Subject: Enroute Chart Depiction of Controlled Airspace for Instrument Approach Procedures.

Background/Discussion: See attached letter and article from Jack A. Hunta concerning problems associated with Senator Wellston aircraft accident and NTSB investigation results.

Recommendations: Depict or annotate controlled or uncontrolled airspace on enroute charts for airports having instrument approaches.

Comments: Issue presented by AVN-101 on behalf of Mr. Jack Hunta, 5004 Pine Lane Gilbert, MN 55741. This recommendation affects IACC en route charting specifications.

Submitted By: Bradley W. Rush
Organization: AVN-101
Date: March 12, 2004
Phone: (405) 954-3027
Fax: (405) 954-4236
E-mail: brad.w.rush@faa.gov
Date: March 16, 2004

04-01 MEETING: Mr. Brad Rush, AVN-101, submitted this issue in response to a user request. Recommendation was made to depict or annotate controlled or uncontrolled airspace on enroute charts for airports having instrument approaches. Mr. Rush stated that Class C and Class D airspace are currently shown on the enroute low charts following the airport name. The recommendation was made to depict all controlled or uncontrolled airspace on enroute charts using that format. The ACF discussion led to the determination that this is not a safety of flight issue and would increase chart clutter. The ACF non-concurs with this recommendation.

CLOSED
February 11, 2004

Federal Aviation Administration
Mr. Tom Accardi AVN-1
Aviation System Standard
P. O. Box 25082
Oklahoma City, OK. 73125

Dear Mr. Accardi,

Please find attached a courtesy copy of an article I wrote for publication in a local newspaper on February 15, 2004. Realizing you can do little or nothing about the investigation I am encouraging you to review recommendations 4 and 5. I believe including these two changes will improve IFR charts make our airspace safer.

Jack A. Hulka
5004 pine Lane
Gilbert, MN. 55741

cc: Congressman Jim Oberstar
To: Editor, Mesabi Daily News

WELLSTONE ACCIDENT INVESTIGATION INCOMPLETE

In November, 2003 the NTSB came out with their Accident Report that was supposed to provide conclusion as to cause of the accident that killed Senator Wellstone and seven others. I have spent a considerable amount of time reviewing the 63 page document. The cause of the accident is no mystery, however what lead up to the cause of the accident remains. We know the aircraft stalled abruptly and spun into the ground. We knew that the day of the accident. The NTSB and FAA speculated for 13 months to come up with that conclusion and put it in writing containing 63 pages. In my opinion the investigation ended incomplete. I say this because of the recommendations listed on page 60 of the report. I find nothing listed that is not already a requirement and being accomplished.

Icing was identified as one of the first possible causes of the accident. First of all the reported ground temperature was 34 degrees Fahrenheit on the hour before and after the accident. This means that probably up to 1000 feet AGL (Above Ground Level) it was above freezing. It has been my experience that ice does not accumulate and it dissipates quite rapidly at 32 degrees. Secondly pilots flying in and out of the airport around that time reported no significant ice accumulation during flight. In addition the accident aircraft was de-icing equipped.

Another item on the report and also in the newspapers was the speed of the aircraft. The information is misleading. The movement, data, and speed received from the radar target is ground speed (GS) which is the speed the aircraft is traveling over the ground. When we analyze aircraft flight characteristics we have to refer to Indicated Airspeed (IAS). We fly the airplane with reference to IAS. Seldom are the two airspeeds IAS and GS the same. For example, an aircraft indicating 100 mph (IAS), corrected to Calibrated Airspeed (CAS), then corrected to True Airspeed (TAS), plus or minus the vector sum of the prevailing wind would equal Ground Speed (GS). It’s obvious there are a number of variables and the two readings could be significantly different.

The next item was the Eveleth VOR. This facility has been shut down since the day of the accident. This was done to complete a flight check and assure the facility was operating within applicable tolerances. FAA flight check found a bend in the approach radial between 5 and 10 miles out. The bend was determined to be between 3.6 and 4.1 degrees. Tolerance is 3.5 degrees. This means that the radial was out of tolerance by a half degree. To put that in perspective a half degree is approximately 400 feet at 7.5 miles. Many of the navigational aids in the National Airspace System have restrictions for various reasons, such as excessive scalloping, roughness, or alignment. This is not unusual and can be accommodated by issuing a Notice To Airmen (NOTAM). The facility then can still be used by the aviation community safely, being aware of the known restriction and/or limitation. I question why this could not be done at Eveleth.
The next focus was on the pilot's log book and flying ability. Surely if he falsified his credentials and log book entries, this is a serious offense and is sometimes hard to detect. However he did complete a 1.7 hour check ride a day or two before the accident. Why wasn’t any deficiency in his flying skills identified then or on one of his previous check rides?

