European Aviation Safety Agency

EASA

TYPE-CERTIFICATE DATA SHEET

T67

Manufacturer: Slingsby Advanced Composites Ltd

Slingsby Advanced Composites Limited Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

For variants:

T67A

T67B Firefly T67C Firefly T67M Firefly

T67M-MkII Firefly T67M200 Firefly T67M260 Firefly T67M260-T3A Firefly

Issue 02

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Change Record

Issue 01: Initial issue 24 August 2007

Issue 02: 3 September 2007 Minor editorial corrections

Deletion of reference to 'Transport category (Passenger) and replacement by 'Normal,

Utility and Aerobatic'.

SECTION 1 T67A

A.I. General

Data Sheet No.: A 390

Issue: 02

Date: 3 September 2007

1 a) Type:

T67

b) Variant:

T67A

2. Airworthiness Category:

Normal, Utility and Aerobatic

3. Type Certificate Holder:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

4. Manufacturer:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

5. Certification Application Date:

Not Known

6 CAA-UK Type Certificate

BA17

7. CAA Certification Date

1st October 1981

8 EASA Certification Date:

24 August 2007

9. This EASA TCDS replaces CAA-UK TCDS BA17

A.II. Certification Basis

1 Reference Date for determining the applicable requirements:

15th February 1981

- 2 (Reserved)
- 3. (Reserved)

4 Certification Basis:

CAA Airworthiness Notice 15 Issue 3 dated 15-Feb-1981

Slingsby Modifications – Current Provisions FAR 23

5 Special Conditions:

None

6. (Reserved):

7 Equivalent Safety Findings:

None

8 Environmental Standards:

Approved Noise Levels in accordance to:

CAA Noise Certificate No 43

A.III. Technical Characteristics and Operational Limitations

Type Design Definition: SEL DON 010 (Modification M0)

Drawing No. 167A-00-001

2. Description: Single engine, two-seat cantilever low wing airplane,

wooden construction, fixed tricycle landing gear,

conventional tail

3. Equipment: (14 volt DC system) Refer document SEL DON 010

4. Dimensions:

 Span
 10 6 m
 (34 ft 9 % in)

 Length
 7.37 m
 (24 ft 2 in)

 Height
 2.37 m
 (7 ft 9 % in)

 Wing Area
 $12 60 \text{ m}^2$ $(135 63 \text{ ft}^2)$

5. Engines: 1 Textron Lycoming O-235-L2A

Pre Mods M219, M406A, M406B

FAA Engine Type Certificate Data Sheet E-223

Oi

1 Textron Lycoming O-235-N2A

Post Mod M219,

FAA Engine Type Certificate Data Sheet E-223

Ur.

1 Textron Lycoming O-235-L2C

Post Mod M406A,

FAA Engine Type Certificate Data Sheet E-223

Or

1 Textron Lycoming O-235-N2C

Post Mod M406B,

FAA Engine Type Certificate Data Sheet E-223

5 1 Engine Limits: for L2A, L2C, N2A & N2C Max take-off rotational speed 2800 r p m

Max continuous rotational speed 2800 r p.m.

For powerplant limitations refer to AFM, IPT67A/FM, Section 2.

6 (Reserved)

7. Propellers: 1 Hoffmann HO-14-178-120 (Composite type)

LBA Propeller Type Certificate Data Sheet 32 110/1

7.1 Settings N/A - Fixed Pitch

8. Fluids:

8.1 Fuel: AVGAS 100/130 or AVGAS 100 LL

8.2 Oil: Oils conforming to Mil spec. MIL-L-60828

For more details see AFM, IPT67A/FM, Section 1

9. Fluid capacities:

9 1 Fuel: Total: 80 litres 17.6 Imp Gallons

Usable: 79litres 17.4 Imp Gallons

9 2 Oil: Maximum: 5 678 litres 6 US qts

Minimum: 4 494 litres 4³/₄ US qts

For more details see AFM, TPT67A/FM, Section 2

10 Air Speeds:

Design Manoeuvring Speed V_A:

up to 750 kg (1650 lb) **123 KIAS**

Flap Extended Speed V_{FE}:

full flaps take-off flaps 92 KIAS 92 KIAS

Maximum structural cruising speed V_{NO}

(= Maximum structural design speed V_c):

123 KIAS

Never exceed speed V_{NE} :

138 KIAS

11. Maximum Operating Altitude:

Not Specified

12 All weather Capability:

Day-VFR Night

see Note 2

IFR

see Note 1 & 2

Flight in icing conditions is forbidden

13 Maximum Total Weight Authorised (MTWA):

Take-off:

750 kg (1650 lb)

Landing:

750 kg (1650 lb)

For Aerobatics:

720 kg (1584 lb)

14 Centre of Gravity Limits at MTWA:

Cat 'A': 720 kg (1584 lb)

Forward limit Aft limit:

0.81 m (2 ft 8 ins) aft of Datum 0.94 m (3 ft 1 ins) aft of Datum

Cat 'U': 750 kg (1650 lb)

Forward limit

Aft limit:

0.81 m (2 ft 8 ins) aft of Datum 0.953 m (3 ft 11/2 ins) aft of Datum

15 Datum:

Forward face of Frame 1

16. (reserved)

17 Levelling Means:

Port Cockpit sill (upper port longeron)

18 Minimum Flight Crew:

1 Pilot

19 Maximum Passenger Seating Capacity:

2, including pilot. This number is limited by the space

available in the cabin

20 (Reserved)

21 Baggage/Cargo Compartments

Location behind Seats

Max Allowable Load 30 kg (66 lbs)

22 Wheels and Tyres

Nose Wheel Tyre Size $4.00-4 (300 \times 100)$

(Pre Mod M68, or M71, or M136A)

Nose Wheel Tyre Size 5.00 – 5 (minimum 4 ply rating)

(Post Mod M68, or M71, or M136A)

Main Wheel Tyre Size 380 x 150

(Pre Mod M136B)

Main Wheel Tyre Size 6 00 – 6 (minimum 4 ply rating)

(Post Mod M136B)

A.IV. Operating and Service Instructions

T67A Aircraft Flight Manual (AFM) IPI67A/FM-A

T67A Aircraft Maintenance Manual (MM)

IPT67A/MM-A

Incorporates Maintenance Schedule as Part of Section 2

(incl. Airworthiness Limitations)
Service, Change (Modification), and Information Bulletins

A.V. Notes

- 1 For daytime VFR and IFR flight outside controlled airspace operation, the optional Modification M 49 must be incorporated.
- 2 As note 2 above and Night operation the optional Modification M50 must be incorporated.

