  | 8  | 9+ | 5         | 4  | 9+ | 9+ | 9+ | 6  | 6  | 9  | -         | 5  | 9+ | 9  | -  | -  | 4  | -  | 5         | 2  | 2  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 1  | 3  | -  | -  | -  | 3         | -  | 8  | 9  | -  | -  | 7  | 9+ | 4         | 9+ | 9+ | 9  | 9  | 8  | 9  | 9  | 2         | 5  | 9  | 9  | 1  | -  | 5  | -  | 5         | 6  | 5  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 6  | 6  | -  | -  | 2  | 9  | 5*        | 8  | 9+ | 7  | 7  | 8  | 9  | 9  | -         | 5  | 9  | 9  | 1  | -  | 7  | -  | 5         | 6  | 7  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 2  | -  | -  | -  | 9  | 4*        | 9  | 9+ | 6  | 6  | 9  | 9  | 9  | 8         | 5  | 9  | 9  | -  | -  | 9  | -  | 6         | 9  | 9  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 4         | 9  | 9  | 6  | 6  | 8  | 8  | 9  | 9         | 5  | 9  | 9  | 2  | -  | 9  | 1  | 9         | 9  | 9  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 6         | 7  | 3  | 7  | 7  | 6  | 8  | 9  | 9         | 5  | 9+ | 9  | 4  | 1  | 9+ | 6  | 4         | 9  | 9  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 8         | 5  | 5  | 8  | 8  | 6  | 8  | 9  | 9         | 5  | 9+ | 9  | 5  | 1  | 9  | 8  | 4         | 9  | 9  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 9         | 5  | 9+ | 9  | 8  | 5  | 9  | 9+ | 9         | 5  | 9+ | 9+ | 4  | 3  | 9  | 9  | 4         | 9  | 9  | -  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 5  | -  | -  | 9+ | 9+        | 5  | 9+ | 9+ | 9  | 5  | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 6  | 5  | 9  | 9  | 5         | 9+ | 6  | -  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 5         | 7  | -  | -  | 8  | 8  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 6  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 7  | 6  | 8  | 9  | 5         | 8  | 3  | -  | 15  |  |  |  |  |
| 16        | -  | 4  | -  | -  | 3  | -  | -  | 7         | 8  | -  | 6  | 8  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 5  | 5  | 9  | 5         | 9+ | 1  | 1  | 16  |  |  |  |  |
| 17        | 3  | 7  | -  | 2  | 6  | 7  | -  | 9         | 9  | 1  | 9+ | 9  | 8  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 9  | 9  | 5  | 2  | 9  | 5         | 8  | -  | 5  | 17  |  |  |  |  |
| 18        | 7  | 8  | -  | 7  | 8  | 7  | -  | 9         | 9  | 3  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9+        | 9+ | 9+ | 8  | 9  | 6  | -  | 9  | 9+        | -  | -  | 8  | 18  |  |  |  |  |
| 19        | 8  | 8  | 1  | 9+ | 9  | 8  | -  | 9+        | 9  | 8  | 9+ | 9+ | 9  | 4  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9  | 7  | 9  | 3  | -  | 9  | 8         | -  | -  | 9  | 19  |  |  |  |  |
| 20        | 8  | 9  | 3  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 7  | 4  | 9+        | 9+ | 8  | 6  | 9  | -  | -  | 8  | 5         | -  | -  | 8  | 20  |  |  |  |  |
| 21        | 8  | 9  | 7  | 9+ | 9  | 8  | 4  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 3  | 9+ | 1  | -  | 9+        | 9  | 8  | 7  | 9+ | -  | -  | 6  | 5         | -  | -  | 6  | 21  |  |  |  |  |
| 22        | 8  | 8  | 9  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 6  | 9+ | -  | 5  | 9+        | 8  | 6  | 9  | 9+ | -  | -  | 6  | 5         | -  | 2  | 6  | 22  |  |  |  |  |
| 23        | 8  | 8  | 9  | 9+ | 9  | 1  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | -  | 8  | 9+        | 6  | 2  | 8  | 9+ | -  | -  | 1  | 5         | -  | 1  | 3  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**May, Angola (Luanda), for SSN = Very Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 8  | 6  | 9  | 9+ | 9  | -  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 8  | 9         | 9  | 9  | 9+ | 6  | 9+ | -  | 1  | -         | 6  | -  | -  | -  | -  | -  | -  | 5         | -  | -  | -  | 0   |  |  |  |  |
| 1         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9+ | 7  | 8         | 9  | 3  | 9  | 5  | 9  | -  | 2  | -         | 6  | 2  | -  | -  | -  | -  | -  | 5         | -  | -  | -  | 1   |  |  |  |  |
| 2         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9         | 7  | 9+ | 9+ | 9  | 1  | 9+ | 1  | 5         | 9+ | 6  | 8  | 1  | 9  | -  | -  | 1         | 6  | -  | -  | 1  | -  | -  | -  | 5         | -  | -  | -  | 2   |  |  |  |  |
| 3         | 8  | -  | 9  | 9+ | 3  | -  | 9  | 7         | 1  | 9+ | 9  | 8  | -  | 9  | -  | 1         | 9  | 3  | 2  | -  | 8  | -  | -  | -         | 6  | -  | -  | -  | -  | -  | -  | 6         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 7  | -  | 9  | 9  | 2  | -  | 9  | 7         | -  | 9+ | 5  | 8  | 2  | 9  | 3  | 8         | 6  | 9  | 8  | 3  | 5  | -  | 2  | -         | 6  | 1  | 1  | -  | -  | -  | -  | 6         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 4  | -  | 8  | 9  | -  | -  | 7  | 9         | -  | 9  | 5  | 6  | 4  | 9  | 9+ | 7         | 4  | 2  | 9+ | 8  | 8  | -  | 8  | -         | 6  | 9  | 5  | -  | -  | -  | -  | 5         | -  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 7  | 8  | -  | -  | 3  | 7         | -  | 9  | 9+ | 2  | 1  | 8  | 9+ | 6         | 6  | 9+ | 9+ | 9+ | 8  | 8  | 9  | -         | 5  | 9  | 9  | -  | -  | 4  | -  | 5         | 1  | -  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 2  | 3  | -  | -  | -  | 2         | -  | 8  | 9  | -  | -  | 7  | 9+ | 6         | 9+ | 9+ | 8  | 9  | 9  | 8  | 9  | 4         | 5  | 9  | 9  | 1  | -  | 6  | -  | 5         | -  | 2  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 7  | 6  | -  | -  | 1  | 9  | 5*        | 9  | 9+ | 7  | 8  | 8  | 8  | 9  | 2         | 5  | 9  | 9  | 1  | -  | 6  | -  | 5         | 7  | 3  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 1  | 2  | -  | -  | -  | 9  | 5         | 9  | 9+ | 5  | 7  | 9  | 8  | 9  | 5         | 5  | 9  | 9  | -  | -  | 9  | -  | 6         | 8  | 8  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 5         | 9  | 9  | 5  | 6  | 8  | 8  | 9  | 5         | 5  | 9  | 9  | 6  | -  | 9  | -  | 8         | 8  | 9  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 6         | 8  | 2  | 6  | 7  | 7  | 8  | 9  | 9         | 5  | 9  | 9  | 6  | -  | 9+ | -  | 9         | 9  | 9  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 8         | 6  | 2  | 8  | 7  | 6  | 8  | 9  | 9         | 5  | 9  | 9  | 5  | -  | 9  | 1  | 5         | 9  | 9  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 6  | 3  | 9  | 8  | 5  | 8  | 9+ | 9         | 5  | 9+ | 9+ | 4  | -  | 9+ | 1  | 5         | 9  | 7  | -  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 2  | -  | -  | 9+ | 9+        | 6  | 3  | 9  | 9  | 6  | 9+ | 9+ | 9         | 5  | 9+ | 9  | 5  | -  | 9  | 3  | 5         | 9+ | -  | -  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 2         | 8  | -  | -  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | 9         | 9+ | 9+ | 5  | 5  | -  | 1  | 7  | 9         | 8  | -  | -  | 15  |  |  |  |  |
| 16        | -  | 5  | -  | -  | 3  | -  | -  | 6         | 8  | -  | 4  | 9  | 8  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 8  | 9         | 9+ | 9+ | -  | 8  | 1  | -  | 9  | 8         | 9  | -  | -  | 16  |  |  |  |  |
| 17        | 2  | 7  | -  | 1  | 6  | 7  | -  | 8         | 9  | 1  | 9  | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | 3  | 9         | 9+ | 9+ | 3  | 9  | 5  | -  | 9  | 8         | 7  | -  | 4  | 17  |  |  |  |  |
| 18        | 5  | 8  | -  | 7  | 8  | 8  | -  | 9         | 9  | 6  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | -  | 9         | 9+ | 9+ | 6  | 9  | 6  | -  | 9  | 5         | -  | -  | 7  | 18  |  |  |  |  |
| 19        | 7  | 8  | 1  | 9+ | 9  | 8  | -  | 9         | 9+ | 9  | 9+ | 9+ | 9  | 2  | 9+ | 9+        | 9  | 9+ | 9+ | 9  | 9+ | 9  | -  | 9+        | 9+ | 7  | 5  | 9  | 4  | -  | 7  | 5         | -  | -  | 7  | 19  |  |  |  |  |
| 20        | 8  | 9  | 4  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 5  | 9+ | 9         | 9+ | 9+ | 9+ | 6  | 9+ | 7  | -  | 9         | 9+ | 3  | 4  | 9+ | 1  | -  | 1  | 5         | -  | -  | 5  | 20  |  |  |  |  |
| 21        | 8  | 9  | 8  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 3  | 9+ | 4  | 1  | 8         | 6  | 1  | 5  | 9+ | -  | -  | -  | 5         | -  | -  | 1  | 21  |  |  |  |  |
| 22        | 8  | 8  | 9  | 9+ | 9  | 8  | 5  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 4  | 9+ | 1  | 5  | 7         | 5  | -  | 2  | 8  | -  | -  | -  | 5         | -  | -  | -  | 22  |  |  |  |  |
| 23        | 8  | 8  | 9  | 9+ | 9  | 8  | 7  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9  | 9         | 9+ | 9  | 9+ | 8  | 9+ | -  | 2  | 1         | 5  | -  | -  | 5  | -  | -  | -  | 5         | -  | -  | -  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

Jun., Angola (Luanda), for SSN = Very Low, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 7  | 6  | 9  | 9+ | 9  | 1  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9  | 9         | 9+ | 9  | 1  | 9+ | -  | -  | -  | 6         | -  | 1  | 5  | -  | -  | -  | 5  | -         | -  | -  | 0  |     |  |  |  |  |
| 1         | 8  | 1  | 9  | 9+ | 9  | -  | 8  | 9+        | 8  | 9+ | 9+ | 9  | 8  | 9  | 8  | 8         | 9  | 6  | 9  | 6  | 9+ | -  | -  | -         | 6  | 1  | -  | 1  | -  | -  | -  | 5         | -  | -  | -  | 1   |  |  |  |  |
| 2         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9         | 5  | 9+ | 9+ | 8  | 7  | 9+ | 2  | 2         | 9  | 3  | 6  | 3  | 9  | -  | -  | -         | 6  | -  | -  | -  | -  | -  | -  | 5         | -  | -  | -  | 2   |  |  |  |  |
| 3         | 8  | -  | 9  | 9+ | 5  | -  | 9  | 8         | 1  | 9+ | 9+ | 8  | -  | 9+ | -  | -         | 7  | 3  | 2  | -  | 8  | -  | -  | -         | 6  | -  | -  | -  | -  | -  | -  | 6         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 7  | -  | 9  | 9+ | 2  | -  | 8  | 7         | -  | 9  | 9  | 8  | 2  | 9  | 2  | 5         | 1  | 7  | 7  | 1  | 1  | -  | -  | -         | 6  | -  | -  | -  | -  | -  | -  | 6         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 3  | -  | 9  | 9  | -  | -  | 7  | 9         | -  | 9  | 5  | 6  | 5  | 9  | 9+ | 7         | -  | 2  | 9+ | 8  | 7  | -  | 5  | -         | 6  | 7  | 1  | -  | -  | -  | -  | 5         | -  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 7  | 8  | -  | -  | 2  | 7         | -  | 9  | 9+ | -  | 4  | 8  | 9+ | 7         | 4  | 9+ | 9+ | 9+ | 9  | 8  | 9  | -         | 5  | 9  | 8  | -  | -  | 1  | -  | 5         | 1  | -  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 4  | 2  | -  | -  | -  | 2         | -  | 8  | 9  | -  | -  | 6  | 9+ | 