



U.S. Department
of Transportation
**Federal Aviation
Administration**

Memorandum

Subject: **ACTION: Review and
Concurrence, Equivalent
Level of Safety, Lake LA-4-
200/MTV-12 Propeller
Reversing System , ACE-02-08**

From: Manager, Boston Aircraft
Certification Office, ANE-
150

Date: June 17, 2002

Reply to Terry Fahr
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FAX 781.238.7170

To: Manager, Small Airplane
Directorate, ACE-100

MT-Propeller, Atting, Germany, has designed a propeller reversing system, which is not controlled by a power lever only, for use with their MTV-12-B-C-R(M)/CRLD188-119a propeller on the Lake LA-4-200. The reversing system is activated by a switch. The direction of the propeller thrust is thereby controlled by the switch, and the level of thrust is controlled by the normal power lever.

An Equivalent Level of Safety (ELOS) Finding is necessary for this reversing system since the design does not comply with 14 CFR Part 23, § 23.779(b)(1), which requires forward motion of the power (thrust) lever to increase forward thrust, and rearward motion of the power lever to increase rearward thrust.

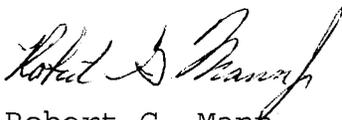
Compensating features which justify the granting of an ELOS for this system are as follows:

1. The two position switch is located next to the engine power lever, and has a guard that must be lifted prior to moving.
2. There is a yellow light on the instrument panel to indicate that the reverse mode is activated.
3. There is an air pressure switch in the pitot static system which prevents activation of the reversing system above 45 knots indicated air speed.

4. There is a centrifugal latch inside the propeller preventing the blades from going below the minimum blade in-flight blade angle above 1600 rpm.

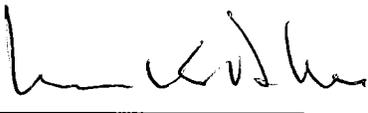
Since unintended operation of the reversing function on this propeller is prevented by the above features, the Boston ACO recommends that the Small Airplane Directorate concur with this proposed ELOS.

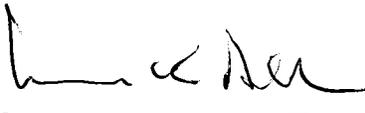
Please be advised that an ELOS Finding was issued by the LBA along with LBA STC SA 1230 for this reversing system. Enclosed are copies of these documents for your information. Also note that the FAA ELOS Finding request is to the requirements of § 23.779(b)(1), instead of CAR 3.384(a), to coincide with the LBA ELOS Finding. Compliance under STC SA 1230 was to Part 23, Amendment 45.



Robert G. Mann

Concur

Signature: 
 Manager, Small Airplane
 Directorate Standards Staff,
 ACE-110

Signature: 
 Manager, Small Airplane
 Directorate, ACE-100