3 The following G limits apply:

Weights:	750 kg (1650 lb)	720 kg (1584 lb)
Flaps up:	+4	+6
	-18	-3
Flaps down:	+2	+2
•	0	0

Issue 02, 3 September 2007

SECTION 2: T67B

B.I. General

Data Sheet No: A 390

Issue: 02

Date: 3 September 2007

a) Iype:

b) Variant:

T67

T67B Firefly

2. Airworthiness Category:

Normal, Utility and Aerobatic

3. Type Certificate Holder:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

Manufacturer:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

5. CAA-UK Type Certificate

BA17

6. CAA Certification Date

18th September 1984

7. EASA Certification Date:

24 August 2007

This EASA TCDS replaces CAA-UK TCDS BA17

B.II. **Certification Basis**

1 Reference Date for determining the applicable requirements:

2nd December 1982

- 2. (Reserved)
- 3. (Reserved)

4 Certification Basis:

Requirements Based on US CFR 14 Part 23 at Amendment 23-27 and UK CAA BCARs Section K, Chapters 2-2 to 2-5 and requirements for certification of composite structures as detailed in CAA letter to Slingsby Aviation Limited,

reference 9/30/GSL2408 dated 2nd December 1982

5. Special Conditions:

None

6. (Reserved):

7. Equivalent Safety Findings:

None

8. Environmental Standards:

Approved Noise Levels in accordance to:

CAA Noise Certificate No.43

B.III. Technical Characteristics and Operational Limitations

1 Type Design Definition:

SAL DON 150 (Modification M110)

Drawing No. 167B-00-001

See note 5 for 167B to 167C conversion, ref Mod M569

2. Description:

Single engine, two-seat cantilever low wing airplane,

Composite (GRP) construction, fixed tricycle landing gear,

conventional tail

3 Equipment:

(14 volt DC system)

Refer document SAL DON 150

4 Dimensions:

Span Length Height Wing Area 10 6 m (34 ft 9½ in) 7 32 m (24 ft 1 in) 2 36 m (7 ft 9 in) 12 60 m² (135 63 ft²)

5 Engines:

1 Textron Lycoming O-235-N2A

Pre Mod M406B,

FAA Engine Type Certificate Data Sheet E-223

Or

1 Textron Lycoming O-235-N2C

Post Mod M406B,

FAA Engine Type Certificate Data Sheet E-223

5.1 Engine Limits: for N2A & N2C

The Highest Power in the Normal Operating Range (HPNOR) is 2600 rpm Apart from an emergency, the power in normal operations should not exceed HPNOR

For powerplant limitations refer to AFM, IP 167B/FM, Section 2.

6. (Reserved)

7. Propellers:

1 Sensenich 72CK-0-56 (Metal type)

FAA Propeller Type Certificate Data Sheet P-904

7 1 Settings

N/A - Fixed Pitch

8 Fluids:

8.1 Fuel:

AVGAS 100 LL

8 2 Oil:

Oils conforming to Mil. Spec. MIL-L-22851 For more details see AFM, TP T67B/FM, Section 1

9. Fluid capacities:

9.1 Fuel:

Total:

117 litres

25 8 Imp Gallons

T

Usable:

112.5 litres

24 7 Imp Gallons

92 Oil:

Maximum:

5 678 litres

6 US qts

Minimum:

4 494 litres

s 4¾ US qts

For more details see AFM, IP I67B/FM, Section 2

10 Air Speeds:

Design Manoeuvring Speed V_A:

up to 862 kg (1900 lb)

130 KIAS

Flap Extended Speed V_{FE}:

full flaps

88 KIAS

take-off flaps

88 KIAS

Maximum structural cruising speed V_{NO}

(= Maximum structural design speed V_C):

130 KIAS

Never exceed speed V_{NE}:

165 KIAS

11 Maximum Operating Altitude:

3658 m (12 000 ft) without oxygen equipment being fitted

12. All weather Capability:

Day-VFR

IMC and Night

see Note 1

IFR

see Note 1

Flight into known icing conditions is prohibited

13 Maximum Total Weight Authorised (MTWA):

Take-off:

862 kg (1900 lb)

Landing:

862 kg (1900 lb)

For Aerobatics:

862 kg (1900 lb)

14 Centre of Gravity Limits at MTWA:

Forward limit

0 862 m (2 ft 9.94 ins) aft of Datum

Aft limit:

0 94 m (3 ft 1 ins) aft of Datum

For limits at other weights refer to the T67B Flight Manual ref. IP T67B/FM

15. Datum:

Forward face of Frame 1

16 (reserved)

17 Levelling Means:

Levelling board (T67B-88-307) placed on aft fuselage

between canopy rail and fin forward fairing

18 Minimum Flight Crew:

1 Pilot

19 Maximum Passenger Seating Capacity:

2, including pilot. This number is limited by the space

available in the cabin

20. (Reserved)

21 Baggage / Cargo Compartments

Location behind Seats

Max Allowable Load 18 kg (40 lbs)

22 Wheels and Tyres

Nose Wheel Tyre Size

500 - 5 (minimum 4 ply rating)

Main Wheel Tyre Size

600 - 6 (minimum 4 ply rating)

B.IV. Operating and Service Instructions

167B Firefly Aircraft Flight Manual (AFM)

TP T67B/FM

T67B Firefly Aircraft Maintenance Manual (MM) Incorporates Maintenance Schedule as Part of Section 2 (incl. Airworthiness Limitations) Service, Change (Modification), and Information Bulletins T67B/MM

B.V. Notes

- 1. For IFR flight Night operation refer to the Air Navigation Legislation for equipment required
- 2. Aircraft airframe to be overall white, registration letters accepted, or in accordance with paint restrictions quoted in aircraft Flight Manual TP_T67B/FM.
- 3. Structural temperature restrictions are applicable refer aircraft Flight Manual TP.T67B/FM and note 4 below.
- 4. The following G limits apply:

Weights: Flaps up:	862 kg (1900 lb) below 50°C +6 -3	50°C & above +4 4 -2
Flaps down:	+2 -1	+2 -1

Refer Flight Manual TP T67B/FM for further details.

5. I67B aircraft may be modified to I67C standard IAW Slingsby Modification M569, UK CAA AAN 24296 refers.

First certified aircraft is works number 2015 Aircraft retain I67B 12 volt system. I67C power plant (with 12 volt ancillaries) and propeller are fitted, general and performance data as per Section C (I67C) of this TCDS T67C G limits apply but structural temperature is limited to 40°C. For design standard refer to T67C-900-001, drawing number T67C-00-006

SECTION 3: T67C

C.I. General

Data Sheet No: A 390

b) Variant:

Issue: 02

Date: 3 September 2007

1. a) Type:

T67

T67C Firefly

2 Airworthiness Category:

Normal, Utility and Aerobatic

3 Type Certificate Holder:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

4 Manufacturer:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

5. CAA-UK Type Certificate

BA17

6. CAA Certification Date

15th December 1987

7 EASA Certification Date:

24 August 2007

8 This EASA TCDS replaces CAA-UK TCDS BA17

C.II. Certification Basis

1 Reference Date for determining the applicable requirements:

2nd December 1982

- 2. (Reserved)
- 3. (Reserved)

4 Certification Basis:

Requirements Based on US CFR 14 Part 23 at Amendment 23-27 and UK CAA BCARs Section K, Chapters 2-2 to 2-5 and requirements for certification of composite structures as detailed in CAA letter to Slingsby Aviation Limited, reference 9/30/GSL2408 dated 2nd December 1982.