5         | 9+ | 9+ | 9  | 9  | 9  | 8  | 9  | 1         | 5  | 9  | 9  | 1  | -  | 4  | -  | 5         | 4  | 1  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 7  | 5  | -  | -  | 1  | 9+ | 6*        | 9  | 9+ | 8  | 8  | 8  | 8  | 9  | 1         | 5  | 9  | 9  | -  | -  | 6  | -  | 5         | 4  | 1  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 1  | -  | -  | -  | 9  | 5         | 9+ | 9  | 7  | 6  | 8  | 8  | 9  | 1         | 5  | 9  | 9  | 2  | -  | 7  | -  | 5         | 6  | 2  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 7  | 5         | 9  | 9  | 6  | 7  | 8  | 8  | 9  | 6         | 5  | 9  | 9  | 6  | 1  | 8  | -  | 6         | 9  | 4  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 6         | 8  | 2  | 7  | 8  | 7  | 8  | 9+ | 8         | 5  | 9  | 9  | 6  | 1  | 9  | -  | 7         | 9  | 6  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 8         | 7  | 2  | 8  | 7  | 6  | 8  | 9+ | 8         | 5  | 9  | 9  | 7  | -  | 9  | 1  | 8         | 9  | 8  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 7  | 2  | 9  | 9  | 6  | 8  | 9+ | 8         | 5  | 9+ | 9+ | 6  | -  | 9  | 1  | 8         | 9  | 6  | -  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 3  | 1  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9+ | 6  | 8  | 9+ | 9         | 5  | 9+ | 7  | 7  | -  | 8  | 4  | 7         | 9  | -  | -  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 2         | 8  | -  | -  | 6  | 7  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9         | 5  | 9+ | 2  | 8  | -  | 2  | 7  | 8         | 7  | -  | 1  | 15  |  |  |  |  |
| 16        | -  | 5  | -  | -  | 3  | -  | -  | 6         | 8  | 1  | 4  | 8  | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 8  | 9         | 9+ | 9+ | -  | 8  | 2  | -  | 8  | 8         | 5  | -  | 2  | 16  |  |  |  |  |
| 17        | 1  | 7  | -  | 1  | 6  | 7  | -  | 8         | 9  | 3  | 9  | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 8  | 9+ | 5  | 9+        | 9+ | 9+ | 5  | 9  | 2  | -  | 9  | 8         | 1  | -  | 4  | 17  |  |  |  |  |
| 18        | 4  | 8  | -  | 7  | 8  | 8  | -  | 9         | 9+ | 7  | 9+ | 9+ | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 1  | 9+        | 9+ | 9  | 3  | 9  | 4  | -  | 8  | 9         | -  | -  | 5  | 18  |  |  |  |  |
| 19        | 6  | 8  | 3  | 9+ | 9  | 8  | -  | 9         | 9+ | 9  | 9+ | 9+ | 9+ | 1  | 9+ | 9+        | 9  | 9+ | 9+ | 4  | 9  | 9+ | -  | 9+        | 9+ | 7  | 4  | 9  | 1  | -  | 7  | 5         | -  | -  | 6  | 19  |  |  |  |  |
| 20        | 7  | 9  | 6  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 4  | 9+ | 9+        | 9+ | 9+ | 9+ | 2  | 9+ | 8  | -  | 9         | 9  | 1  | 4  | 9  | -  | -  | 1  | 5         | -  | -  | -  | 20  |  |  |  |  |
| 21        | 8  | 9  | 9  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 7  | 9+ | 9+        | 9+ | 9+ | 9+ | 1  | 9+ | 4  | -  | 6         | 6  | -  | 4  | 9  | -  | -  | -  | 5         | -  | -  | -  | 21  |  |  |  |  |
| 22        | 8  | 8  | 9  | 9+ | 9+ | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 2  | 9+ | 2  | 2  | 6         | 6  | -  | 4  | 8  | -  | -  | -  | 5         | -  | -  | -  | 22  |  |  |  |  |
| 23        | 8  | 8  | 9  | 9+ | 9  | 7  | 6  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9         | 9+ | 9+ | 9+ | 1  | 9+ | -  | 1  | 4         | 6  | 1  | 3  | 8  | -  | -  | -  | 5         | -  | -  | -  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**Jul., Angola (Luanda), for SSN = Very Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 8  | 6  | 9  | 9+ | 9  | -  | 8  | 9         | 9  | 9+ | 9+ | 9+ | 9  | 9  | 2  | 7         | 9  | 4  | 9  | 3  | 9  | -  | -  | -         | 6  | -  | -  | -  | -  | -  | -  | 6         | -  | -  | -  | 0   |  |  |  |  |
| 1         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9         | 8  | 9+ | 9+ | 9  | 8  | 9+ | 2  | 7         | 9  | 7  | 9  | 1  | 9  | -  | -  | -         | 6  | -  | -  | -  | -  | -  | -  | 6         | -  | -  | -  | 1   |  |  |  |  |
| 2         | 7  | -  | 9  | 9+ | 9  | -  | 9  | 9         | 5  | 9+ | 9+ | 8  | -  | 9+ | -  | 3         | 9  | 3  | 6  | -  | 9  | -  | -  | -         | 6  | -  | -  | -  | -  | -  | -  | 6         | -  | -  | -  | 2   |  |  |  |  |
| 3         | 7  | -  | 9  | 9+ | 3  | -  | 9  | 8         | 2  | 9+ | 9+ | 8  | -  | 9+ | -  | -         | 8  | 4  | 2  | -  | 9  | -  | -  | -         | 6  | -  | -  | -  | -  | -  | -  | 6         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 6  | -  | 9  | 9+ | 1  | -  | 8  | 7         | -  | 9+ | 9  | 8  | 2  | 9  | 1  | 6         | 4  | 7  | 7  | 1  | 3  | -  | -  | -         | 6  | -  | -  | -  | -  | -  | -  | 6         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 2  | -  | 8  | 9  | -  | -  | 7  | 9         | -  | 9  | 5  | 6  | 5  | 9  | 9  | 8         | 1  | 3  | 9+ | 6  | 6  | -  | 5  | -         | 6  | 6  | 1  | -  | -  | -  | -  | 5         | -  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 7  | 8  | -  | -  | 2  | 8         | -  | 9  | 9  | 1  | 1  | 9  | 9  | 7         | 6  | 2  | 9+ | 9+ | 8  | 5  | 9  | -         | 5  | 9  | 8  | -  | -  | 1  | -  | 5         | -  | -  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 2  | 1  | -  | -  | -  | 2         | -  | 8  | 8  | -  | -  | 7  | 9  | 