DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A73EU Revision 7 Slingsby Aviation Ltd T67M260 T67M260-T3A

March 27, 2007

TYPE CERTIFICATE DATA SHEET No. A73EU

This data sheet, which is part of Type Certificate No. A73EU, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

<u>Type Certificate Holder.</u> Slingsby Aviation Ltd.

Kirkbymoorside

YORK YO6 6EZ ENGLAND

I. Model T67M260 - 2PLCM (Acrobatic Category) - Approved December 15, 1993.

Engine. Textron Lycoming AEIO-540-D4A5.

Fuel. Avgas 100LL

Engine Limits. For all operations 2700 rpm (260 hp)

Propeller. Hoffman HO-V123K-KV/180DT

Spinner T67G-50-401

Diameter 70.9 in. (No further reduction permitted) Pitch setting at 75% radius: Low 10° , 40', $\pm 10'$

High 30°, 45', ±20'

Governor. Woodward C210988

Airspeed Limits (KIAS). V_{NF} (Never exceed) 195

 $\begin{array}{c} V_{\hbox{NO}} \ (\hbox{Max structural cruising}) & 156 \\ V_{\hbox{A}} \ \ (\hbox{Maneuvering}) & 140 \\ V_{\hbox{FE}} \ \ (\hbox{Flaps extended 18°}) & 120 \\ V_{\hbox{FE}} \ \ (\hbox{Flaps extended 40°}) & 98 \end{array}$

C.G. Range. Ins aft of datum:

Forward Limit: (+28.0) at 2175 lb or less

(+30.8) at 2550 lb

Straight line variation between these points

PAGE NO.	1	2	3	4	5	6	7	8	8	8
REV. NO.	7	3	3	7	7	4	4	4	5	6

A73EU Page 2 of 8

I. Model T67M260 (cont'd)

Aft Limit: (+32.5) at 2430 lb or less

(+32.4) at 2550 lb

Straight line variation between these points

Datum. Forward Face of Frame 1

Leveling Means. Fore and Aft - Fuselage incidence board T67B-88-307

Lateral - Top of Frame 4

Empty Weight C.G. Range. None

2550 lb Maximum Weight.

Number of Seats. (See Flight Manual for Weight and Balance)

Maximum Baggage. 66 lb (+72.3)

Fuel Capacity. 42.54 US Gals in two 21.27 US Gal Tanks in Wing (+29.1).

41.54 US Gals usable. See Note 1 for Volume of unusable fuel.

Oil Capacity. 12 US Quarts (-24)

6 US Quarts minimum permissible.

Control Surface Movements. Wing Flaps: Up 0

Take off 18° , $+1^{\circ}$, -2°

Land $40^{\circ}, +1^{\circ}, -3^{\circ}$

Ailerons: Up $14^{\circ}, \pm 1^{\circ}$ Down 11.75°, ±1° Up 22°, ±1° Elevators: Down 20°, $\pm 1^\circ$ Elevator Trim Tab Up 19° min Down 31°, $+2^{\circ}, -1^{\circ}$ Rudder: Left 30°, +1° Right 30° , $+1^{\circ}$

II. Model T67M260-T3A - 2PLCM (Acrobatic Category) - Approved December 15, 1993. (Military use only)

Textron Lycoming AEIO-540-D4A5. Engine.

Fuel. Avgas 100LL

Engine Limits. For all operations 2700 rpm (260 hp)

Propeller. Hoffman HO-V123K-KV/180DT

Spinner T67G-50-401

Diameter 70.9 in. (No further reduction permitted) Pitch setting at 75% radius: Low 10°, 40', ±10'

High 30°, 45', ±20'

Woodward C210988 Governor.

A73EU Page 3 of 8

II. Model T67M260-T3A (cont'd)

Airspeed Limits (KIAS). V_{NE} (Never exceed) 195

 V_{NO} (Max structural cruising) 156 V_{A} (Maneuvering) 140

V_{FE} (Flaps extended 18°) 120 V_{FE} (Flaps extended 40°) 98

C.G. Range. Ins aft of datum:

Forward Limit: (+28.0) at 2175 lb or less

(+30.8) at 2550 lb

Straight line variation between these points

Aft Limit: (+32.5) at 2430 lb or less

(+32.4) at 2550 lb

Straight line variation between these points

<u>Datum.</u> Forward Face of Frame 1

<u>Leveling Means.</u> Fore and Aft - Fuselage incidence board T67B-88-307

Lateral - Top of Frame 4

Empty Weight C.G. Range. None

Maximum Weight. 2550 lb

Number of Seats. 2 (See Flight Manual for Weight and Balance)

Maximum Baggage. 66 lb (+72.3)

Fuel Capacity. 42.54 US Gals in two 21.27 US Gal Tanks in Wing (+29.1).