5 Special Conditions:

None

6 (Reserved):

7 Equivalent Safety Findings:

None

8 Environmental Standards:

Approved Noise Levels in accordance to:

CAA Noise Certificate No.43

C.III. Technical Characteristics and Operational Limitations

1 Type Design Definition:

SAL DON 190 (Modification M130)

Drawing No 167C-00-001

2 Description:

Single engine, two-seat cantilever low wing airplane, Composite (GRP) construction, fixed tricycle landing gear,

conventional tail

3. Equipment:

(28 volt DC system)

Refer document SAL DON 190

4. Dimensions:

Span
Length
Height Pre Mod M468
Height Post Mod M468
Wing Area

10 6 m (34 ft 9¼ in) 7 32 m (24 ft 1 in) 2 36 m (7 ft 9 in) 2 29 m (7 ft 6 in) 12 60 m² (135 63 ft²)

5. Engines:

1 Textron Lycoming O-320-D2A

FAA Engine Type Certificate Data Sheet E-274

5.1 Engine Limits:

Max take-off rotational speed

 $2700\ r.p.m.$

Max continuous rotational speed

2700 r p.m.

For powerplant limitations refer to AFM, TP.I67C/FM, or TP.I67C/3/FM Section 2

6 (Reserved)

7. Propellers:

1 Sensenich 74DM6-0-64 (Metal type)

FAA Propeller Type Certificate Data Sheet P-886

7.1 Settings

N/A - Fixed Pitch

8 Fluids:

8.1 Fuel:

AVGAS 100 LL

8 2 Oil:

Oils conforming to Mil. Spec. MIL-L-22851 For more details see AFM, TP 167C/FM, or

TP.T67C/3/FM Section 1

9 Fluid capacities:

9.1 Fuel: Fuselage Tank (Pre Mod M156)

Total: Usable: 117 litres

25 8 Imp Gallons

112 5 litres

24 7 Imp Gallons

9 2 Fuel: Wing Tanks (Post Mod M156)

Total: Usable: 161 4 litres 157 4 litres 35 5 Imp Gallons 34 62 Imp Gallons (42.6 US Gallons) (41.54 US Gallons)

9.3 Oil:

Maximum:

7 57 litres

8 US qts

Usable:

5 678 litres

6 US qts

For more details see AFM, TP.T67C/FM, or

TP I67C/3/FM Section 2

((Post Mod M 156,Post Mod M495)

(Pre & Post M156, Pre Mod M357)

(Post Mod M 156, Post Mod M357,

((Post Mod M 156,Post Mod M495)

(Pre & Post M156, Pre Mod M357) (Post Mod M 156, Post Mod M357,

((Post Mod M 156,Post Mod M495)

Landing:

Pre Mod M495)

For Aerobatics:

Pre Mod M495)

10	A to Consolution		
10	Air Speeds: Design Manoeuvring Speed V _A :		
	(Pre Mod M156)	up to 907 kg (2000 lb)	140 KIAS
	(Post Mod M156, Pre & Post Mod M357,) (Pre Mod M439)	up to 953 kg (2100 lb)	140 KIAS
	(Post Mod M156, Post Mod M357,) (Post Mod M439)	up to 953 kg (2100 lb)	143 KIAS
	Flap Extended Speed V _{FE} :		
	(Pre Mod M656)	full flaps	88 KIAS
		take-off flaps	88 KIAS
	(Post Mod M656)	full flaps	98 KIAS
	,	take-off flaps	120 KIAS
	Maximum structural cruising speed V_{NO} (= Maximum structural design speed V_{C}):		140 KIAS
	Never exceed speed V_{NE} :		180 KIAS
11	Maximum Operating Altitude:	3658m (12 000ft) withou	t oxygen equipment being fitted
12	All weather Capability:	Day-VFR IMC and Night see No IFR see No Flight into known icing of	ote 1
13.	Maximum Total Weight Authorised (MTWA): Take-off:		
	(Pre & Post M156, Pre Mod M357)	907 kg (2000 lb)	
	(Post Mod M 156, Post Mod M357, Pre Mod M495)	953 kg (2100 lb)	
	1 10 WOU W1493)	0751 (0150 11)	

975 kg (2150 lb)

907 kg (2000 lb) 953 kg (2100 lb)

975 kg (2150 lb)

907 kg (2000 lb)

953 kg (2100 lb)

975 kg (2150 lb)

14 Centre of Gravity Limits at MTWA:

Pre Mod M156

Forward limit:

907 kg (2000 lb) 0.81 m (2 ft 7.89 ins) aft of Datum

Aft limit:

907 kg (2000 lb) 0.901 m (2 ft 11 47 ins) aft of Datum

For limits at other weights refer to the I67C Flight Manual ref IP I67C/FM

Post Mod M156, Pre Mod M495

Forward limit

953 kg (2100 lb) 0 862 m (2 ft 9.94 ins) aft of Datum

Aft limit:

953 kg (2100 lb) 0 901 m (2 ft 11.47 ins) aft of Datum

For limits at other weights refer to the T67C Flight Manual ref. TP T67C/3/FM

Post Mod M495

Forward limit

975 kg (2150 lb) 0 870 m (2 ft 10 25 ins) aft of Datum

Aft limit:

975 kg (2150 lb) 0.914 m (3 ft 0 ins) aft of Datum

For limits at other weights refer to the I67C Flight Manual ref. IP I67C/3/FM

15 Datum:

Forward face of Frame 1

16 (reserved)

17 Levelling Means:

Levelling board (T67B-88-307) placed on aft fuselage

between canopy rail and fin forward fairing

18 Minimum Flight Crew:

1 Pilot

19 Maximum Passenger Seating Capacity:

2, including pilot. This number is limited by the space

available in the cabin.

20 (Reserved)

21 Baggage / Cargo Compartments

Location Behind Seats

Max. Allowable Load 30 kg (66 lbs)

22 Wheels and Tyres

Nose Wheel Tyre Size

5.00 - 5 (minimum 4 ply rating)

Main Wheel Tyre Size

6.00 - 6 (minimum 4 ply rating)

C.IV. Operating and Service Instructions

T67C Firefly Aircraft Flight Manual (AFM)

IP 167C/FM (Pre Mod M156)

or

TP I67C/3/M (Post Mod M156)

167C Firefly Aircraft Maintenance Manual (MM) Incorporates Maintenance Schedule as Part of Section 2 (incl. Airworthiness Limitations) Service, Change (Modification), and Information Bulletins

T67C/MM

C.V. Notes

- 1 For IFR flight Night operation refer to the Air Navigation Legislation for equipment required.
- 2. Modifications M357, M439, M495 and M656 are non-structural Modifications
- 3. Aircraft airframe to be overall white, registration letters accepted, or in accordance with paint restrictions quoted in aircraft Flight Manual TP T67C/FM or TP T67C/3/M.
- 4. Structural temperature restrictions are applicable refer aircraft Flight Manual TP.T67C/FM or TP.T67C/3/M and note 5 below.

