Subject: SID Charting Standards

Background/Discussion: Many SID’s have MEA’s specified that are of little or no operational significance. I believe that they are actually the highest altitude that can be assigned by Departure Control. Examples include the Hugo Two used in the Charlotte area and the Tar Heel 8 in the Raleigh Durham area. As long as the Charlotte area SID has been in existence, the 11000 foot MEA shown on the SID transition routes has never been assigned to me on departure. There is never a case where it would come into play even if lost communications occurred. I asked the Charlotte TRACON and they did not know why the MEA was charted as 11000 and the AeroNav specialist just said it was at Charlotte’s request.

The MEA is defined in the Pilot/Controller Glossary (PCG) as:

“MINIMUM EN ROUTE IFR ALTITUDE (MEA) – The lowest published altitude between radio fixes which assures acceptable navigational signal coverage and meets obstacle clearance requirements between those fixes. The MEA prescribed for a Federal airway or segment thereof, area navigation low or high route, or other direct route applies to the entire width of the airway, segment, or route between the radio fixes defining the airway, segment, or route.”

Also, the format of the SID used at Billings Montana should be used for all SIDs to specify the Lost Communications Procedure as it would clarify what the pilot is expected to do under these circumstances, particularly in the case of a radar vector SID. The Billings Four states: “If no transmissions are received for 1 minute after departure, fly last assigned heading until reaching 7000. Proceed direct BIL VOR, then via last routing cleared and climb to filed altitude.” I am sure this is included because of obstacles in the area, but the concept of providing guidance on the SID for lost communications is a good one that could apply to all vector SIDs.

91.185 states the following for determining the route and altitude:

(c) IFR conditions. If the failure occurs in IFR conditions, or if paragraph (b) of this section cannot be complied with, each pilot shall continue the flight according to the following:

(1) Route.

(i) By the route assigned in the last ATC clearance received;
(ii) If being radar vectored, by the direct route from the point of radio failure to the fix, route, or airway specified in the vector clearance;
(iii) In the absence of an assigned route, by the route that ATC has advised may be expected in a further clearance; or
(iv) In the absence of an assigned route or a route that ATC has advised may be expected in a further clearance, by the route filed in the flight plan.
(2) **Altitude.** At the highest of the following altitudes or flight levels for the route segment being flown:

(i) The altitude or flight level assigned in the last ATC clearance received;
(ii) The minimum altitude (converted, if appropriate, to minimum flight level as prescribed in Sec. 91.121(c)) for IFR operations; or
(iii) The altitude or flight level ATC has advised may be expected in a further clearance.

**Recommendations:** If these are in fact the highest possible altitude that may be assigned for these routes, they should be charted as such with the line over the altitude. On radar vector SID’s provide a lost communications procedure if communications are not established.

**Comments:**
Note: This can be broken into two recommendations.

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**Date:** April 14, 2014

**MEETING 14-02**

John Collins, GA Pilot, briefed the issue. John stated that the Legend within the TPPs says that altitudes depicted on SIDs are MEAs, yet many SIDS have altitudes specified that are of little or no operational significance. He noted that a comparison of the MEAs published on the IFR Enroute Charts to those that appear on the SIDS, shows that the altitudes often do not match and in some cases the MEA depicted on the SID is higher than the one published on the Enroute Chart.

Valerie Watson, AJV-344, stated that from a charting perspective, the MEAs that appear on the SID are published on the procedure source document, FAA Form 8260.15B and are charted accordingly. The charting offices, of either the FAA or non-government, will chart what is on the source document.

Tom Schneider, AFS-420, commented that the FAA Form 8260.46 provides for altitudes for the transitions, MOCA and MEA. Tom surmised that ATC devises the altitudes appearing on SIDs for their operational needs.

It was agreed that the issue is not one of charting but of source. Tom stated that he would put a statement into the 8260.46 that MEAs should not be raised to support ATC altitudes and that if ATC needs an altitude for operational requirements, crossing altitudes should be used.

After discussion, the second portion of the Recommendation regarding lost communications on SIDS be withdrawn by the proponent.
STATUS: OPEN

ACTION: Tom Schneider, AFS-420, to report on revision of the 8260.46 guidance on use of MEAs and Crossing Altitudes on SIDs.

MEETING 15-01:

Tom Schneider, AFS-420, provided an update. Tom stated that he has written guidance for Draft FAA Order 8260.46F that will ensure that MEAs will not be raised to support ATC altitudes. The Order is currently in draft form and internal coordination has begun.

John Collins, General Aviation Pilot, asked Tom if the same revision will be applied to the STAR order. Tom stated that he would look at placing the same type of guidance in Draft Order 8260.19G for STAR application.

STATUS: OPEN

ACTION: Tom Schneider, AFS-420, to report on proposed revision of the FAA Order 8260.46 guidance on the use of MEAs on Departures and to review the STAR Order 8260.19G to see if the same revision should be applied to Arrivals.