41.54 US Gals usable. See Note 1 for Volume of unusable fuel.

Oil Capacity. 12 US Quarts (-24)

6 US Quarts minimum permissible.

<u>Control Surface Movements.</u> Wing Flaps: Up 0

Take off 18° , $+1^{\circ}$, -2°

Land $40^{\circ}, +1^{\circ}, -3^{\circ}$

 Ailerons:
 Up
 14° , $\pm 1^{\circ}$ Down
 11.75° , $\pm 1^{\circ}$

 Elevators:
 Up
 22° , $\pm 1^{\circ}$ Down
 20° , $\pm 1^{\circ}$

 Elevator Trim Tab
 Up
 19° min
 Down
 31° , $+2^{\circ}$, -1°

 Rudder:
 Left
 30° , $+1^{\circ}$ Right
 30° , $+1^{\circ}$

Certification Basis (T67M260)

1. 14 CFR Section 21.29 and 14 CFR Part 23, effective February 1, 1965, including Amendments 23-1 through 23-42.

 Special Condition: "Evaluation of Composite Structure" (Docket No. 088 CE, Special Condition 23-ACE-57) published in the Federal Register on 12 August 1992 and

effective 11 September 1992.

A73EU Page 4 of 8

3. 14 CFR Part 36, effective 1 December 1969, including Amendments 36-1 through Amendment 20.

 Equivalent Safety Finding. In respect of FAR 23.777(c)(4), "Power Lever Finding," No. 92-2, issued by Small Airplane Directorate, ACE-100 on 14 April 1992, found that the location of the powerplant controls in the cockpit provided equivalent safety.

Certification Basis (T67M260-T3A)

- 1. 14 CFR Section 21.29 and 14 CFR Part 23, effective February 1, 1965 including Amendments 23-1 through 23-42, except Section 23.562.
- Special Condition: "Evaluation of Composite Structure" (Docket No. 088 CE, Special Condition 23-ACE-57) published in the Federal Register on 12 August 1992 and effective 11 September 1992.
- 3. 14 CFR Part 36, effective 1 December 1969, including Amendments 36-1 through Amendment 20.
- Equivalent Safety Finding. In respect of FAR 23.777(c)(4), "Power Lever Finding," No. 92-2 issued by Small Airplane Directorate, ACE-100 on 14 April 1992, found that the location of the powerplant controls in the cockpit provided equivalent safety.

The United Kingdom CAA originally type certificated this aircraft under is type certificate Number BA17. The FAA validated this product under U.S. Type Certificate number A73EU. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of the United Kingdom CAA.

Type Certificate.

Type Certificate A73EU was issued pursuant to FAR 21.29 in validation of a United Kingdom Civil Aviation Authority Certification of compliance with the aforementioned certification basis, and in accordance with the standard airworthiness certificate provisions of FAR 21.183(c).

Serial Nos. Eligible.

The United Kingdom Certificate of Airworthiness for Export issued to aircraft manufactured at Kirkbymoorside in the United Kingdom and endorsed as noted under "Import Requirements", must be submitted for each individual aircraft for which application of certification is made. Serial Nos. for production of the T67M260 Model have not been identified. Serial numbers must be identified prior to production. All Mandatory Service Bulletins and UK CAA AD's must be incorporated for import into the United States prior to issuance of an Export Certificate of Airworthiness. A civilian version of the Airplane Flight manual must be FAA approved.

Slingsby T67M260-T3A airplane models completely manufactured in the United Kingdom have the following serial numbers: No. 2109 and 2110. (Used by U.S. Air Force only)

Airplanes assembled by Northrop Worldwide Aircraft Services Inc, in

.

accordance Licensing Agreement SAL/NWASI, dated 8 February 1994 and under FAA Production Certificate No. PC9SW. These airplanes have the following serial numbers: No. 2123 thru 2233. (Used by U.S. Air Force only)

Additional numbers may be added by petition submitted by the Type Certificate holder.

