AERONAUTICAL CHARTING FORUM Charting Group Meeting 08-01 – April 22, 2008

RECOMMENDATION DOCUMENT

FAA Control # <u>08-01-208</u>

Subject: TPP Rate of Climb Table Improvements

Background/Discussion:

The Rate of Climb Table contained in the "Front Matter Section" of the TPP booklet is used to convert a feet per nautical mile climb gradient which may be published on an Instrument Approach Procedure, Obstacle Departure Procedure, or Standard Instrument Departure into a required climb rate based on feet per minute. This required rate-of-climb can then be used to determine whether or not the required climb gradient can be achieved during pre-flight planning or is being achieved after takeoff during the climb-out.

It has been noted that the published Rate of Climb Table does not cover all possible published climb gradients contained in the TPP. For example, the GYPSM THREE Graphic Obstacle Departure Procedure at Eagle, CO (EGE) requires a 750 ft/nm climb gradient to 10,500 ft. Yet, the highest Required Gradient Rate value shown on the TPP's table is 700 ft/NM. In the absence of this column on the table, a pilot is unable to determine the required rate of climb necessary to achieve the GYPSM THREE's published climb gradient.

Recommendations:

The Rate of Climb Table in the TPP book should be revised to include all possible climb gradient values published in the TPP.

Comments: This recommendation affects the NACO Terminal Procedures Publication.

Submitted by: Richard J. Boll II Organization: NBAA Phone: 202-783-9000 FAX: 202-331-8364 E-mail: richard.boll@sbcglobal.net Date: April 08, 2008 **MEETING 08-01:** Mr. Richard Boll, NBAA, submitted the issue that the Rate of Climb Table contained in the "Front Matter Section" of the TPP booklet is used to convert a feet per nautical mile climb gradient. This may be published on an Instrument Approach Procedure, Obstacle Departure Procedure, or Standard Instrument Departure as a required climb rate based on feet per minute. This required rate-of-climb can then be used during pre-flight planning to determine whether or not the required climb gradient can be achieved after takeoff during the climb-out.

It has been noted that the published Rate of Climb Table does not cover all possible published climb gradients contained in the TPP. For example, the GYPSM THREE Graphic Obstacle Departure Procedure at Eagle, CO (EGE) requires a 750 ft/nm climb gradient to 10,500 ft. Yet, the highest Required Gradient Rate value shown on the TPP's table is 700 ft/NM. With the absence of this column on the table, a pilot is unable to determine the required rate of climb necessary to achieve the GYPSM THREE's published climb gradient.

The recommendation is to revise the Rate of Climb Table in the TPP Books to include all possible climb gradient values published in the TPP.

There was much discussion on how the values in the current tables were derived. The figures in the tables are rounded for ease of use. The consensus of the group was to ask Flight Standards what the highest climb gradient on a public procedure was before committing to produce a revised table.

ACTION: Mr. Boll agreed to contact AFS-460 through Mr. Tom Schneider.

MEETING 08-02: Mr. John Moore, FAA/NACO, recapped the issue. Mr. Richard Boll, NBAA inquired what the highest climb gradient was of all currently published DPs. New York's La Guardia Airport has a DP with a 900 ft/nm climb gradient and there's currently one procedure in coordination with a 1000 ft/nm. Mr. Roy Maxwell, Delta Airlines, requested that a cap be established before it could be approved as a public procedure. Mr. Tom Schneider, FAA/AFS-420, replied that there is a cap in the 46C at 500 ft/nm. Mr. Moore proposed that Mr. Maxwell write a RD to the IPG proposing such a cap. Mr. Boll asked if a standard formula could be posted below the current table for climb gradients in excess of what is currently published. Mr. Ted Thompson, Jeppesen, commented that some procedures have their own climb gradient table published on the procedure, but that is not an option for all DPs. NGA's table goes up to 1000 ft/nm now, but has a higher airspeed rate than that on the FAA's. Ms. Valerie Watson, FAA/NACO and Lance Christian, NGA/OMS will look at the issue at the next IACC MPOC meeting and report at the next ACF.

ACTION: Ms. Valerie Watson to report at the next ACF.

MEETING 09-01: Mr. John Moore, FAA/NACO, recapped the issue. NGA has a higher climb table but lists fewer airspeeds. The NGA table is a combined climb and descent table. NACO is willing to eliminate its two tables and use NGA's. Interpolation on the pilot's part would be required. The consensus was to proceed with that plan. <u>ACTION:</u> Ms. Valerie Watson, FAA/NACO, to report at the next ACF.

MEETING 09-02: Ms. Valerie Watson, FAA/AeroNav Services, reported that IACC approval has been obtained for adopting the combined Climb/Descent Table currently published by DoD/NGA. AeroNav Services will put the table on the inside back cover of the TPPs. The change will be effective on the February 11, 2010 charting cycle. **CLOSED**