

EASA	EMERGENCY AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2007- 0316-E</p> <p>Date: 21 December 2007</p>	
No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.		
Type Approval Holder's Name :	Type/Model designation(s) :	
DG-Flugzeugbau GmbH	DG-1000	
TCDS Number : EASA.A.072		
Foreign AD: Not applicable.		
Supersedure: None		
ATA 27	Flight Controls – Bolt of bearing support for elevator bell crank and Suspension of the airbrake control hook - Inspection / Modification	
Manufacturer(s):	DG Flugzeugbau GmbH	
Applicability:	<p>DG-1000 all models Action 1 – 3: S/N 10-1 up to 10-109, except S/N 10-103 up to 105 and 10-109 (the action has been performed on these S/N)</p> <p>Action 4 – 6: S/N 10-1 up to 10-94, except 10-84, 10-88 and 10-92</p>	
Reason:	<p>1. The bolt of a bearing stand which is the pivot for a bell crank failed in a DG-500 ELAN Trainer. As the cause of the failure it is suspected that the nut fixing the bell crank had become loose. As the design is similar in the DG-1000 up to ser. no. 10-109 analogous instructions have to be executed for the DG-1000.</p> <p>2. During aerobatics a suspension of the airbrake control hook up in the wing root failed. Therefore the suspension shall be reinforced.</p>	
Effective Date:	25 December 2007	

Compliance:	<p>Action 1 - before the next flight Check the actual torque of the nut which fixes bellcrank 5St19 to the bolt according to working instruction No. 1 for TN1000/12. If the torque is 3 Nm (2.2 ft.lb.) or higher it can be assumed that the bolt was not overstressed during operation. Increase the torque to 12 Nm (9 ft.lb.).</p> <p>Action 4 - before the next flight Check the suspension of the airbrake control hook ups in the wing roots for any damage. Visual inspection through the access holes in the rear root ribs (refer to photos in working instruction No. 4 for TN1000/12) and check of the overcentre locking moment according to sect. 4.4.2 MM. If the force to be measured during the check is below 50 N (11 lbs.) a damage must be suspected. If no damage could be detected, the glider may be operated up to execution of instruction 6 but aerobatics are prohibited for this period.</p> <p>Action 2 - if necessary prior to the next flight If the torque was less than 3 Nm (2.2 ft.lb.) the bolt must be replaced according to working instruction No. 2 for TN1000/12. In such a case please send within 7 days after the check a note by e-mail to design@dg-Flugzeugbau.de.</p> <p>Action 5 - if necessary prior to the next flight The suspensions of the airbrake control hook ups in the wing roots must be reinforced according to working instruction No. 4 for TN1000/12.</p> <p>Action 3 - not later than March 30, 2007 An additional bracket must be installed according to working instruction No. 3 for TN1000/12.</p> <p>Action 6 - not later than March 30, 2007 If any damage was detected a large repair according to working instruction No. 5 for TN1000/12 is necessary. The suspension parts required by this instruction are reinforced by more fibreglas layers according to the actual production state. For this reason Action 5 must not be executed. Note: If damage was detected on only one wing only this wing must be repaired. The other wing may be reinforced according to working instruction No. 5.</p>
Ref. Publications:	DG Flugzeugbau Technical Note No. 1000/12 dated 30. November 2007
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can accept Alternative Method of Compliance for this AD. 2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification 3. Enquiries regarding this Airworthiness Directive should be referred to the AD Focal Point – Certification Directorate, EASA. E-mail: ADs@easa.europa.eu 4. For any questions concerning the technical content of the requirements in this AD, please contact: DG Flugzeugbau GmbH Otto-Lilienthal-Weg 2 76646 Bruchsal Federal Republic of Germany Phone: + 49 (0) 7251 3020140 Fax: +49 (0) 7251 3020149 E-Mail: dirks@dg-flugzeugbau.de