The following G limits apply:	5.	The	following	G	limits	apply:
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Weights:	For MTWA up to 975 kg (2150 lb)	below 50°C	50°C & above
Flaps u	up:	+6	+4 4
_		-3	-2
Flaps	down:	+2	+2
_		-1	-1

Refer Flight Manual TP.T67C/FM or TP.T67C/3/M for further details

SECTION 4: T67M

D.I. General

Data Sheet No.: A.390

Issue: 02

Date: 3 September 2007

1 a) Type:

T67

b) Variant:

167M Firefly

2. Airworthiness Category:

Normal, Utility and Aerobatic

3. Type Certificate Holder:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

4. Manufacturer:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

5 CAA-UK Type Certificate

BA17

6 CAA Certification Date

2nd August 1983

7. EASA Certification Date:

24 August 2007

8. This EASA TCDS replaces CAA-UK TCDS BA17

D.II. Certification Basis

1. Reference Date for determining the applicable requirements:

2nd December 1982

- 2. (Reserved)
- 3. (Reserved)

4. Certification Basis:

Requirements Based on US CFR 14 Part 23 at Amendment 23-27 and UK CAA BCARs Section K, Chapters 2-2 to 2-5 and requirements for certification of composite structures as detailed in CAA letter to Slingsby Advanced Composites Limited, reference 9/30/GSL2408 dated 2nd December

1982

5 Special Conditions:

None

6. (Reserved):

7. Equivalent Safety Findings:

None

8. Environmental Standards:

Approved Noise Levels in accordance to:

CAA Noise Certificate No.43

D.III. Technical Characteristics and Operational Limitations

Type Design Definition: SAL DON 110 (Modification M100)

Drawing No. 167M-00-001

2 Description: Single engine, two-seat cantilever low wing airplane,

Composite (GRP) construction, fixed tricycle landing gear,

conventional tail

3. Equipment: (28 volt DC system) Refer document SAL DON 110

4. Dimensions:

 Span
 10 6 m
 (34 ft 9 % in)

 Length
 7 29 m
 (23 ft 11 in)

 Height
 2.36 m
 (7 ft 9 in)

 Wing Area
 $12 60 \text{ m}^2$ (135.63 ft^2)

5 Engines: 1 Textron Lycoming AEIO-320-D1B

FAA Engine Type Certificate Data Sheet 1E12

5.1 Engine Limits: Max take-off rotational speed 2700 r.p.m.

Max continuous rotational speed 2700 r.p.m

For powerplant limitations refer to AFM, TP I67M/FM

6 (Reserved)

7 Propellers: 1 Hoffmann HO-V72L-V/180CB (Composite type)

LBA Propeller Type Certificate Data Sheet 32.130/19

7 1 Settings

Low pitch setting 14° High pitch setting 30°

8 Fluids:

8 1 Fuel: AVGAS 100 LL

8 2 Oil: Oils conforming to Mil. Spec. MIL-L-22851

For more details see AFM, TP I67M/FM

9. Fluid capacities:

9.1 Fuel:

Total: 116 8 litres 25.7 Imp Gallons Usable: 109 litres 24 Imp Gallons

Maximum: 7.57 litres 8 US qts
Usable: 5.678 litres 6 US qts

For more details see AFM, TP T67M/FM, or

10 Air Speeds:

9 2 Oil:

Design Manoeuvring Speed V_A: up to 907 kg (2000 lb) 140 KIAS

Flap Extended Speed V_{FE} : full flaps 88 KIAS

take-off flaps 88 KIAS

Maximum structural cruising speed V_{NO} (= Maximum structural design speed V_{C}): 140 KIAS

Never exceed speed V_{NE} : 180 KIAS

11 Maximum Operating Altitude: 3658 m (12 000 ft) without oxygen equipment being fitted

12 All weather Capability:

Day-VFR

IMC and Night see Note 1 see Note 1 IFR

Flight into known icing conditions is prohibited

13. Maximum Total Weight Authorised (MTWA):

Take-off:

907 kg (2000 lb)

Landing:

907 kg (2000 lb)

For Aerobatics:

Refer to AFM TP I67M/FM Section 2

14 Centre of Gravity Limits at MTWA:

Forward limit

907 kg (2000 lb) 0 810 m (2 ft 7.89 ins) aft of Datum

Aft limit:

907 kg (2000 lb) 0.930 m (3 ft 0.6 ins) aft of Datum

For limits at other weights refer to the T67M Flight Manual ref TP T67M/FM

15 Datum:

Forward face of Frame 1

16. (reserved)

17 Levelling Means:

Levelling board (T67B-88-307) placed on aft fuselage

between canopy rail and fin forward fairing

18 Minimum Flight Crew:

1 Pilot

19 Maximum Passenger Seating Capacity:

2, including pilot This number is limited by the space

available in the cabin

20 (Reserved)

21 Baggage / Cargo Compartments

Location Behind Seats

Max. Allowable Load 30 kg (66 lbs)

22. Wheels and Tyres

Nose Wheel Tyre Size

5.00 - 5 (minimum 4 ply rating)

Main Wheel Tyre Size

6.00 - 6 (minimum 4 ply rating)

D.IV. Operating and Service Instructions

167M Firefly Aircraft Flight Manual (AFM)

TP I67M/FM

T67M Firefly Aircraft Maintenance Manual (MM) Incorporates Maintenance Schedule as Part of Section 2 (incl. Airworthiness Limitations)

Service, Change (Modification), and Information Bulletins

T67M/MM

D.V. Notes

- 1. For IFR flight Night operation refer to the Air Navigation Legislation for equipment required.
- 2 Aircraft airframe to be overall white, registration letters accepted, or in accordance with paint restrictions quoted in aircraft Flight Manual TP 167M/FM.
- 3. Structural temperature restrictions are applicable Maximum permissible structure temperature for aerobatics is 50°C Post Mod M170 or 40°C Pre Mod M170. Refer aircraft Flight Manual TP.167M/FM.

