GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM 07-02 Charting Group

October 24-25, 2007

RECOMMENDATION DOCUMENT

FAA Control # 07-02-203

Subject:

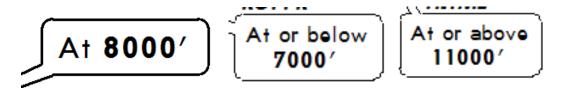
Distinguishing "Cross At" and "At or below" from the more common "At or above" altitudes on charts

Background/Discussion:

Cross AT and At or BELOW altitudes are less common than At or Above altitudes. This being the case pilots may mistake an **At** or **At or below** altitude for an **At or above** altitude. To try to avoid this mistake from occurring, AT and At or Below altitudes should be charted in a distinctly different manner from At or above altitudes.

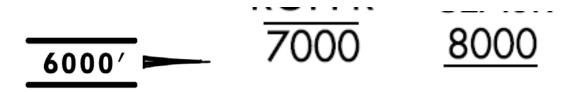
Examples of current chart depictions of At, At or below and At or above altitudes are:

Charting method A:



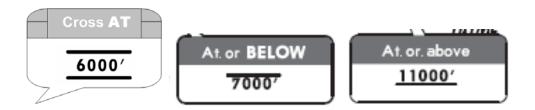
Note that the number of letters are the same in "At or BELOW" and "At or above."

Charting method B:



Note how the lines above and below the altitude are very intuitive and help to distinguish the At, At or below and At or above altitudes.

Charting method C:



Note how the font and all caps used for "At" and "below" help these less frequently used altitudes stand out from "above."

Recommendation:

We recommend both Jeppesen and NACO use the Charting Option C above being that it both graphically and textually distinguishes At, At or below and At or above altitudes.

Comments:

Submitted by: Brian Townsend

Organization: ALPA

Phone: (702) 204-0007

FAX:

Date: 10/15/07

MEETING 07-02: Brian Townsend, ALPA, briefed this issue. (See Attachment 8 Crossing Altitudes Presentation.ppt") Crossing altitude situations for 'At' and 'At or Below' are less common than 'At or Above'. This being the case, ALPA recommends that the 'Becsituation be emphasized. Samples were provided in the Recommendation Document included in the ACF 07-02 information packet.

NACO has already changed to the ICAO-style overline/underline depiction without any text.

Jeppesen is still in the process of making a decision whether to adopt the ICAO-style, or stay with text descriptions, or possibly a combination of both text and lines. Jeppesen will consider ALPA's recommendation to further emphasize 'At' or the 'At or Below' conditions.

Also refer to agenda items 04-01-167 (Altitude Constraints) and 05-01-174 (Top Altitudes).

ACTION: Ted Thompson will provide a report on Jeppesen's decision at the ACF at next meeting.

MEETING 08-01: Mr. Ted Thompson, Jeppesen, requested that the issue be closed and noted that they would apply what ever comes out of the new working group (ATC/MCA Crossing Altitude subcommittee under the IPG) to Jeppesen Charts. This is mainly a Jeppesen issue. They are seriously considering adopting the overline/underline method and at and at or below altitudes. The issue is currently under evaluation at Jeppesen **CLOSED.**