Import Requirements.

A United States Airworthiness Certificate may be issued on the basis of United Kingdom Certificate of Airworthiness for Export signed by a representative of the United Kingdom Civil Aviation Authority on behalf of the European Community containing the following statement; "The airplane covered by this certificate has been examined, tested and found to conform to the 14 CFR Part 23 type design approved under U.S. Type Certificate A73EU and is to be in a condition for safe operation".

Any imported aircraft must also meet the requirements of Note 10 of this Type Certificate Data Sheet.

Service Information.

Service bulletins, structural repair manuals, vendor manuals, aircraft flight manuals, and overhaul and maintenance manuals, which contain a statement that the document is CAA approved, or CAA approved through the Manufacturers CAA Approval Ref. DAI 2243/46, is accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before September 28, 2003 – by the United Kingdom CAA.

- Service bulletins,
- Structural repair manuals,
- Vender manuals,
- Aircraft flight manuals, and
- Overhaul and maintenance manuals.

The FAA accepts such documents and considers the FAA-approved unless on of the following conditions exits:

- The documents change the limitations, performance, or procedures of the FAA approved manuals: or
- The documents make an acoustical or emissions change to this product's U. S. type certificate as defined in 14 CFR 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to EASEA to approve on Behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

Equipment. (All Models)

The basic equipment prescribed in the applicable airworthiness requirements (See Certification Basis) must be installed in the aircraft for airworthiness certification. This equipment must include Airplane Flight Manual T.O. 1T-3A-1 dated 9 December 1993 or later CAA approved revision. The equipment required to be fitted and functioning for a particular flight is stated in the Minimum Equipment List, T67G-900-014 Issue 4, dated 24 March 1995, or later CAA

approved revision.

NOTES Pertain to all models unless otherwise specified

NOTE 1. Current weight and balance report, including list of equipment included in certificated empty weight and loading instructions when necessary, must be provided for each aircraft at the time of original certification.

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 1.0 US Gallon (+29.1) and full oil of 12 US Quarts (-24).

NOTE 2. The following placards must be displayed in full view of the pilot:

"THIS AIRPLANE MUST BE OPERATED AS AN ACROBATIC CATEGORY AIRPLANE IN COMPLIANCE WITH THE APPROVED AIRPLANE FLIGHT MANUAL."

All markings and placards required in the approved Airplane Flight Manual must be installed in the appropriate locations.

Each individual airplane will be supplied with placards that specifies the kind of operation such as VFR, IFR, day or night, to which the operation of the airplane is limited by the equipment installed.

- NOTE 3. Airplane is limited to 18,000 flight hours. The temperature of the structure for operations must not exceed 122°F (50°C) for aerobatic flight and 131°F (55°C) for all other flights. Additional Instructions for Continued Airworthiness and Service Life Limits of components are contained in the Maintenance Schedule T67M260/MS, dated October 9, 1993. Revisions to Airworthiness Limitations must be FAA approved or CAA approved for the FAA.
- NOTE 4. Paint specification. Paints containing UV protection must be used for repairs. The recommended paint specification is white polyurethane FE102.
- NOTE 5. Paint schemes. Restrictions on paint schemes which define the areas where only colors approved by the aircraft manufacturer may be used are given in the T67M260 Maintenance Manual, Fig. 1-6 Paint Restrictions. These restrictions must be observed.
- NOTE 6. Prior to the initial issue of an Airworthiness Certificate, each airplane must be test flown to T67M260 Production Flight Test Schedule No. 1, Issue 3 and found to be satisfactory. After the test schedule has been completed an external inspection must be made to verify that no structural damage has occurred.
- NOTE 7. Compliance with JAR 23.221, "Spinning," must be demonstrated before the issue of a United Kingdom Certificate of Airworthiness.
- NOTE 8. The T67M260 and T67M260-T3A are identical except for "Cockpit Arrangement Drawing".

T67M260 Dwg No. T67G-18-001 T67M260-T3A Dwg No. T67G-18-005

This difference is installation of a fire extinguisher and first aid kit in the T67M260.