6         | 9  | 9+ | 9  | 9  | 8  | 5  | 9  | 2         | 5  | 9  | 8  | -  | -  | 2  | -  | 5         | 3  | 1  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 6  | 5  | -  | -  | 1  | 9  | 6         | 8  | 9+ | 8  | 8  | 6  | 5  | 9  | -         | 5  | 9  | 9  | -  | -  | 2  | -  | 5         | 1  | 1  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 2  | 1  | -  | -  | -  | 9  | 5         | 9  | 9  | 6  | 6  | 9  | 6  | 9  | -         | 5  | 9  | 9  | -  | -  | 6  | -  | 5         | 5  | -  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 5         | 9  | 9  | 6  | 7  | 8  | 7  | 9  | 7         | 5  | 9  | 9+ | 4  | -  | 7  | -  | 5         | 7  | 1  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 7         | 8  | 9  | 7  | 8  | 7  | 7  | 9+ | 5         | 5  | 9  | 9  | 5  | -  | 8  | -  | 5         | 7  | 2  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 6  | 9  | 8  | 7  | 7  | 6  | 9+ | 8         | 5  | 9  | 9  | 6  | -  | 8  | -  | 5         | 8  | 8  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 8  | 2  | 9  | 9  | 6  | 6  | 9+ | 7         | 5  | 9+ | 9+ | 6  | -  | 8  | -  | 5         | 8  | 5  | -  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 3  | -  | -  | 3  | 1  | -  | 9  | 9+        | 7  | 2  | 9+ | 9+ | 6  | 8  | 9+ | 8         | 5  | 9+ | 7  | 5  | -  | 8  | 1  | 5         | 7  | -  | -  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 2         | 8  | -  | 1  | 6  | 7  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 8  | 9  | 9         | 5  | 9+ | 1  | 7  | -  | -  | 3  | 6         | 5  | -  | -  | 15  |  |  |  |  |
| 16        | -  | 5  | -  | -  | 3  | -  | -  | 6         | 9  | -  | 4  | 8  | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9  | 8  | 9  | 6  | 9         | 5  | 9+ | -  | 7  | -  | -  | 5  | 6         | 3  | -  | -  | 16  |  |  |  |  |
| 17        | 2  | 7  | -  | 1  | 6  | 7  | -  | 8         | 9  | 1  | 8  | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 1  | 9+        | 9  | 9+ | 4  | 8  | -  | -  | 7  | 6         | -  | -  | 1  | 17  |  |  |  |  |
| 18        | 5  | 8  | -  | 6  | 8  | 8  | -  | 9         | 9+ | 6  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9  | 9+ | -  | 9+        | 6  | 7  | 5  | 9  | -  | -  | 8  | 5         | -  | -  | 2  | 18  |  |  |  |  |
| 19        | 6  | 8  | 1  | 9  | 8  | 8  | -  | 9         | 9+ | 9  | 9+ | 9+ | 9+ | 2  | 9+ | 9         | 9  | 9+ | 9+ | 5  | 9+ | 8  | -  | 9+        | 9  | 2  | 5  | 9  | -  | -  | 5  | 5         | -  | -  | 4  | 19  |  |  |  |  |
| 20        | 8  | 9  | 5  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 6  | 9+ | 9         | 9+ | 9+ | 9+ | 2  | 9+ | 2  | -  | 9         | 6  | -  | 1  | 9  | -  | -  | -  | 5         | -  | -  | -  | 20  |  |  |  |  |
| 21        | 8  | 9  | 7  | 9+ | 9  | 9  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | -  | 9+ | -  | -  | 7         | 6  | -  | 1  | 6  | -  | -  | -  | 6         | -  | -  | -  | 21  |  |  |  |  |
| 22        | 8  | 8  | 8  | 9+ | 9  | 8  | 5  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9  | 9+        | 9+ | 9  | 9  | 1  | 9+ | -  | 2  | 5         | 6  | -  | -  | 5  | -  | -  | -  | 5         | -  | -  | -  | 22  |  |  |  |  |
| 23        | 8  | 8  | 9  | 9+ | 9  | 8  | 8  | 9+        | 9  | 9  | 9+ | 9+ | 9  | 9  | 7  | 9         | 9+ | 5  | 9+ | 4  | 9+ | -  | -  | 1         | 6  | -  | -  | 1  | -  | -  | -  | 5         | -  | -  | -  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |

**Aug., Angola (Luanda), for SSN = Very Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |  |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|--|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |  |  |  |  |
| 0         | 8  | 6  | 9  | 9+ | 9  | -  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9  | 6  | 9         | 9+ | 9  | 9+ | 4  | 9+ | -  | -  | 1         | 6  | -  | -  | 2  | -  | -  | -  | 5         | -  | -  | -  | 0   |  |  |  |  |
| 1         | 8  | 1  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9  | 8  | 9+ | 6  | 6         | 9  | 8  | 9  | 6  | 9+ | -  | 1  | -         | 6  | 1  | -  | -  | -  | -  | -  | 5         | -  | -  | -  | 1   |  |  |  |  |
| 2         | 8  | -  | 9  | 9+ | 9  | -  | 9  | 9         | 3  | 9+ | 9+ | 8  | -  | 9+ | 2  | 5         | 9  | 5  | 8  | 7  | 9  | -  | -  | 1         | 6  | -  | -  | 1  | -  | -  | -  | 5         | -  | -  | -  | 2   |  |  |  |  |
| 3         | 8  | -  | 9  | 9+ | 4  | -  | 9  | 8         | 1  | 9+ | 9+ | 8  | -  | 9+ | -  | 1         | 8  | 5  | 2  | 1  | 8  | -  | -  | -         | 6  | -  | -  | -  | -  | -  | -  | 6         | -  | -  | -  | 3   |  |  |  |  |
| 4         | 7  | -  | 9  | 9+ | 1  | -  | 8  | 7         | -  | 9+ | 8  | 8  | 6  | 9  | 2  | 6         | 3  | 7  | 8  | 1  | 3  | -  | -  | -         | 6  | -  | -  | -  | -  | -  | -  | 6         | -  | -  | -  | 4   |  |  |  |  |
| 5         | 4  | -  | 8  | 9  | -  | -  | 7  | 9         | -  | 9  | 5  | 6  | 6  | 9  | 9+ | 8         | 1  | 3  | 9+ | 8  | 7  | -  | 7  | -         | 6  | 8  | 2  | -  | -  | -  | -  | 5         | -  | -  | -  | 5   |  |  |  |  |
| 6         | -  | -  | 7  | 8  | -  | -  | 3  | 7         | -  | 9  | 9+ | 1  | 1  | 8  | 9  | 7         | 4  | 2  | 9+ | 9+ | 8  | 5  | 9  | -         | 5  | 9  | 8  | -  | -  | 2  | -  | 5         | -  | 1  | -  | 6   |  |  |  |  |
