



**United Kingdom
Civil Aviation Authority**

MPD No: 2010-003

Issue Date: 29 April 2010

MANDATORY PERMIT DIRECTIVE

In accordance with Article 22(1) of the Air Navigation Order 2009 as amended the following action required by this Mandatory Permit Directive (MPD) is mandatory for applicable aircraft registered in the United Kingdom operating on a UK CAA Permit to Fly.

MPD: 2010-003 AEROTECHNIK / COSMIK AVIATION

Subject:	Temporary Reduction in Maximum Manoeuvring Airspeed, V_A and Never Exceed Airspeed, V_{NE} together with Mandatory Inspection of Wing Lower Spar Caps.
Applicability:	<p>Aerotechnik EV-97 Eurostar Aerotechnik EV-97A Eurostar Aerotechnik EV-97 Eurostar SL EV-97 teamEurostar UK</p> <p>All aeroplanes except those with documentation for the wings showing Wing Lower Spar Cap material passed the inspection detailed in Evektor-Aerotechnik document M-EV97-02/2009 "Methodology of Check of Wing Spar Caps – Conductivity".</p>
Reason:	<p>As a result of the investigation into the crash of a Danish registered Eurostar in Switzerland it was ascertained that some of the material used in the wing lower spar caps did not meet the alloy's strength specification.</p> <p>An inspection procedure to enable the strength of the wing lower spar caps to be measured has now been developed so that it can be determined whether they are acceptable and meet the design requirements.</p> <p>While the inspection procedure was being finalised MPD 2009-010 required that the V_A and V_{NE} airspeed limits on all aircraft were reduced to ensure that there was an adequate strength margin even if an aircraft had lower strength wing lower spar caps.</p> <p>This MPD supersedes MPD 2009-010 and retains the Temporary Reduction of certain airspeed limitations from that MPD. The inspection procedure is mandated by this MPD and forms a closing action for the MPD.</p>

<p>Compliance:</p>	<ol style="list-style-type: none"> 1. Before further flight after the effective date of this MPD, temporarily amend V_A and V_{NE} by approved modification action as follows: <ol style="list-style-type: none"> a) Replace existing placarded value of V_A by new value of 88 mph (76 knots). b) Replace existing placarded value of V_{NE} by a new value of 106 mph (92 knots). c) Re-mark airspeed indicator to show a red radial line at the new V_{NE} of 106 mph (92 knots). d) Amend Pilot's Handbook to show the new values of V_A and V_{NE}. 2. It is understood that Cosmik Aviation can supply a kit, which will meet these requirements. 3. Compliance with the requirements of MPD 2009-010 is acceptable to show compliance with paragraphs 1 and 2 above. 4. Before 31 March 2011, inspect both aeroplane wings in accordance with Cosmik Aviation SB/EUR/005 or SB-EV97-UK-011 as applicable. 5. If the inspection shows that both the wings meet the strength criteria the aircraft may be re-assembled. 6. If the inspection shows that one or both of the wings do not meet the strength criteria, the understrength wing or wings must be repaired or replaced with components that do meet the strength criteria before re-assembly to the aeroplane. <p>Note: Provided the conductivity of any spar cap that failed the strength criteria does not exceed 43%, it is permissible to re-assemble the aeroplane and conduct a one-off ferry flight to a location where the understrength wing or wings must be removed and then repaired or replaced.</p> <ol style="list-style-type: none"> 7. Following aeroplane re-assembly the temporary actions in paragraph 1 above may be reversed and the aeroplane placarding, airspeed indicator marking and Pilot's Handbook returned to standard. 8. Further flight after 31 March 2011 is prohibited unless an inspection in accordance with paragraph 4 of this MPD has been carried out.
<p>Ensure compliance with this MPD is recorded in the aircraft logbook.</p>	
<p>Effective Date:</p>	<p>5 May 2010</p>
<ol style="list-style-type: none"> 1. This MPD was published on 26 March 2010 as PMPD 10-01 for consultation until 26 April 2010. 2. Enquiries regarding this MPD should be referred to Aircraft Certification Department, Civil Aviation Authority, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Tel: +44 (0)1293 573309 Fax: +44 (0)1293 573976 Email: department.certification@caa.co.uk 	