

AERONAUTICAL CHARTING FORUM
Charting Group
Meeting 17-02 – October 25 - 26, 2017

RECOMMENDATION DOCUMENT

FAA Control # ACF-CG RD 17-02-315

Subject: Updating Terminal Procedure Publication (TPP) Comparable Values of RVR and Visibility Table

Background/Discussion:

Last year, an effort was put forth to harmonize the TPP Inoperative Components Table with FAA Order 8260.3C United States Standard for Terminal Instrument Procedures (TERPS). This new Inoperative Components Table will be released on April 27th, 2017. In continuing this modernization effort, consideration should be given to harmonizing the TPP Comparable Values of RVR and Visibility Table with the RVR & SM visibility values that are derived from TERPS for procedure publication.

The existing Comparable Values of RVR and Visibility Table reflects RVR & Statute Mile (SM) visibility values that were replaced in 2007 (TERPS Change 20), and are not fully harmonized with 8260.3C. Therefore, in certain circumstances, the following may occur:

- When using certain published 8260.3C RVR values with the existing Comparable Values of RVR and Visibility Table, the resulting SM visibility will be higher than necessary in the event of ALS or RVR outage. This can result in unnecessary divert, or unnecessary loss of operational capability (procedure not available).
- With certain RVR values, in the event of ALS or RVR outage, the published straight-in minima will become higher than circling minima, which is not compliant with TERPS.

Recommendations:

Update the Comparable Values of RVR and Visibility Table as soon as possible.

Comments:

Attachment #1 contains a revised table that is harmonized with 8260.3C, and eliminates the above safety/operational concerns.

Submitted by: Tony Lawson

Organization: FAA, Aeronautical Information Services (AJV-5)

Phone: (405) 954-2788

E-mail: tony.r.lawson@faa.gov

Date: 3/28/2017

ATTACHMENT #1

NEW TABLE

Comparable Values of RVR and Visibility

The following table shall be used for converting RVR to ground or flight visibility. For converting RVR values that fall between listed values, use the next higher RVR value; do not interpolate. For example, when converting 1800 RVR, use 2400 RVR with the resultant visibility of 1/2 mile.

RVR (feet)	Visibility (statute miles)	RVR (feet)	Visibility (statute miles)
1600	1/4	4000	3/4
2400	1/2	4500	7/8
① 2600	1/2	5000	1
② 3000	5/8	5500	1 ④
③ 3500	5/8	6000	1 1/8 ⑤

Changes:

1. Added RVR 2600 (1/2) per 8260.3C.
2. Changed RVR 3200 to RVR 3000 per 8260.3C.
3. Added RVR 3500 (5/8) per 8260.3C.
4. Added RVR 5500 (1) per 8260.3C.
5. Changed RVR 6000 (1 1/4) to RVR 6000 (1 1/8) per 8260.3C.

OLD TABLE (for reference)

Comparable Values of RVR and Visibility

The following table shall be used for converting RVR to ground or flight visibility. For converting RVR values that fall between listed values, use the next higher RVR value; do not interpolate. For example, when converting 1800 RVR, use 2400 RVR with the resultant visibility of 1/2 mile.

RVR (feet)	Visibility (statute miles)	RVR (feet)	Visibility (statute miles)
1600	1/4	4500	7/8
2400	1/2	5000	1
3200	5/8	6000	1 1/4
4000	3/4		

Deficiencies:

1. RVR 3200 no longer supported by 8260.3.
2. New 8260.3 RVR values (2600,3000,3500,5500) are not supported.
3. RVR 6000 (1 1/4) does not match TERPS.

MEETING 17-02

Tony Lawson, FAA, AJV-553, introduced the issue. He briefed that he is making an effort to [harmonize the values](#) in the Comparable Values of RVR and Visibility table that is published in the Legend of the TPP with the values that are published in FAA Order 8260.3C. The current Table in the TPP does not contain all of the values used in TERPS so sometimes the next higher RVR value has to be used to determine the visibility that is published on the chart. This can result in visibility values that are unnecessarily high. Tony would like to resolve this problem by adding the missing RVR values to the table in the TPP in addition to modifying the Visibility for RVR 6000 from $1 \frac{1}{4}$ to $1 \frac{1}{8}$ to agree with 8260.3C.

Rich Boll, NBAA, stated that though in concept he approves of this idea, the table that is published in the TPP is governed by what is published in 14 CFR Part 91.175(h). He explained that regulations require pilots to use the table that is published in the CFR. John Bordy, FAA/AFS-420, agreed and stated that the TPP conversion table must harmonize with that in the CFR. He believes that if the value in Tony's proposed table for RVR 6000 were revised to agree with that in the CFR ($1 \frac{1}{4}$), the proposal to add interim RVR values could likely be determined to be in compliance with the CFR. He said the FAA could also pursue revision of the CFR to accomplish the reduced RVR 6000 visibility, but acknowledged that would likely be a lengthy process and could be difficult to achieve.