| 7         | -  | -  | 3  | 2  | -  | -  | -  | 4         | -  | 8  | 9  | -  | -  | 7  | 9+ | 6         | 9  | 9+ | 9  | 9  | 8  | 7  | 9  | -         | 5  | 9  | 8  | -  | -  | 6  | -  | 5         | 6  | 2  | -  | 7   |  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 5  | 6  | -  | -  | 2  | 9  | 5         | 7  | 9+ | 8  | 8  | 7  | 6  | 9  | -         | 5  | 9  | 9  | -  | -  | 7  | -  | 5         | 6  | 4  | -  | 8   |  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 2  | 2  | -  | -  | -  | 9  | 4         | 9  | 9+ | 7  | 6  | 8  | 7  | 9  | 4         | 5  | 9  | 9  | -  | -  | 8  | -  | 5         | 8  | 4  | -  | 9   |  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 5         | 9  | 9  | 6  | 7  | 8  | 8  | 9  | 5         | 5  | 9  | 9  | 1  | -  | 8  | -  | 6         | 9  | 4  | -  | 10  |  |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8  | 7         | 7  | 2  | 7  | 8  | 7  | 8  | 9  | 5         | 5  | 9  | 9  | 6  | -  | 9  | -  | 7         | 8  | 6  | -  | 11  |  |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 8         | 5  | 2  | 8  | 8  | 6  | 7  | 9+ | 7         | 5  | 9  | 9  | 6  | -  | 8  | -  | 6         | 8  | 5  | -  | 12  |  |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 7  | 9+ | 9+ | 9  | 7  | 7  | 9+ | 8         | 5  | 9+ | 9+ | 6  | -  | 5  | -  | 6         | 8  | 7  | -  | 13  |  |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 4  | -  | -  | 4  | -  | -  | 9+ | 9+        | 7  | 9+ | 9+ | 9+ | 6  | 8  | 9+ | 9         | 5  | 9+ | 9  | 6  | -  | 8  | 1  | 6         | 8  | -  | -  | 14  |  |  |  |  |
| 15        | -  | -  | -  | -  | 1  | -  | -  | 5         | 8  | -  | 1  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9         | 5  | 9+ | 5  | 7  | -  | 2  | 6  | 6         | 8  | -  | -  | 15  |  |  |  |  |
| 16        | 1  | 5  | -  | -  | 4  | -  | -  | 8         | 9  | -  | 4  | 9  | 9  | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9  | 9  | 9         | 5  | 9+ | -  | 8  | -  | -  | 6  | 6         | -  | -  | -  | 16  |  |  |  |  |
| 17        | 3  | 7  | -  | 3  | 6  | 7  | -  | 8         | 9  | 2  | 9  | 9  | 9  | -  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9  | 9+ | 4  | 9+        | 6  | 9  | 1  | 9  | -  | -  | 7  | 7         | 6  | -  | 1  | 17  |  |  |  |  |
| 18        | 5  | 8  | -  | 7  | 8  | 7  | -  | 9         | 9+ | 5  | 9+ | 9+ | 9  | 1  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | -  | 9+        | 6  | 8  | 3  | 9  | -  | -  | 8  | 6         | -  | -  | 3  | 18  |  |  |  |  |
| 19        | 7  | 9  | 1  | 9  | 8  | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 4  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | -  | 9+        | 9  | -  | -  | 9  | -  | -  | 7  | 5         | -  | -  | 4  | 19  |  |  |  |  |
| 20        | 8  | 9  | 3  | 9+ | 9  | 8  | -  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+ | 9         | 9+ | 9+ | 9  | 5  | 9+ | 7  | -  | 9+        | 8  | -  | 1  | 9  | -  | -  | 4  | 5         | -  | -  | 3  | 20  |  |  |  |  |
| 21        | 8  | 9  | 8  | 9+ | 9  | 8  | 5  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 8         | 9+ | 9+ | 7  | 2  | 9+ | -  | -  | 8         | 6  | -  | -  | 8  | -  | -  | -  | 5         | -  | -  | -  | 21  |  |  |  |  |
| 22        | 8  | 8  | 9  | 9+ | 9+ | 8  | 7  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9  | 9+        | 9+ | 9+ | 8  | 4  | 9+ | -  | 5  | 8         | 6  | -  | 2  | 8  | -  | -  | -  | 5         | -  | -  | -  | 22  |  |  |  |  |
| 23        | 8  | 8  | 9  | 9+ | 9  | 4  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9  | 9+        | 9+ | 9+ | 9  | 5  | 9+ | -  | 2  | 5         | 6  | -  | -  | 6  | -  | -  | -  | 5         | -  | -  | -  | 23  |  |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |  |  |  |  |



**Oct., Angola (Luanda), for SSN = Very Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |    |    |    |    |     |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | UTC |
| 0         | 9  | 6  | 9  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9+ | -         | 5  | 9+ | 8  | -  | 8  | 7  | -         | -  | 1  | 5  | -  | -  | -  | 0   |
| 1         | 9  | -  | 9  | 9  | 8  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | -         | 7  | 9  | 5  | 5  | 7  | 1  | -         | -  | -  | 5  | -  | -  | -  | 1   |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 5  | 9+ | 9+ | 9  | -  | 9+ | 8         | 8  | 9+ | 9+ | 9+ | 9  | 9+ | -         | 3  | 8  | 5  | 2  | 7  | -  | -         | -  | -  | 5  | -  | 1  | -  | 2   |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9         | 1  | 9+ | 9+ | 9  | 2  | 9+ | 5         | 8  | 9+ | 9+ | 8  | 9+ | 9  | -         | 1  | 7  | 6  | -  | 4  | -  | -         | -  | -  | 5  | -  | -  | -  | 3   |
| 4         | 8  | -  | 9  | 9  | 2  | -  | 8  | 9         | -  | 9  | 9+ | 8  | 6  | 9  | 5         | 8  | 9  | 3  | 9  | 8  | 9  | -         | 8  | 1  | 8  | 6  | 8  | -  | -         | 1  | -  | 5  | -  | 1  | -  | 4   |
| 5         | 5  | -  | 9  | 9  | -  | -  | 7  | 9         | -  | 9  | 5  | 6  | 6  | 9  | 9+        | 8  | 9  | 2  | 9+ | 9  | 8  | -         | 9+ | 1* | 6  | 9  | 9  | -  | -         | 2  | -  | 5  | -  | -  | -  | 5   |