4. The following G limits apply: See note 5 Weights: Flaps up:	MIWA 907 kg (2000 lb) +4 4 -1 8	884 kg (1950 lb) +6 -3
Flaps down:	+2 -1	+2 -1

Refer Flight Manual TP 167M/FM for further details

5. For Works number 1999 maximum manoeuvring load factors at MTWA 907 kg (2000 lb) apply as follows:

Flaps up: +4.4 -1 8

Flaps down: +2 -1

SECTION 5: T67M-Mk II

E.I. General

Data Sheet No.: A 390

Issue: 02

Date: 3 September 2007

l a) Type:

167

b) Variant:

167M-MkII Firefly

2. Airworthiness Category:

Normal, Utility and Aerobatic

3. Type Certificate Holder:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

4. Manufacturer:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

5. CAA-UK Type Certificate

BA17

6 CAA Certification Date

20th December 1985

7 EASA Certification Date:

24 August 2007

8 This EASA ICDS replaces CAA-UK ICDS BA17

E.II. Certification Basis

1. Reference Date for determining the applicable requirements:

2nd December 1982

- 2 (Reserved)
- 3 (Reserved)

4. Certification Basis:

Requirements Based on US CFR 14 Part 23 at Amendment 23-27 and UK CAA BCARs Section K, Chapters 2-2 to 2-5 and requirements for certification of composite structures as detailed in CAA letter to Slingsby Aviation Limited,

reference 9/30/GSL2408 dated 2nd December 1982

5. Special Conditions:

None

6 (Reserved):

7 Equivalent Safety Findings:

None

8. Environmental Standards:

Approved Noise Levels in accordance to:

CAA Noise Certificate No 43

E.III. Technical Characteristics and Operational Limitations

Type Design Definition:

SAL DON 205

Drawing No. 167M-00-001 issue 8

Description:

Single engine, two-seat cantilever low wing airplane,

Composite (GRP) construction, fixed tricycle landing gear,

conventional tail

3 Equipment: (28 volt DC system)

Refer document SAL DON 110

4 Dimensions:

> Span Length Height Pre Mod M468 Height Post Mod M468 Wing Area

10 6 m (34 ft 9½ in) 7 29 m (23 ft 11 in) (7 ft 9 in) 2 36 m 2 29 m (7 ft 6 in) $12 60 \text{ m}^2$ (135.63 ft^2)

Engines:

1 Textron Lycoming AEIO-320-D1B

FAA Engine Type Certificate Data Sheet 1E12

5 1 Engine Limits:

Max take-off rotational speed

2700 rp.m

Max continuous rotational speed

2700 r.p.m

For powerplant limitations refer to AFM, TP T67M-MkII/FM

(Reserved)

7. Propellers:

1 Hoffmann HO-V72L-V/180CB (Composite type) LBA Propeller Type Certificate Data Sheet 32 130/19

7 1 Settings

Low pitch setting 14°

30° High pitch setting

Fluids:

8.1 Fuel:

AVGAS 100 LL

8.2 Oil:

Oils conforming to Mil. Spec. MIL-L-22851 For more details see AFM, IP T67M-MkII/FM

Fluid capacities:

9.1 Fuel: Wing Tanks

Total: Usable: 161 4 litres

35.5 Imp Gallons

157 4 litres

34.62 Imp Gallons

9.2 Oil:

Maximum:

7.57 litres 8 US qts

Usable:

5.678 litres 6 US qts For more details see AFM, IP T67M-MkII/FM, or

10.	Air Speeds: Design Manoeuvring Speed V _A :	up to 907 kg (2000 l	lb) 140 KIAS
	Flap Extended Speed V _{FE} : (Pre Mod M656)	full flaps take-off flaps	88 KIAS 88 KIAS
	Flap Extended Speed V _{FE} : (Post Mod M656)	full flaps take-off flaps	98 KIAS 120 KIAS
	Maximum structural cruising speed V_{NO} (= Maximum structural design speed V_{C}):		140 KIAS
	Never exceed speed V _{NE} :		180 KIAS
11.	Maximum Operating Altitude:	3658. M (12 000 ft)	without oxygen equipment being fitted
12	All weather Capability:	IFR s	see Note 1 see Note 1 cing conditions is prohibited
13	Maximum Total Weights Authorised (MTWA): Take-off:		
	(Pre Mod M321) (Post Mod M 321, Pre Mod M537, (Post Mod M537)	907 kg (2000 lb) 953 kg (2100 lb) 975 kg (2150 lb)	
	Landing: (Pre Mod M321) (Post Mod M 321, Pre Mod M537, (Post Mod M537)	907 kg (2000 lb) 953 kg (2100 lb) 975 kg (2150 lb)	
	For Aerobatics: (Pre Mod M321) (Post Mod M 321, Pre Mod M537, (Post Mod M537)	907 kg (2000 lb) 953 kg (2100 lb) 975 kg (2150 lb)	
14	Centre of Gravity Limits at MTWA: Pre Mod M321 Forward limit	907 kg (2000 lb) 0) 840 m (2 ft 9.07 ins) aft of Datum
	Aft limit:	907 kg (2000 lb) 0	0.927 m (3 ft 0.5 in) aft of Datum
	For limits at other weights refer to the 167M-M	ИkII Flight Manual Tl	P 167M-MkII/FM
	Post Mod M321, Pre Mod M537 Forward limit	953 kg (2100 lb) 0	0.86 m (2 ft 9.86 ins) aft of Datum
	Aft limit:	953 kg (2100 lb) 0	914 m (2 ft 11 98 in) aft of Datum
	For limits at other weights refer to the T67M-M	AkII Flight Manual II	P 167M-MkII/FM
	Post Mod M537 Forward limit	975 kg (2150 lb) 0) 868 m (2 ft 10 17 ins) aft of Datum
	Aft limit:	907 kg (2150 lb) 0	909 m (2 ft 11 79 in) aft of Datum

For limits at other weights refer to the 167M-MkII Flight Manual TP 167M-MkII/FM

15.	Datum:	Forward face of Frame 1
16.	(reserved)	
17	Levelling Means:	Levelling board (T67B-88-307) placed on aft fuselage between canopy rail and fin forward fairing
18	Minimum Flight Crew:	1 Pilot
19	Maximum Passenger Seating Capacity:	2, including pilot. This number is limited by the space available in the cabin
20	(Reserved)	
21	Baggage / Cargo Compartments	
	Location Behind Seats	Max. Allowable Load 30 kg (66 lbs)
22	Wheels and Tyres Nose Wheel Tyre Size	5 00 – 5 (minimum 4 ply rating)
	Main Wheel Tyre Size	6 00 – 6 (minimum 4 ply rating)

E.IV. Operating and Service Instructions

T67M-MkII Firefly Aircraft Flight Manual (AFM)

TP 167M-MkJJ/FM

T67M-MkII Firefly Aircraft Maintenance Manual (MM) Incorporates Maintenance Schedule as Part of Section 2 (incl. Airworthiness Limitations)
Service, Change (Modification), and Information Bulletins

I67M-MkII/MM

E.V. Notes

- 1 For IFR flight Night operation refer to the Air Navigation Legislation for equipment required
- Aircraft airfiame to be overall white, registration letters accepted, or in accordance with paint restrictions quoted in aircraft Flight Manual TP.T67M-MkII/FM
- Structural temperature restrictions are applicable refer aircraft Flight Manual TP.T67M-MkII/FM and note 4 below. For Post Mod M734B/D aircraft flight prohibitive above 55°C, for Post Mod M516 Addendum 1 & 2 Works numbers 2116 & 2121 flight prohibitive above 45°C.

