The purpose of the Special Airworthiness Information Bulletin (SAIB) is to provide safety information to DG Flugzeugbau Model DG-500 powered sailplane owners on the following:

- Flight and Maintenance Manual Revision (Technical Note No. 843/5), Instruction No. 1
- Rudder gap seal to correct rudder vibration (Technical Note No. 843/5), Instruction No. 2
- Cooling liquid reservoir bracket (Technical Note No. 843/5), Instruction No. 3
- Cracks in the propeller mounting plate (Technical Note No. 843/8), Instruction No. 1
- Refueling with unleaded fuel (Technical Note No. 843/8), Instruction No. 2 & 5
- Flight and Maintenance Manual revisions (Technical Note No. 843/8), Instruction 3 & 4

Background
The FAA is currently conducting an assessment of foreign airworthiness directives that have been issued by the German Luftfahrt-Bundesamt (LBA) on German type certificated powered sailplanes. The LBA has issued German airworthiness directives on the service difficulty issues listed above. The FAA is currently assessing the need to issue corresponding U.S. airworthiness directives on U.S. type certificated Model DG-400 powered sailplanes. In the interim, the FAA is using this Special Airworthiness Information Bulletin to inform U.S. owners of this model powered sailplane of the service difficulties reported by the manufacturer. If an airworthiness directive is determined to be appropriate, a Notice of Proposed Rulemaking will be issued. The following is a brief description of the main areas of each issue.

Flight and Maintenance Manual Revision (Technical Note No. 843/5), Instruction No. 1
DG Flugzeugbau has flight and maintenance manual revisions for the DG-500 powered sailplane.

Rudder gap seal (Technical Note No. 843/5), Instruction No. 2
DG Flugzeugbau has determined that some Model DG-500 powered sailplanes have experienced rudder vibrations caused by flow separation at the rudder gap when at very high speeds. To correct this, DG Flugzeugbau issued this Technical Note to seal the rudder gap eliminating the vibration. For your information, this Technical Note is enclosed. The FAA highly encourages you to determine if this modification has been accomplished on your powered sailplane.

Cooling liquid reservoir bracket (Technical Note No. 843/5), Instruction No. 3
DG Flugzeugbau has determined that some Model DG-500 powered sailplanes have experienced failure of the cooling liquid reservoir bracket due to vibration. To correct this problem DG Flugzeugbau has issued this Technical Note to modify the reservoir mounting. For your
information, this Technical Note is enclosed. DG Flugzeugbau has the parts available to accomplish this modification. The FAA highly encourages you to determine if this modification has been accomplished on your powered sailplane. The cost is approximately $20.00 U.S. dollars and requires approximately 2 hours for inspection and modification.

Cracks in the propeller mounting plate (Technical Note No. 843/8), Instruction No. 1
DG Flugzeugbau has determined that on some Model DG-500 powered sailplanes, cracks have appeared in the propeller mounting plate 5M2 near the bolts connecting the plate to attachment SM4. This Technical Note advises inspection and the addition of an aluminum plate. DG Flugzeugbau has the parts available to accomplish the modification. The FAA highly encourages you to determine if this modification has been accomplished on your powered sailplane. The cost is approximately $186.00 U.S. dollars and requires approximately 2 hours for inspection and modification.

Refueling with unleaded fuel (Technical Note No. 843/8), Instruction No. 2 & 5
DG Flugzeugbau has evaluated unleaded fuel for use in the Model DG-500. This enclosed Technical Note is issued to provide information on this subject.

Flight and Maintenance Manual revisions (Technical Note No. 843/8), Instruction 3 & 4
DG Flugzeugbau has issued these manual revisions and information on the use of Loctite. This Technical Note is enclosed.

Additional Information:
The FAA has issued the following Airworthiness Directives (AD) on the DG Flugzeugbau Model DG-100. This information is provided to you for your information only.
96-04-12; To prevent an unintended extension of the airbrakes caused be failure of the lever to the torsion tube of the airbrake control. Accomplish Technical Note No. 843/3-2, dated October 28, 1992.

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