| 6         | 1  | -  | 5  | 6  | -  | -  | 4  | 7         | -  | 9  | 9+ | 2  | 4  | 8  | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9         | 9  | 4  | 5  | 9+ | 9  | -  | -         | 6  | -  | 5  | 6  | 2  | -  | 6   |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 2         | -  | 7  | 7  | 1  | -  | 7  | 9+        | 9  | 9+ | 9+ | 9  | 9  | 8  | 9+        | 9  | 2  | 9+ | 9+ | 9  | 1  | 5         | 6  | -  | 5  | 7  | 4  | -  | 7   |
| 8         | -  | -  | -  | -  | -  | -  | -  | 2         | -  | 5  | 8  | -  | -  | 3  | 9+        | 4  | 9+ | 9+ | 9  | 7  | 6  | 9+        | 9  | 2  | 9+ | 9+ | 9  | -  | 1         | 7  | -  | 5  | 7  | 8  | -  | 8   |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 9         | 4  | 9  | 9+ | 8  | 5  | 9  | 9         | 9  | 9  | 5  | 9+ | 9  | -  | 2         | 9  | -  | 5  | 7  | 9  | -  | 9   |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9         | 4  | 9  | 8  | 7  | 4  | 8  | 9         | 9  | 9+ | 4  | 9+ | 9  | 5  | 4         | 9  | 1  | 8  | 8  | 9  | -  | 10  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9         | 6  | 8  | 8  | 8  | 5  | 6  | 9         | 9  | 9  | 4  | 9+ | 9  | 9  | 1         | 9  | 5  | 8  | 9  | 9  | -  | 11  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 8         | 8  | 6  | 8  | 9  | 8  | 5  | 9         | 9+ | 9  | 4  | 9+ | 9  | 9  | 5         | 9+ | 9  | 9  | 9  | 9  | -  | 12  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9         | 9  | 5  | 9+ | 9+ | 9  | 5  | 9+        | 9+ | 9  | 5  | 9+ | 9+ | 9  | 7         | 9  | 9  | 4  | 9  | 9  | 1  | 13  |
| 14        | -  | -  | -  | -  | -  | -  | -  | 1         | 4  | -  | -  | 7  | -  | -  | 9+        | 9+ | 5  | 9+ | 9+ | 9+ | 5  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 6         | 8  | 9  | 4  | 9+ | 8  | 6  | 14  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 6         | 8  | -  | 1  | 9  | 7  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 6         | 7  | 9  | 5  | 8  | 6  | 7  | 15  |
| 16        | 1  | 5  | -  | -  | 5  | -  | -  | 8         | 8  | -  | 6  | 8  | 8  | -  | 9+        | 9+ | 9  | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8         | 5  | 9+ | 5  | 9+ | 2  | 8  | 16  |
| 17        | 5  | 7  | -  | 2  | 7  | 1  | -  | 9         | 9  | 1  | 9+ | 9  | 8  | 4  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 1         | 3  | 9+ | 5  | 9  | -  | 9  | 17  |
| 18        | 6  | 8  | -  | 8  | 8  | 8  | -  | 9         | 9  | 4  | 9+ | 9+ | 9  | 4  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | -  | 9+ | 5  | 6  | -  | 9  | 18  |
| 19        | 8  | 9  | 1  | 9+ | 9  | 9  | -  | 9         | 9+ | 8  | 9+ | 9+ | 9  | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 9  | 9+ | 9+ | 9+ | 9  | 9+ | 4         | -  | 9+ | 9  | 2  | 1  | 9  | 19  |
| 20        | 8  | 9  | 4  | 9+ | 9  | 9  | 5  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | 9         | 5  | 9+ | 9+ | 9+ | 9  | 9+ | -         | -  | 9  | 5  | 3  | 3  | 9+ | 20  |
| 21        | 9  | 8  | 8  | 9+ | 9  | 8  | 7  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 6  | 9+ | 7         | 1  | 9+ | 9+ | 9+ | 9  | 9+ | -         | -  | 9  | 9  | -  | 4  | 9  | 21  |
| 22        | 9  | 8  | 9  | 9+ | 9  | 4  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 4         | -  | 9+ | 9+ | 8  | 9  | 9+ | -         | -  | 9  | 5  | -  | 5  | 9  | 22  |
| 23        | 9  | 8  | 9  | 9+ | 9  | -  | 9  | 9+        | 9+ | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | -         | 5  | 9+ | 9+ | 2  | 9  | 9+ | -         | -  | 7  | 5  | -  | 4  | 1  | 23  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA |     |

Nov., Angola (Luanda), for SSN = Very Low, Sigs in S-Units. By N6BV, ARRL.

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    |    | 20 Meters |    |    |    |    |    |    |    | 15 Meters |    |    |    |    |    |    |    | 10 Meters |    |    |    |     |    |  |  |  |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|----|-----------|----|----|----|-----|----|--|--|--|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA | UTC |    |  |  |  |
| 0         | 9  | 6  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 7  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9+ | -  | 8         | 9  | 8  | 1  | 7  | 3  | -  | -  | 1         | 5  | -  | -  | -   | 0  |  |  |  |
| 1         | 9  | 2  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9+ | -  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 9+ | -  | 8         | 8  | 9  | 4  | 6  | -  | -  | 2  | -         | 5  | -  | -  | -   | 1  |  |  |  |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 6  | 9+ | 9+ | 9  | -  | 9+ | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9  | -  | 7         | 8  | 5  | 5  | 4  | -  | -  | -  | 1         | 5  | -  | -  | -   | 2  |  |  |  |
| 3         | 9  | -  | 9  | 9+ | 7  | -  | 9  | 9+        | 1  | 9+ | 9+ | 8  | 5  | 9+ | 4  | 8         | 9+ | 9+ | 9  | 9  | 8  | 8  | -  | 2         | 6  | 6  | 2  | 1  | -  | -  | -  | -         | 5  | -  | -  | -   | 3  |  |  |  |
| 4         | 8  | -  | 9  | 9+ | 4  | -  | 8  | 8         | -  | 9+ | 9+ | 9  | 6  | 9  | 1  | 8         | 9  | 3  | 9  | 8  | 7  | 7  | -  | 7         | 1  | 6  | 5  | 6  | -  | -  | -  | -         | 5  | -  | -  | -   | 4  |  |  |  |