4	The following G limits a	pply:		
	4.1 Weights:	For MTWA up to 975 kg (2150 lb)	below 50°C	50°C & above Refer note 2 above
	Flaps up:		+6 -3	+4 4 -2
	Flaps down:		+2	+2
			-1	-1

Refer Flight Manual IP.T67M-MkII/FM or for further details.

4.2 Post Mod M	516 Addendum 1 & 2 Works numbers 21.	16 & 2121	
Weights:	For MTWA up to 975 kg (2150 lb)	below 42°C	42°C & above
J			Refer note 2 above
Flaps up:		+6	+4 4
y rapo ap.		-3	-2
Flaps down:		+2	+2
F		-1	-1

Refer Flight Manual TP.167M-MkII/FM or for further details.

SECTION 6: T67M200

F.I. General

Data Sheet No: A 390

b) Variant:

Issue: 02

Date: 3 September 2007

1 a) Type:

T67

T67M200 Firefly

2. Airworthiness Category:

Normal, Utility and Aerobatic

3. Type Certificate Holder:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

4. Manufacturer:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

5 CAA-UK Type Certificate

BA17

6 CAA Certification Date

19th June 1987

7. EASA Certification Date:

24 August 2007

8. This EASA TCDS replaces CAA-UK TCDS BA17

F.II. Certification Basis

1. Reference Date for determining the applicable requirements:

2nd December 1982

- 2. (Reserved)
- 3 (Reserved)

4. Certification Basis:

Requirements Based on US CFR 14 Part 23 at Amendment 23-27 and UK CAA BCARs Section K, Chapters 2-2 to 2-5 and requirements for certification of composite structures as detailed in CAA letter to Slingsby Advanced Composites Limited, reference 9/30/GSL2408 dated 2nd December

1982.

5. Special Conditions:

None

6. (Reserved):

7 Equivalent Safety Findings:

None

8. Environmental Standards:

Approved Noise Levels in accordance to:

CAA Noise Certificate No 112

F.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: SAL DON 200 (Post Mod M150) Drawing No. 167F-00-001

Description: Single engine, two-seat cantilever low wing airplane,

Composite (GRP) construction, fixed tricycle landing gear,

conventional tail

Refer document SAL DON 200 3 Equipment: (28 volt DC system)

Dimensions:

10.6 m (34 ft 91/4 in) Span (24 ft 2 in) Length 7 323 m Height Pre Mod M468 2 36 m (7 ft 9 in) (7 ft 6 in) Height Post Mod M468 2.29 m Wing Area 12.60 m^2 $(135 63 \text{ ft}^2)$

Engines:

1 Textron Lycoming AEIO-360-A1E (Pre Mod M917)

FAA Engine Type Certificate Data Sheet 1E10

1 Textron Lycoming AEIO-360-A1E6 (Post Mod M917)

FAA Engine Type Certificate Data Sheet 1E10

Max take-off rotational speed 5.1 Engine Limits:

2700 r.p m. 2700 r.p m. Max continuous rotational speed

For powerplant limitations refer to AFM, IP I67M200/FM or I67M200/CS/POH

(Reserved)

Propellers:

1 Hoffmann HO-V123K-V/180R (Composite type) (Pre Mod M333)

LBA Propeller Type Certificate Data Sheet 32.130/17

1 Hoffmann HO-V123K-V/180DI (Composite type) (Post Mod M333, Pre Mod M822)

LBA Propeller Type Certificate Data Sheet 32.130/17

1 Hoffmann HO-V123K-KV/180DT (Composite type) (Post Mod M822)

LBA Propeller Type Certificate Data Sheet 32 130/17

7.1 Settings:

13° (Pre Mod M333) Low pitch setting 32°-34°

High pitch setting

Low pitch setting 10° 50' (Post Mod M333, Pre Mod M822)

High pitch setting 26°

10° 50' (Post Mod M822) Low pitch setting

> High pitch setting 26°

8 Fluids:

8 1 Fuel: AVGAS 100 LL

8.2 Oil: Oils conforming to Mil. Spec. MIL-L-22851

For more details see AFM, TP I67M200/FM,

or 167M200/CS/POH

9 Fluid capacities:

9.1 Fuel: Wing Tanks

Total: Usable: 161.4 litres 35.5 Imp Gallons 157.4 litres 34.62 Imp Gallons

9.2 Oil:

Maximum: 7 57 litres 8 US qts
Usable: 3 79 litres 4 US qts

For more details see AFM, TP T67M200/FM,

or T67M200/CS/POH

10 Air Speeds:

Design Manoeuvring Speed V_A:

up to 1020 kg (2250 lb) 140 KIAS

Flap Extended Speed V_{FE}: (Pre Mod M656)

full flaps take-off flaps 88 KIAS 88 KIAS

Flap Extended Speed V_{FE}: (Post Mod M656)

full flaps

98 KIAS

take-off flaps

120 KIAS

Maximum structural cruising speed V_{NO} (= Maximum structural design speed V_{c}):

140 KIAS

Never exceed speed V_{NE}:

180 KIAS

11. Maximum Operating Altitude:

3658 m (12 000) without oxygen equipment being fitted

12. All weather Capability:

Day-VFR

IMC and Night

see Note 1

IFR

see Note 1

Flight into known icing conditions is prohibited

13 Maximum Total Weight Authorised (MTWA):

Take-off:

(Pre Mod M358)

975 kg (2150 lb)

(Post Mod M 358, Post Mod M 914)

1020 kg (2250 lb)

Landing:

(Pre Mod M358, Post Mod M358,)

975 kg (2150 lb)

Pre Mod M914)

(Post Mod M914)

1020 kg (2250 lb)

For Aerobatics:

(Pre Mod M358, Post Mod M358,)

975 kg (2150 lb)

Pre Mod M914)

(Post Mod M914)

1020 kg (2250 lb)

14. Centre of Gravity Limits at MTWA:

Pre Mod M358

Forward limit

975 kg (2150 lb) 0 823 m (2 ft 8 4 ins) aft of Datum

Aft limit:

975 kg (2150 lb) 0 888 m (2 ft 10 96 in) aft of Datum

For limits at other weights refer to the T67M200 Flight Manual TP T67M200FM

Post Mod M358, Pre Mod M914 and Post Mod M914

Forward limit

1020 kg (2250 lb) 0.843 m (2 ft 9.19 ins) aft of Datum

Aft limit:

1020 kg (2250 lb) 0.888 m (2 ft 10.45 in) aft of Datum

For limits at other weights refer to the I67M200 Flight Manual IP I67M200FM or I67M200/CS/POH

15. Datum:

Forward face of Frame 1

16 (reserved)

17 Levelling Means:

Levelling board (167B-88-307) placed on aft fuselage

between canopy rail and fin forward fairing

18 Minimum Flight Crew:

1 Pilot

19 Maximum Passenger Seating Capacity:

2, including pilot This number is limited by the space

available in the cabin

20 (Reserved)

21. Baggage / Cargo Compartments

Location Behind Seats

Max. Allowable Load 30 kg (66 lbs)