Steve Woodbury, Flight Safety International, voiced that if and when these changes are implemented, explanatory language would be needed to explain the added RVR values and the reasons for there being more RVR values listed in the TPP table than are listed in the CFR.

Valerie Watson, FAA/AJV-553, asked why RVR 1800 is not listed in the revised table. Tony said that they could add that too. Valerie said that if all possible RVR values seen on approach charts were added to the table, the rounding requirement could be removed.

Rich agreed and suggested Tony should add all possible RVR values to the table and change the visibility for RVR 6000 to $1 \frac{1}{4}$ to agree with the CFR. This revised table could then be vetted through General Council to ask if it is consistent with the CFR. If approved, the new table could be published in the TPP.

John Blair, FAA/AFS-410, said that he will work on rulemaking to update the CFR and that in the interim he would take the revised table to General Counsel and see if he can obtain a legal determination that the expanded table complies with the CFR. Tony said he would provide John with the revised table.

STATUS: OPEN

ACTION: Tony Lawson, FAA/AJV-553, will draft revised Comparable Values of RVR and Visibility tables and work with John Blair, FAA/AFS-410, and John Bordy, FAA/AFS-420, on compliance and rulemaking for its implementation.

ACTION: John Blair, FAA/AFS-410, will begin work on rulemaking changes to 14 CFR Part 91.175(h) to harmonize it with FAA Order 8260.3C (expanded RVR values so no interpolation is required and *revised* RVR 6000 value of $1 \frac{1}{8}$).

ACTION: John Blair, FAA/AFS-410, will take the revised Comparable Values of RVR and Visibility table (expanded RVR values so no interpolation is required but *retaining* RVR 6000 value of 1 ¼ per current CFR) through the FAA's Office of General Council to see if it complies with 14 CFR Part 91.175(h).

MEETING 18-01

Valerie Watson, FAA/AJV-553, reviewed the history of the recommendation to expand the existing Comparable Values of RVR and Visibility table in the front of the Terminal Procedures Publication (TPP) to incorporate interim RVR values contained in TERPS Order 8260.3C but not contained in 14 CFR Part 91.175(h). John Blair, FAA/AFS-410, reported that his office is in support of expanding the RVR table as originally proposed, but retaining the RVR 6000 value of 1 ¼ statute mile visibility, per 14 CFR Part 91.175(h). He said that, at this time, his management will not pursue the formal rulemaking process that is necessary to revise the CFR. He said that if, in the future, it is determined that it is necessary to update the CFR and if more resources are then available to do so, his offices could reconsider.

There was then discussion about whether or not the Comparable Values of RVR and Visibility table published in the Legend of the TPP is regulatory. Valerie stated that the current table in the TPP is taken exactly from the CFR, so is regulatory, but TPP front matter (for example, an expanded table extracted from TERPS Order 8260.3) does not necessary have to be. She explained that most of the TPP front matter guidance is not regulatory. Tony Lawson, FAA/AJV-553, suggested to move forward with the specification change to update the TPP table to incorporate interim values not included in the CFR table (retaining the RVR 6000 value of 1 ¼ statute mile visibility from the CFR) and in that coordination process the proposed revision of the table can be vetted to all concerned aspects of Flight Standards, AFS-400, for approval.

Tony commented that in the future he would like to remove the table from the TPPs and either eliminate depiction of the military minimums or incorporate them on the Instrument Approach Procedures 8260 procedure source document.

Valerie said that she was still concerned that the CFR would not be updated. She suggested that perhaps the table could be removed from the CFR, since its contents are covered in the TERPS Order 8260.3C. John Bordy, FAA/AFS-420, said it was his belief that either the table has to remain in the CFR or the visibility values need to be part of the published procedure source. Tony suggested that perhaps the table itself could be removed from the CFR and incorporated by reference to the TERPS order. John Blair repeated that any change to the CFR would not, at this time, be pursued by his management.

STATUS: OPEN

ACTION: Valerie Watson, FAA/AJV-553, will draft a specification change to update the Comparable Values of RVR and Visibility table published in the Legend of the TPP and staff it through FAA/AFS-400 for approval.

MEETING 18-02

Valerie Watson, FAA/AJV-553, briefed the issue. Valerie showed the revised [Comparable Values of RVR and Visibility Table](#) that will be published in the Legend of the Terminal Procedures Publication on 8 November 2018. She explained that this table incorporates RVR and Visibility comparable values that are published in FAA Order 8260.3 and is not counter to, but expands upon, those in 14 CFR Part 91.175(h). All affected procedures, approximately 500, will have visibility revised per the new table as of the 8 Nov 2018 publication date. It was agreed that this item could be closed.

STATUS: CLOSED