The day of the accident, Gary Ullman, assistant airport manager, the pilot who went up to look for the downed aircraft was approached by one of the NTSB investigators and questioned on how he could take off without a clearance. While the investigator was being quite intimidating, Gary explained to him the difference between controlled and uncontrolled airspace. The Eveleth Airport is situated in uncontrolled airspace. The Investigator, after being reassured by several others was eventually satisfied with the explanation that you do not need a clearance from Air Traffic when flying in uncontrolled airspace. To put that issue in perspective, a student pilot is required to know that difference prior to the first solo flight. It makes you wonder about the qualifications of the people the NTSB sends out to investigate aircraft accidents, especially when being a chartered flight, with fatalities in instrument weather conditions. To further clarify the issue, an instrument rated pilot can fly in uncontrolled airspace with no weather restrictions or clearance. A non instrument rated pilot is required to have 1 mile visibility and remain clear of clouds. This requirement and regulation is unenforceable in my view.

As mentioned in a previous article there are the two airports located less than a mile apart, the Eveleth Airport and the Ely Lake Airport. As a result they have conflicting traffic patterns with certain wind directions. Also they are assigned different Common Traffic Advisory Frequencies (CTAF). To add more to the confusion we have IFR traffic being cleared for approaches into Eveleth. So on a given day we could have a 400 ft ceiling, 1 mile visibility, raining, VFR traffic flying in and out of both airports plus IFR traffic being cleared for approaches into Eveleth. The day of the Wellstone accident there was an aircraft southbound over the Ely Lake airport within a window of time of the accident. This was reported to the NTSB investigators by Dave Serena, owner of Ely Lake Aviation and his mechanic Dave Matko. They said the aircraft was so low they thought it would take the tin off the roof. Why this information was ignored by the investigators is troubling to say the least. Whether that aircraft was a factor would be pure speculation, unless someone would come forward. If it was a high wing airplane and was below the flight path of the Wellstone aircraft the wing would probably block the view so there would be no visual contact. Never the less, the aircraft was not violating any regulations, because it is uncontrolled airspace.

I have flown both the King Air and the Queen Air aircraft. They do not react violently when demonstrating a normal stall maneuver. If you respond when the stall warning device sounds, which is 5 to 8 knots above the actual stall the aircraft is quite forgiving. However, the stall speed increases dramatically with an increase in bank or an abrupt movement of the controls. This will result in an accelerated stall which could very well
develop into a spin. It is my opinion that this is what happened in the Wellstone accident. What contributed to the accelerated stall would be pure speculation. We don’t have enough information to be more specific.

The NTSB is noted for their expertise on accident investigations. They deserve full credit for some outstanding work. However, I feel they let us down in this case. What lead up to the crash is pure speculation. In my opinion more frequent check rides and additional stall warning devices are not the complete answer in preventing accidents of this type. I think we have to look at current regulations and the Airspace System. The Airspace is getting more congested every day and it is anticipated this trend is going to continue. The airspace surrounding the Eveleth airport is extremely hazardous, especially during instrument weather conditions. It is just a matter of time when we’re going to have an accident involving two airplanes and all the evidence will be included. I have some recommended changes to improve safety at both the Eveleth airport and the entire system:

1. Reclassify the Eveleth Airport airspace to Class “E”
2. Recommend a change to a right hand traffic pattern on runway 09 at Eveleth
3. Assign the same CTAF frequency at both Eveleth and Ely Lake airports
4. “Airports that have instrument approaches terminating in uncontrolled airspace, so state on the approach plate, i.e. (Class “G” airspace below 700 ft. AGL)
5. Depict or annotate controlled or uncontrolled airspace on enroute charts for airports having instrument approaches.

Jack A. Hinsa
Airline Transport Pilot #1435422
Certified Flight Instructor, Airplanes, Instruments, Multi Engine
5004 Pine Lane
Gilbert, MN 55741