22 Wheels and Tyres

Nose Wheel Tyre Size

5.00 - 5 (minimum 4 ply rating)

Main Wheel Tyre Size

600 - 6 (minimum 4 ply rating)

F.IV. Operating and Service Instructions

T67M200 Firefly Aircraft Flight Manual (AFM)

TP I67M200/FM or I67M200/CS/POH

T67M200 Firefly Aircraft Maintenance Manual (MM) Incorporates Maintenance Schedule as Part of Section 2 (incl. Airworthiness Limitations)

T67M200/MM

Service, Change (Modification), and Information Bulletins

F.V. Notes

- 1 For IFR flight Night operation refer to the Air Navigation Legislation for equipment required
- 2. Aircraft airframe to be overall white, registration letters accepted, or in accordance with paint restrictions quoted in aircraft Flight Manual TP T67M200/FM or T67M200/CS/POH.
- 3 Structural temperature restrictions are applicable. Post Mod M387 & M734A/C aircraft flight prohibitive above 55°C. Refer aircraft Flight Manual TP.T67M200/FM or T67M200/CS/POH and note 4 below.

4. The following G limits apply:

		appij.		
41	Weights:	For MTWA up to 975 kg (2150 lb)	below 50°C	50°C & above
	Flaps up:		+6	+4.4
			-3	-2
	Flaps down:		+2	+2
	-		-1	-1

4.2	Weights: Flaps up:	For MTWA above 975 kg (2150 lb)	below 50°C +3 8 -1.6	50°C & above +3 8 -1.6
	Flaps down:		+2 -1	+2 -1
43	Post Mod M Weights: Flaps up:	915 aircraft: For MTWA up to 1020 kg (2250 lb)	below 50°C +6 -3	50°C & above +4 4 -2
	Flaps down:		+2 -1	+2 -1

Refer Flight Manual TP 167M200/FM or 167M200/CS/POH for further details.

SECTION 7: T67M260

G.I. General

Data Sheet No: A.390

Issue: 02

Date: 3 September 2007

1 a) Type:

b) Variant:

167

T67M260 Firefly

2. Airworthiness Category:

Normal, Utility and Aerobatic

3. Type Certificate Holder:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

4 Manufacturer:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

5. CAA-UK Type Certificate

BA17

6 CAA Certification Date

11th November 1993

7. EASA Certification Date:

24 August 2007

8. This EASA TCDS replaces CAA-UK TCDS BA17

G.II. Certification Basis

Reference Date for determining the applicable requirements:

Not Known

- 2. (Reserved)
- 3. (Reserved)
- 4 Certification Basis:

JAR 23 Light Aeroplanes at Draft Issue 4.

Features and characteristics not directly related to increased power and weight over that of the T67M200 meet the certification basis specified in the proceeding Sections B through to F above, T67B through to T67M200 respectively

Requirements for which compliance was not required as under the derivative principle they relate to features not affected by increased power or weight over that of previous models:-

JAR 23 1091(b)(4) & (5)

Air induction system

JAR 23.1143(g)

Auxiliary power unit controls

JAR 23.1553

Fuel quantity indication

5 Special Conditions:

None

6 (Reserved):

Equivalent Safety Findings:

None

8.

Environmental Standards:

Approved Noise Levels in accordance to:

CAA Noise Certificate No 171

G.III. Technical Characteristics and Operational Limitations

1. Type Design Definition:

Doc. No 167G-900-022 (Post Mod M700)

Drawing No. 167G-00-001

2 Description:

Single engine, two-seat cantilever low wing airplane, Composite (GRP) construction, fixed tricycle landing gear,

conventional tail

3. Equipment:

(28 volt DC system)

Refer document I67G-900-022

4 Dimensions:

Span Length Height Wing Area 10.6 m (34 ft 9½ in) 7.54 m (24 ft 9 in) 2.29 m (7 ft 6 in) 12.60 m² (135.63 ft²)

5. Engines:

(Pre Mod M917)

1 Textron Lycoming AEIO-540-D4A5 FAA Engine Type Certificate Data Sheet 1E4 UK CAA validated 8th November 1993

5.1 Engine Limits:

Max take-off rotational speed

2700 r p m. 2700 r p m

Max continuous rotational speed

For powerplant limitations refer to AFM, 167M260/POH

(Reserved)

7 Propellers:

1 Hoffmann HO-V123K-KV/180DT (Composite type) LBA Propeller Type Certificate Data Sheet 32 130/17

71 Settings:

Low pitch setting High pitch setting 10° 50′ 26°

8 Fluids:

8 1 Fuel:

AVGAS 100 LL

8.2 Oil:

Oils conforming to Mil Spec. MIL-L-22851

For more details see AFM, I67M260/POH,

9 Fluid capacities:

9.1 Fuel: Wing Tanks

I otal: Usable: 161 4 litres 157 4 litres

35 5 Imp Gallons 34 62 Imp Gallons

9.2 Oil:

Maximum:

11.36 litres 12 US qts

Minimum: 5.68 litres 6 US qts For more details see AFM, T67M260/POH 10 Air Speeds:

Design Manoeuvring Speed V_A:

up to 1157 kg (2550 lb) 140 KIAS

Flap Extended Speed V_{FE}:

Never exceed speed V_{NE} :

full flaps take-off flaps 98 KIAS **120 KIAS**

Maximum structural cruising speed V_{NO}

156 KIAS

(= Maximum structural design speed V_C):

195 KIAS

11 Maximum Operating Altitude:

3048 m (10 000 ft) without oxygen equipment being fitted

12. All weather Capability:

Day-VFR

IMC and Night

IFR

see Note 1

see Note 1

Flight into known icing conditions is prohibited

13. Maximum Iotal Weight Authorised (MTWA):

Take-off:

(Pre Mod M605) (Post Mod M605)

1146 kg (2525 lb)

1157 kg (2550 lb)

Landing:

(Pre Mod M605) (Post Mod M605)

1146 kg (2525 lb) 1157 kg (2550 lb)

For Aerobatics:

(Pre Mod M605) (Post Mod M605) 1146 kg (2525 lb) 1157 kg (2550 lb)

14 Centre of Gravity Limits at MTWA

Pre Mod M605

Forward limit

1146 kg (2525 lb) 0 784 m (2 ft 6 9 ins) aft of Datum

Aft limit:

1146 kg (2525 lb) 0.866 m (2 ft 10 1 in) aft of Datum

Post Mod M605

Forward limit

1157 kg (2550 lb) 0 787 m (2 ft 7 ins) aft of Datum

Aft limit:

1157 kg (2550 lb) 0 864 m (2 ft 10 in) aft of Datum

For limits at other weights refer to the T67M260 Flight Manual T67M260POH.

