

AREA OF CONCERN 126-2

4/19/06

SAFETY: No

SUBJECT: Procedures for Use of Time to Meet Restrictions

DISCUSSION: The committee looked at current regulations that mandate the controller must issue the clock time to the restricted aircraft and the time the aircraft must comply with the given restriction.

128 - The committee discussed the AOC with its submitter, Mr. Bill Holtzman from ZDC. The discussion centered around the need for a time hack when issuing a time based restriction. It was agreed that no change would be appropriate in the oceanic or non-radar environs but that omission of the additional verbiage in a radar environment would reduce controller transmissions, pilot misunderstandings, and add clarity.

129 - David Young advised that several versions of proposed DCPs have been presented to his management for their consideration.

130 - David Young's organization would not concur on ATPAC recommendation based on what may have been incomplete information. David Young will re-address the issue based on ATPAC feedback and report at #131.

131 - A memo will be written and addressed to ATO-E for their review that outlines the committee's recommendation.

RECOMMENDATION: ATPAC opined that giving the aircraft a time to reach/leave an altitude followed by the minutes needed to achieve would suffice and not complicating the issue with clock time.

ATPAC RECOMMENDATION TO ATO-E REGARDING PROCEDURES FOR USE OF TIME TO MEET RESTRICTIONS. ATPAC AREA OF CONCERN (AOC) 126-2.

First, the committee would like to address some of the misconceptions about this proposal. Arguments have been heard about whether or not it is reliable control technique to use computer-generated, predictive "vector lines" to evaluate the time till routes cross. Similarly, arguments have been heard about whether it is employing "positive control" at all to issue an altitude crossing restriction which might in any way seem close to the capability of the aircraft. While we think of those situations more in a climb situation than a descent, similar risks exist in both. The Committee makes no effort to insert itself into the evaluation of how one might "ensure" positive control in such a situation. It is a moot point to consider those issues anyway, based on the fact that there is already such a clearance provided for in the 7110.65.

Also, it is important to note that the above arguments exist without regard to the verbiage one uses with which to refer to the clearance limit time by which we instruct the aircraft to achieve the required altitude. Those arguments apply as surely with our current phraseology as they would with that which is proposed. There is no

additional control inherent in one description of a time event over that inherent in any other way of describing that same time.

Separately and distinct from the above issues, the Committee chooses to address the situation of how to describe it once the decision has been made to clear an aircraft to achieve an altitude by a particular moment in time. Such a moment can be described in a number of ways, two of which are: referring to a specific time on the controller's clock on the one hand ("Climb to reach FL350 by 1525Z; time now 1522 and three quarters"), and on the other hand, referring to the passage of a specific period of time after a radio transmission ("Climb to reach FL 350 in two minutes").

The Committee believes that the benefits of the proposed version of a time description include: eliminating the need for UTC references, eliminating the excess verbiage created by the time check, and eliminating the mental math required on the part of the controller in order to compute the time limit and on the part of the pilot in order to evaluate, then record and/or remember the difference between the airplane's clock and the controller's clock and to continue to apply that difference for the length of time it takes to achieve the altitude. The proposed phraseology would provide additional accuracy by replacing the relatively coarse units of a quarter minute with the accuracy with which one can read a sweep second hand (which is required equipment on all IFR aircraft).

The Committee also wishes to note that the proposed time description is already in relatively common use in the field, despite its variance from the currently-prescribed phraseology. Thus the proposed phraseology is, much to the chagrin of some, well-tested. While never valid as a reason to approve an idea, the fact that it has been in use already for a long time has provided an opportunity to uncover unanticipated problems. The Committee was not able to identify any.

Committee Recommendation: ATPAC recommends that the phraseology change in this proposal would be a positive one which would improve the precision of a control clearance, reduce the verbiage necessary to issue the clearance, make it easier for the controller to describe to the pilot, and make compliance easier for the pilot, both in understanding and in its accomplishment.

132 - ATO-R will be invited to brief at Mtg #133

133 - This issue will be addressed pending staffing increases in the PDG.

134 - The following was provided by En Route prior to the meeting: "The initial DCP for this should be written in the next two weeks." Kerry Rose (PDG) to provide completed DCP or update.

CURRENT STATUS: DEFERRED TO MEETING #134

IOU REMAINS OPEN (ATO-R)