NOTE 9. For the model T67M260-T3A, six-inch aircraft registration marks may be used vice

A73EU Page 7 of 8

12-inch marks required by regulations when operated as a military aircraft. The purpose and rationale is stated in petition approved by FAA Acting Deputy Director, Aircraft Certification Service on May 28, 1993.

NOTE 10. All T67M260-T3A aircraft manufactured under this Type Certificate A73EU listed under "Serial Numbers Eligible" are presently maintained and operated as trainers by the United States Air Force. None are in civilian use. Prior to any future release to civilian use, all USAF operated aircraft designated under "Serial Numbers Eligible" must meet conformity inspection to the Type Design. Compliance with FAR 23.562 must be completed. In addition, all aircraft, must incorporate the Slingsby Mandatory Service and Modification Bulletins listed below which have been UK CAA approved:

Service/Mod Bulletin	<u>Subject</u>	UK CAA AD
SB 52, Issue 3 *M606	Elevator Horn Water Ingress	010-05-94
SB 54 M593	Inspection of Wing Fuel Tank Drain Valves	011-05-94
SB 62 M645	Flap Lever Proof Test	005-11-94
SB 64	Inspection of Elevator Bearing Plate	006-11-94
Service/Mod Bulletin	<u>Subject</u>	UK CAA AD
M576	Introduction of Rudder Pedal Pad with Chamfered Side Plate	013-05-94
M636	Introduction of Improved Low Level Fuel Sensor	007-10-94
SB 65 M646	Nose Landing Gear Inspection and Modification	001-12-94
SB 72, Issue 2	Inspection of Thermostatic Bypass Valves	Mandatory Textron Lycoming Service Bulletin
SB 79, Issue 2 M665	Inspection of Control Column to Seat Clearance and Seat Attachment Integrity. Introduction of Locating Spigot on seat	008-04-95 009-04-95
SB 83, Issue 2 * M671	Inspection for Foul Between No 2 Rudder Pedal Pivot and Nosewheel Steering Arm	006-02-96
SB 84 * M678	Inspection of Rib 2 Lower Flange Bond to Wing Skin	010-07-95
SB 87, Issue 2 *M683	Reduced Structural Temperature Limitation from 55°C to 50°C and Prohibited Flight Temperature Limitation from 65°C to 55°C. See Note 3.	002-09-95
SB88, Issue 2 M687 A/B	Rudder pedal to Mixture Potential Foul	007-08-96

* SB 94 / M695	Inspection of Elevator Pushrod to Control Column Assembly Pivot Bolt to Seat Clearance	007-07-96
SB 105	Inspection of Control Surfaces for Rubbing Marks	No CAA AD
SB 120, Issue 3	Inspection of Rudder Bar Support Brackets (Only welded brackets are allowed if cracks are found)	012-01-97
SB 139	Inspection of Steering Arm on Fairey Hydraulics Nose Leg (No cracks are allowed, parts must be replaced and inspections continued every 150 hours per SB)	003-09-97
SB 150 M783	Inspection of Elevator Lever Stiffnut at Frame 7 Introduction of Split Pin into Elevator Pushrod Bellcrank Pivot Bolt at Frame 7	002-12-97 No CAA AD
Service/Mod Bullet	<u>in</u> <u>Subject</u>	UK CAA AD
M830	Introduction of STC Fuel System Modification	No CAA AD
M890	Introduction of Re-routed Fuel Tank Vent System, Re- introduction Of Low Fuel Warning Lights and Electric Fuel Pu	No CAA AD
	Limited To 35 lbs/in ² Output Pressure-Post Mod M830 Aircraf	
M898, Issue 2	Limited To 35 lbs/in ² Output Pressure-Post Mod M830 Aircraft Deletion of Fuel Filter Drain Ref SAIC Fuel Modification	
M898, Issue 2 M992		ft
	Deletion of Fuel Filter Drain Ref SAIC Fuel Modification Introduction of fasteners to front of Frame 2 to 3 trim	010-02-2000
M992	Deletion of Fuel Filter Drain Ref SAIC Fuel Modification Introduction of fasteners to front of Frame 2 to 3 trim panel for added security	010-02-2000 005-03-2003

^{*} Mod Bulletin is specified in Service Bulletin, but no Mod Bulletin exists. Service Bulletin incorporates action required by Mod Bulletin. If maintenance records for the aircraft show that a Mod Bulletin has been incorporated, the associated Service Bulletin has also been incorporated.

.....END....