

GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM 07-02 Charting Group

October 24-25, 2007

RECOMMENDATION DOCUMENT

FAA Control # 07-02-199

Subject: Glider Caution Note on Terminal Procedure Publications and IFR Charts

Background/Discussion: The primary purpose of the Air Traffic Control (ATC) system is to separate aircraft. Accordingly, separation and safety alerts are our highest priority, however, gliders present a unique challenge to ATC surveillance systems and to the Traffic Alert and Collision Avoidance System (TCAS).

"Thermal-ling" gliders have no forward speed and may be processed as ground clutter, therefore possibly being electronically eliminated from the Moving Target Indicator (MTI) from controller displays. In addition, glider pilots are not required to equip their aircraft with a transponder nor are they required to establish communications with ATC. They are "non-participants" in the ATC system. Under those circumstances, gliders without transponders are invisible to TCAS and may or may not be depicted on ATC radar scopes. Without radio or radar contact, controllers may not be aware of their presence.

There are three major soaring sites surrounding the Reno area with superior soaring conditions, resulting in an average of 25 gliders on an average day. Throughout the summer on good gliding days, they average 40-50 gliders per day seven days a week through 18,000 feet if the wave is active. Reno is a premier soaring site in the United States and the western hemisphere due to a variety of lifts, high altitudes and high speeds that can be achieved in the wave, flight time from the early morning until dark, and the view of Lake Tahoe and the Sierra Nevada Mountains. The suggested Caution Boxes would be placed on IFR Enroute Low Altitude Charts where there is the most commercial jet traffic and high speed corporate traffic.

The point of putting a warning on the low altitude charts and on Reno's Terminal Procedure Publications (TPPs), is to increase situational awareness among participants in the ATC System. Pilots approaching Reno and associated satellite airports should be constantly reminded of aircraft operating in Class E airspace immediately below Class A airspace, without radios and, most importantly, without transponders; in locations and at altitudes that could jeopardize their safety.

Such was the case on August 28, 2006, when a business jet on Oakland Center's frequency collided with a glider in "non-participant" status at 16,000 feet Mean Sea Level. The pilots of the business jet were unaware the glider was climbing through 16,000 feet in close proximity to a jet route. Nor did they have any idea they were flying through an area that attracts an extraordinary number of glider pilots. Moreover, it is highly probable that the pilots were busy looking and thinking about RNO instrument procedures and not about the need to see and be seen.

The request for the Glider Caution Note is critical to safety and the above scenario provides significant precedent to add the requested verbiage to the charts and RNO TPPs.

Recommendations:

Place the Glider Caution note on all of Reno's TPPs and on IFR Enroute Low Altitude Charts 2, 5, and 7 to provide a visible indication to IFR pilots charting their flight that these conditions exist and pose a dangerous situation in the Reno area up to FL 180.

Comments: This recommendation affects

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On L7, place it at approximately at 40°10'N 119°30'W; north of Reno/Tahoe Intl Airport between V165 and V113.

In addition, update the August 3,2007, San Francisco Sectional with this advisory in a bold and visible print. There is a caution box at 39°7'N/119035'W. Replace the wording with that above and add two more caution boxes; one at 39°55'N/119 12'W. and at 40°N/119° 45'W.

Any questions regarding this matter may be directed to Francie Hope, System Support Specialist, AJO2-W2, at (310) 725-6502.

MEETING 07-02: John Moore, NACO, briefed this issue for Ms. Francie Hope, FAA/ATO-WSC, who was not in attendance. As a result of a nonfatal midair collision between a glider and a corporate jet aircraft near Reno, Nevada, a memorandum was written by the FAA manager of the Western Service Area recommending a caution note be charted on the IFR LOW Enroute chart and all IFR Terminal charts (SID/STAR/APCH) in the Reno area.

There are at least three chart-related aspects to the issue: 1) whether inclusion of a caution note on instrument charts (and source) is the best way to address the situation, 2) where the note should be located on charts (notes section or planview graphic), if it is determined that they should go there, and 3) how conspicuous the note should be. Ted Thompson, Jeppesen, stated that a Volpe study recommended all notes of this type be placed in the approach briefing strip. Tom Schneider, AFS-420, noted that policy in the 8260.19D, para 855.b. states SIAPs must NOT contain notes that may be construed as regulating traffic. Brad Rush, NFPO, stated that their policy is no cautionary notes on IAPs. Considerable discussion ensued, with comments from glider pilots in attendance and submitted written comments from glider/fixed wing pilots familiar with the incident and the area where it occurred. There were comments questioning whether such a note on the IFR chart would have prevented the incident and there was overwhelming agreement that it likely would not have prevented it. Broadcasting glider warning on ATIS or by Local NOTAM was mentioned as a possible solution.

The consensus of the forum was that the note does not belong on IFR Enroute charts and would be of questionable value on IFR Terminal charts. The majority of the forum agreed that regulatory guidance mandating gliders be transponder equipped when operating above certain altitudes (i.e. 10,000' MSL) and in the vicinity of terminal arrival operations would be a better safety enhancement than annotating IFR charting products. The forum consensus was to await the final NTSB incident report before acting on this issue.

ACTION: John Moore, NACO will contact the originator(s) and inform them that the ACF will take no action until an official accident report is made available (NTSB).

MEETING 08-01: Mr. John Moore recapped the issue then summarized the final NTSB report. The NTSB determined the probable cause of the accident was "The failure of the glider pilot to utilize his transponder and the high closure rate of the two aircraft, which limited each pilot's opportunity to see-and-avoid the other aircraft." For complete information see NTSB Identification LAX06FA277B at www.nts.gov. Although not required, caution notes have been placed on SIDs and STARS in the past. Mr. Brad Rush, FAA/NFPO admitted that some notes got through and were incorrectly placed on some of the charts. He further commented that when the procedures are amended the notes would come off the charts. The following NTSB recommendations to the FAA were provided by Ms. Francie Hope FAA, Western Service Center.

- Remove the glider exemptions from the Federal Aviation Regulations that pertain to transponder requirements and use. (A-08-10)
- Develop guidance material for glider owners/operators that describes feasible installation options to aid in the prompt installation and approval of transponders in gliders. (A-08-11)
- Establish a national transponder code for glider operations, as low in the transponder code range as feasible, that would notify air traffic controllers of glider operation/position. (A-08-12)

- Upon establishment of a national transponder code for glider operations, as per Safety Recommendation A-08-12, ensure that air traffic control personnel are informed of the code, what it represents, and under what limitations the users are operating. (A-08-13) -1013

It was not an NTSB recommendation to put notes on IFR Enroute Charts. Lance Christian, DoD/NGA said it doesn't belong on the charts and the NTSB solution/recommendation was to have and use a transponder. The ACF decided previously that, in general, notes about VFR operations do not belong on IFR procedure charts. Mr. Frank Flood, Air Canada, suggested that appropriate authorities consider possible establishment of special use airspace.

Though there was considerable conversation and opinion about this issue, the general consensus was to close it with no further action required.

CLOSED.