| 5         | 7  | -  | 9  | 8  | -  | -  | 7  | 9         | -  | 9  | 5  | 8  | 7  | 9  | 9  | 8         | 9  | 2  | 9+ | 9  | 8  | 8  | -  | 9         | 1  | 8  | 6  | 9  | -  | -  | -  | -         | 5  | -  | -  | -   | 5  |  |  |  |
| 6         | 1  | -  | 4  | 6  | -  | -  | 5  | 8         | -  | 9  | 9  | 5  | 4  | 8  | 9+ | 9         | 9+ | 9+ | 9+ | 9  | 9  | 9  | 3  | 9         | 4  | 5  | 9+ | 9  | 1  | -  | 5  | -         | 5  | 4  | 1  | -   | 6  |  |  |  |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 4         | -  | 8  | 8  | 1  | -  | 7  | 9+ | 9         | 9+ | 9+ | 9+ | 8  | 8  | 8  | 9  | 9         | 2  | 5  | 9+ | 9  | 1  | 1  | 4  | -         | 5  | 5  | 2  | -   | 7  |  |  |  |
| 8         | -  | -  | -  | -  | -  | -  | -  | 1         | -  | 5  | 4  | -  | -  | 5  | 9+ | 5         | 9+ | 9+ | 9  | 7  | 7  | 7  | 9  | 9         | 2  | 5  | 9  | 9  | 1  | -  | 4  | -         | 5  | 4  | 7  | -   | 8  |  |  |  |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 9  | 4         | 9  | 9+ | 9  | 3  | 7  | 7  | 9  | 9         | 9  | 5  | 9  | 9  | -  | 2  | 8  | -         | 4  | 5  | 9  | -   | 9  |  |  |  |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 4         | 9  | 8  | 6  | 2  | 8  | 8  | 9  | 9         | 4  | 9+ | 9  | 1  | 2  | 9  | 1  | 7         | 7  | 9  | -  | 10  |    |  |  |  |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 6         | 8  | 8  | 8  | 4  | 8  | 8  | 9  | 9         | 4  | 9+ | 9  | 7  | 4  | 9  | 4  | 9         | 8  | 9  | -  | 11  |    |  |  |  |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 8         | 7  | 9  | 9  | 7  | 5  | 5  | 9  | 9+        | 9  | 4  | 9+ | 9  | 9  | 4  | 9+ | 8         | 9  | 9  | 8  | -   | 12 |  |  |  |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9  | 9         | 6  | 9+ | 9+ | 9  | 5  | 5  | 9  | 9+        | 9  | 4  | 9+ | 9+ | 9  | 5  | 9  | 9         | 4  | 9  | 6  | 3   | 13 |  |  |  |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 2  | -  | -  | 4  | -  | -  | 9+ | 9+        | 4  | 9+ | 9+ | 9+ | 6  | 6  | 9  | 9+        | 9  | 5  | 9+ | 9+ | 9  | 5  | 8  | 9         | 4  | 6  | 1  | 9   | 14 |  |  |  |
| 15        | -  | -  | -  | -  | -  | -  | -  | 6         | 7  | -  | -  | 9  | 6  | -  | 9+ | 9+        | 6  | 9+ | 9+ | 9+ | 8  | 8  | 9+ | 9+        | 9  | 5  | 9+ | 9  | 9  | 4  | 7  | 9         | 5  | 2  | -  | 9   | 15 |  |  |  |
| 16        | 1  | 5  | -  | -  | 4  | -  | -  | 9         | 8  | -  | 6  | 8  | 8  | -  | 9+ | 9+        | 8  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 8  | 9+ | -  | 5  | 9         | 5  | 5  | -  | 9   | 16 |  |  |  |
| 17        | 4  | 7  | -  | 2  | 7  | -  | -  | 8         | 9  | 1  | 9+ | 9  | 9  | 4  | 9+ | 9+        | 9  | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 7  | 9+ | 8  | 1  | 9+        | 5  | -  | -  | 9   | 17 |  |  |  |
| 18        | 7  | 8  | -  | 8  | 8  | 8  | -  | 9         | 9  | 4  | 9+ | 9+ | 9  | 6  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+        | 5  | 9+ | 9+ | 9+ | 3  | 1  | 9+ | 5         | -  | 4  | 8  | 18  |    |  |  |  |
| 19        | 8  | 9  | 1  | 9+ | 9  | 8  | -  | 9+        | 9+ | 8  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 9  | 8  | 9+        | 5  | 9+ | 9+ | 9+ | -  | -  | 9+ | 5         | -  | 2  | 7  | 19  |    |  |  |  |
| 20        | 9  | 9  | 3  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 8  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 6  | 6  | 9+        | 5  | 9+ | 9  | 9+ | -  | -  | 9  | 5         | -  | -  | 6  | 20  |    |  |  |  |
| 21        | 9  | 9  | 6  | 9+ | 9  | 7  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+ | 9+ | 5  | 2  | 9+        | 5  | 8  | 9  | 9+ | -  | -  | 8  | 5         | -  | -  | 4  | 21  |    |  |  |  |
| 22        | 9  | 8  | 8  | 9+ | 9  | 3  | 8  | 9+        | 9+ | 9+ | 9+ | 9+ | 9  | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | 2  | 2  | 9+        | 5  | 3  | 9  | 9+ | -  | -  | 9  | 6         | -  | 1  | 2  | 22  |    |  |  |  |
| 23        | 9  | 8  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 9  | 9+ | -  | 4  | 9+        | 9  | -  | 8  | 8  | -  | -  | 7  | 5         | -  | 1  | -  | 23  |    |  |  |  |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU | FE        | SA | AF | AS | OC | NA | EU | FE | SA        | AF | AS | OC | NA | EU | FE | SA | AF        | AS | OC | NA |     |    |  |  |  |

**Dec., Angola (Luanda), for SSN = Very Low, Sigs in S-Units. By N6BV, ARRL.**

| 80 Meters |    |    |    |    |    |    |    | 40 Meters |    |    |    |    |    |    | 20 Meters |    |    |    |      |       |    | 15 Meters |    |    |    |    |    |    | 10 Meters |    |    |     |     |      |    |     |
|-----------|----|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|------|-------|----|-----------|----|----|----|----|----|----|-----------|----|----|-----|-----|------|----|-----|
| UTC       | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS   | OC    | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF  | AS  | OC   | NA | UTC |
| 0         | 9  | 7  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 5  | 9+ | 9+        | 9+ | 9+ | 9  | 9    | 9+    | 9+ | -         | 2  | 9  | 5  | -  | 5  | 1  | -         | -  | -  | 5   | -   | -    | -  | 0   |
| 1         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 8  | 9+ | 9+ | 9  | -  | 9+ | 9         | 9+ | 9+ | 2  | 9+   | 9     | 8  | -         | 3  | 6  | 5  | -  | 1  | -  | -         | -  | 5  | -   | -   | -    | 1  |     |
