To: All Owners / Operators of affected Propellers

Subject: Counterweight Failures on Acrobatic Propellers

Propeller Models affected: MTV-2-B-C, MTV-3-B-C, MTV-4-B-C
Serial-No. 83..., 84..., 85...
Propellers with Serial-No. 86...
have already the new counterweight

Aircraft models affected: All Aircraft, unsing this Propeller

Condition: After the introduction of the modification according to Service Bulletin No. 2 of March 15, 1985, there was again one failure of a counterweight. This forced us to design our own counterweight. As the reason was still not clear and could be related to material instability, we started design and production of the new counterweight, Part-No. A-215.

Correction: All old style counterweights, Part-No. D-4170 must be removed and scrapped. Installation of the new counterweight A-215, manufactured from solid steel alloy, is required.

1. Within the next 10 hours of operation, remove spinner dome and further remove propeller from aircraft.
2. An approved propeller shop must replace the counterweight, because balancing is required after modification.
3. Remove counterweights and attachment hardware and scrap. Destroy old counterweights, because they never should be used again. Secure balancing weights, because they can be reused.
4. Install new counterweights according to the enclosed drawing on page 2 of this bulletin. As the blade ferrules are already drilled for the spiral pin, the new counterweights shall be installed to fit these holes. The pins must be engaged in order to avoid slipping. Torque counterweight bolts as shown on the drawing.
   After correct torque of all bolts and nuts, drill a hole into the counterweight and head of the socket head cap screw with 2,3 mm (.090 inch) diameter and install the safety pins A-285 to secure the bolts.
5. Static balance the propeller and safety wire balance weight screws. On the MTV-3-B-C propeller, observe the free movement of the blades to the spinner because only a limited place and stack height can be used.

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6. Install propeller on aircraft according to manual MPC-11 or E-148. Torque flange bolts with 85 - 90 Nm (63-66 ftlb) on engines up to 300 hp and with 120 - 135 Nm (90-100 ftlb) on engines above 300 hp.
   Safety wire bolts in pair.

7. Perform ground run and check for leackage. Install spinner dome with screws and plastic washers.