



U.S. DEPARTMENT
OF TRANSPORTATION

Federal Aviation
Administration

MEMORANDUM

AIRCRAFT CERTIFICATION OFFICE
c/o American Embassy, Brussels
APO NEW YORK 09667-1011

Subject: ACTION: Equivalent Level of Safety Slingsby T67M-260,
Powerplant Control Layout, Power Lever Finding No. 92-02

Date: April 14, 1992

From: Manager, Aircraft Certification Office,
AEU-100

Reply To
Attn. of: WEG/vk/1378.92

To: Manager, Aircraft Certification Service, ACE-100

Background:

Slingsby Aviation proposes to locate a second power lever ganged to the centrally mounted lever, on the left hand cockpit wall.

Applicable Regulations:

The applicable Federal Aviation Regulations (FAR) paragraphs state:

"23.777 *****

c) Powerplant controls must be located-

3) For other single-engine airplanes at or near the center of the cockpit, on the pedestal, instrument panel, or overhead; and

4) For airplanes, with side-by-side pilot seats and with two sets of powerplant controls, on left and right consoles."

Applicant's Position:

Slingsby Aviation proposed to locate a second power lever ganged to the centrally mounted lever, on the left hand cockpit wall. With the T67M-260 arrangement both pilots are able to fly the aircraft in manoeuvring flight, acrobatic and spins with joystick type control column in the right hand and the power lever in the left hand. Slingsby considers this to be an ergonomically desirable arrangement, generally favored by flight training schools.

Slingsby considers the T67M-260 arrangement, which enables an instructor to take over the central quadrant controls directly is preferable to having separate groups on either cockpit wall and no central cluster.

FAA Position:

The Slingsby T67M-260 powerplant control cluster is located at or near the center of the cockpit on the pedestal in accordance with FAR subparagraph 23.777(c)(3).

The powerplant controls are arranged in order, from left to right, power lever, propeller, and mixture control in accordance with FAR subparagraph 23.777(d).

The primary instruments will be located on the left side of the main instrument panel. The airplane is intended as an acrobatic trainer for civil and military pilots. Slingsby has installed an additional power lever on the left console, to accommodate military instructors who prefer using the left hand for power control, and the right hand for airplane control with the control column.

A review by the Small Airplane Directorate flight test personnel determined the Slingsby dual throttle installation is safe to fly, and a finding of an equivalent level of safety is appropriate for this configuration.

Compensating Features:

The pilot in the left and right seats can promptly adjust the power lever at any time without interfering with or being interfered by the other pilot's hand.

The same hand movements for performing acrobatic maneuvers from either position.

Powerplant control adjustments and hand movements during non-acrobatic flight are not affected.

Recommendation:

We concur that the Slingsby T67M-260 proposed throttle configuration is considered as providing an equivalent level of safety as envisioned in the regulations and thus meets the requirements of paragraph 23.777 (c)(4) of the FAR.

Concurred by:

Everett W. Pittman

Everett W. Pittman
Manager, Aircraft Certification Staff
AEU-100

4/15/92
Date

Michael K. Dahl

for Manager, Standards Office, ACE-110

4/30/92
Date

Barry D. Clements

for Barry D. Clements
Small Airplane Directorate
Aircraft Certification Service, ACE-100

4/30/92
Date