| 2         | 9  | -  | 9  | 9+ | 9  | -  | 9  | 9+        | 7  | 9+ | 9+ | 9  | 1  | 9+ | 7         | 8  | 9+ | 9  | 9    | 9     | 8  | -         | -  | 7  | 5  | -  | -  | -  | -         | -  | 5  | -   | -   | -    | 2  |     |
| 3         | 9  | -  | 9  | 9+ | 8  | -  | 9  | 9         | 4  | 9+ | 9+ | 9  | 5  | 9+ | 1         | 7  | 9+ | 8  | 8    | 8     | 8  | -         | -  | 5  | 6  | -  | -  | -  | -         | -  | 5  | -   | -   | -    | 3  |     |
| 4         | 8  | -  | 9  | 9+ | 5  | -  | 8  | 9         | -  | 9+ | 9+ | 9  | 6  | 9+ | 2         | 8  | 9  | 2  | 9    | 7     | 8  | -         | 3  | 1  | 6  | 1  | 1  | -  | -         | -  | 5  | -   | -   | -    | 4  |     |
| 5         | 7  | -  | 9  | 9  | 1  | -  | 7  | 9         | -  | 9+ | 5  | 8  | 6  | 9+ | 8         | 9  | 9  | 2  | 9+   | 8     | 8  | -         | 5  | -  | 5  | 5  | 4  | -  | -         | -  | 5  | -   | -   | -    | 5  |     |
| 6         | 2  | -  | 7  | 7  | -  | -  | 4  | 8         | -  | 9  | 9  | 5  | 4  | 8  | 9+        | 8  | 9+ | 2  | 9+   | 8     | 8  | -         | 9  | 1  | 9  | 9+ | 9  | -  | -         | 1  | -  | 5   | 1   | -    | 6  |     |
| 7         | -  | -  | -  | 1  | -  | -  | -  | 5         | -  | 8  | 8  | 1  | -  | 7  | 9+        | 7  | 9+ | 9+ | 9    | 8     | 8  | 9+        | 9  | 5  | 5  | 9+ | 9  | -  | -         | 1  | -  | 5   | 3   | -    | 7  |     |
| 8         | -  | -  | -  | -  | -  | -  | -  | -         | -  | 4  | 4  | -  | -  | 2  | 9+        | 6  | 9  | 9+ | 9    | 6     | 7  | 9         | 9  | 1  | 5  | 9+ | 9  | -  | -         | 2  | -  | 4   | 3   | 5    | 8  |     |
| 9         | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | 1  | -  | -  | -  | 9         | 5  | 9  | 9+ | 9    | 3* 1  | 9  | 9         | 7  | 5  | 9  | 9  | -  | 1  | 8         | -  | 8  | 6   | 7   | 9    |    |     |
| 10        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9         | 5  | 8  | 9+ | 8    | 3 7   | 8  | 9         | 9  | 4  | 8  | 9  | -  | -  | 9         | 1  | 9  | 7   | 8   | 10   |    |     |
| 11        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9         | 5  | 8  | 9  | 9    | 4 7   | 8  | 9         | 9  | 4  | 9  | 9  | -  | 1  | 9         | 5  | 9  | 7   | 7   | 11   |    |     |
| 12        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9         | 8  | 7  | 9  | 9    | 6 4   | 8  | 9         | 9  | 5  | 9+ | 9  | 6  | 1  | 9         | 8  | 9  | 8   | 4   | 12   |    |     |
| 13        | -  | -  | -  | -  | -  | -  | -  | -         | -  | -  | -  | -  | -  | -  | 9         | 9  | 6  | 9+ | 9+   | 9 6   | 8  | 9+        | 9  | 5  | 9+ | 9  | 9  | 2  | 9         | 9  | 4  | 9   | -   | 13   |    |     |
| 14        | -  | -  | -  | -  | -  | -  | -  | -         | 1  | -  | -  | 4  | -  | -  | 9+        | 9+ | 6  | 9+ | 9+   | 9+ 6  | 9  | 9+        | 9  | 5  | 9+ | 9  | 9  | 1  | 9         | 9  | 4  | 2   | -   | 3 14 |    |     |
| 15        | -  | -  | -  | -  | -  | -  | -  | 7         | 7  | -  | -  | 7  | -  | -  | 9+        | 9+ | 7  | 9+ | 9+   | 9+ 8  | 9+ | 9+        | 9+ | 5  | 9+ | 5  | 9+ | 1  | 8         | 9  | 5  | 2   | -   | 9 15 |    |     |
| 16        | 2  | 1  | -  | -  | 2  | -  | -  | 9         | 8  | -  | 6  | 8  | 8  | 1  | 9+        | 9+ | 8  | 9+ | 9+   | 9+ 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 4  | 9+ | -  | 7         | 9+ | 5  | -   | -   | 9 16 |    |     |
| 17        | 5  | 8  | -  | 3  | 7  | -  | -  | 9         | 9  | 1  | 9+ | 9  | 9  | 6  | 9+        | 9+ | 9  | 9+ | 9+   | 9+ 9+ | 9+ | 9+        | 9+ | 9+ | 9+ | 6  | 9+ | 8  | 6         | 9  | 9  | -   | -   | 8 17 |    |     |
| 18        | 7  | 8  | -  | 8  | 8  | 7  | -  | 9         | 9  | 4  | 9+ | 9+ | 9  | 7  | 9+        | 9+ | 9+ | 9+ | 9+   | 9+ 9+ | 9  | 9+        | 9+ | 9+ | 9  | 9  | 9+ | 3  | 2         | 9  | 9  | -   | 1 3 | 18   |    |     |
| 19        | 8  | 9  | -  | 9+ | 9  | 8  | 4  | 9         | 9+ | 7  | 9+ | 9+ | 9  | 8  | 9+        | 9+ | 9+ | 9+ | 9+   | 9+ 9+ | 9  | 9         | 9+ | 5  | 8  | 9+ | 9+ | -  | -         | 9+ | 9  | -   | -   | 5 19 |    |     |
| 20        | 8  | 9  | 2  | 9+ | 9  | 8  | 6  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9  | 9+        | 9+ | 9+ | 9+ | 9+   | 9 9+  | 8  | 7         | 9+ | 5  | 5  | 9+ | 9+ | -  | -         | 9  | 5  | -   | -   | 4 20 |    |     |
| 21        | 9  | 9  | 6  | 9+ | 9  | 8  | 8  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9+   | 9+ 9+ | 7  | 2         | 9+ | 5  | 1  | 9+ | 9+ | -  | -         | 8  | 9  | -   | -   | 6 21 |    |     |
| 22        | 9  | 9  | 7  | 9+ | 9  | 4  | 9  | 9+        | 9+ | 9  | 9+ | 9+ | 9  | 9+ | 9+        | 9+ | 9+ | 9+ | 9 9+ | 5     | 4  | 9+        | 9  | -  | 9  | 9+ | -  | -  | 5         | 5  | -  | 3 2 | 22  |      |    |     |
| 23        | 9  | 8  | 8  | 9+ | 9  | -  | 9  | 9+        | 9  | 9+ | 9+ | 9+ | 8  | 9+ | 9+        | 9+ | 9+ | 9  | 9    | 9 9+  | 1  | 4         | 9+ | 8  | -  | 8  | 8  | -  | -         | 1  | 5  | -   | -   | - 23 |    |     |
|           | EU | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF | AS   | OC    | NA | EU        | FE | SA | AF | AS | OC | NA | EU        | FE | SA | AF  | AS  | OC   | NA |     |