15. Datum:

Forward face of Frame 1

16 (reserved)

17. Levelling Means:

Levelling board (T67B-88-307) placed on aft fuselage

between canopy rail and fin forward fairing

18 Minimum Flight Crew:

1 Pilot

19 Maximum Passenger Seating Capacity:

2, including pilot This number is limited by the space

available in the cabin

20. (Reserved)

21 Baggage / Cargo Compartments

Location Behind Seats

Max Allowable Load 30 kg (66 lbs)

22. Wheels and Tyres

Nose Wheel Tyre Size

500 - 5 (minimum 4 ply rating)

Main Wheel Tyre Size

600 - 6 (minimum 6 ply rating)

G.IV. Operating and Service Instructions

I 67M260 Firefly Aircraft Flight Manual (AFM)

T67M260/POH

I 67M260 Firefly Aircraft Maintenance Manual (MM) Incorporates Maintenance Schedule as Part of Section 2 (incl. Airworthiness Limitations)

T67M260/MM

Service, Change (Modification), and Information Bulletins

G.V. Notes

- 1 For IFR flight Night operation refer to the Air Navigation Legislation for equipment required
- Aircraft airframe to be overall white, registration letters accepted, or in accordance with paint restrictions quoted in aircraft Flight Manual I67M260/POH.
- 3 Structural temperature restrictions are applicable, aircraft flight prohibitive above 55°C Refer aircraft Flight Manual T67M260/POH and note 4 below.
- 4 The following G limits apply:
 - 4 1 Post Mod M725A:

Weights:	For MTWA up to 975 kg (2550 lb)	below 50°C	50°C & above
Flaps up	o:	+6	+4.4
		-3	-2
Flaps do	own:	+3	+3
-		-1	-1

4 2 Post Mod M950:

	25 - 0 - 0		
Weights:	For MTWA above 975 kg (2150 lb)	below 50°C	50°C & above
Flaps up):	+3 8	+3 8
		-1 6	-1 6
Flaps do	wn:	+2	+2
1 tups ac	,,,,,,	-1	-1

Refer Flight Manual 167M260/POH for further details

- 5. The following CAA Airworthiness Notes apply:
 - 5.1 Airworthiness Notice No 76 Airworthiness Notice No 88

Electrical power supplies for aircraft radio systems. Electrical generation systems bus-bar low voltage warning. Special Conditions relating to high intensity radiation fields, (HIRF), and the direct and indirect effects of lightning

6. Item of equivalent safety:

JAR 23.961 requires that the fuel systems must be free from vapour lock when using fuel at a temperature of 110°F

This is approved on the basis of equivalent safety from tests conducted using fuel at 106°F, satisfactory experience with the similar T67M200 and the high fuel flow margin provided by the fuel pump

SAL FIR 042 cleared the T67M260 variant to 110°F (43.3°C) this showing compliance with JAR 23.961.

SECTION 8: T67M260 T-3A

H.I. General

Data Sheet No: A.390

Issue: 02

Date: 3 September 2007

1. a) Type:

b) Variant:

T67

I67M260 I-3A Firefly

2 Airworthiness Category:

Normal, Utility and Aerobatic

3 Type Certificate Holder:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

4 Manufacturer:

Slingsby Advanced Composites Limited

Ings Lane Kirkbymoorside North Yorkshire England, YO62 6EZ

5. CAA-UK Type Certificate

BA17

6 CAA Certification Date

15th December 1993

7. EASA Certification Date:

24 August 2007

8 This EASA TCDS replaces CAA-UK TCDS BA17

H.II. Certification Basis

1. Reference Date for determining the applicable requirements:

Not Known

- 2 (Reserved)
- (Reserved)

4 Certification Basis:

14 CFR Part 23 dated February 1st 1965 amended through amendment 23-42 effective February 4th 1991 and those paragraphs in Subpart C, Emergency Landing Conditions, as amended through amendment 23-35, effective October

11th 1988.

5 Special Conditions:

None

6. (Reserved):

7 Equivalent Safety Findings:

None

8. Environmental Standards:

Approved Noise Levels in accordance to:

In accordance with FAR 36 amendment 20

CAA Noise Certificate No 171

Issue 02, 3 September 2007

H.III. Technical Characteristics and Operational Limitations

1. Type Design Definition:

Doc No 167G-900-006 (Post Mod M500)

Drawing No. 167G-00-001

2 Description:

Single engine, two-seat cantilever low wing airplane, Composite (GRP) construction, fixed tricycle landing gear,

conventional tail

3. Equipment:

(28 volt DC system)

Refer document I67G-900-006

4. Dimensions:

Span Length Height Wing Area 10.6 m (34 ft 9¼ in) 7.54 m (24 ft 9 in) 2.29 m (7 ft 6 in) 12.60 m² (135 63 ft²)

5 Engines:

(Pre Mod M917)

1 Textron Lycoming AEIO-540-D4A5 FAA Engine Type Certificate Data Sheet 1E4 UK CAA validated 8th November 1993

5.1 Engine Limits:

Max take-off rotational speed

2700 r p m 2700 r p m

Max continuous rotational speed

iax commuous rotational speed

For powerplant limitations refer to AFM, T.O 1T-3A-1

(Reserved)

7 Propellers:

1 Hoffmann HO-V123K-KV/180DT (Composite type) LBA Propeller Type Certificate Data Sheet 32 130/17

7.1 Settings:

Low pitch setting 10° 50' High pitch setting 26°

8 Fluids:

8 1 Fuel:

AVGAS 100 LL

8 2 Oil:

Oils conforming to Mil. Spec. MIL-L-22851 For more details see AFM, T.O 1T-3A-1

9 Fluid capacities:

9 1 Fuel: Wing Tanks

Total: Usable:

 161.4 litres
 35.5 Imp Gallons
 42 54 US Gallons

 157.4 litres
 34 62 Imp Gallons
 41.54 US Gallons

9.2 Oil:

Maximum: 11.36 litres 12 US qts Minimum: 5.68 litres 6 US qts

For more details see AFM, I O 1T-3A-1

10. Air Speeds:

Design Manoeuvring Speed V_A:

up to 1157 kg (2550 lb) 140 KIAS

Flap Extended Speed V_{FE}:

full flaps

98 KIAS

Trap Extended Speed VFE

take-off flaps

120 KIAS

Maximum structural cruising speed V_{NO} (= Maximum structural design speed V_C):

156 KIAS

Never exceed speed V_{NE}:

195 KIAS

11 Maximum Operating Altitude: 3810 m (12500 ft)

12. All weather Capability: Day-VFR

IMC and Night see Note 1
IFR see Note 1

Flight into known icing conditions is prohibited

13 Maximum Total Weight Authorised (MTWA):

Take-off:

(Pre Mod M605) 1146 kg (2525 lb) (Post Mod M605) 1157 kg (2550 lb)

Landing:

(Pre Mod M605) 1146 kg (2525 lb) (Post Mod M605) 1157 kg (2550 lb)

For Aerobatics:

(Pre Mod M605) 1146 kg (2525 lb) (Post Mod M605) 1157 kg (2550 lb)

14 Centre of Gravity Limits at MTWA

Pre Mod M605

Forward limit 1146 kg (2525 lb) 0.784 m (2 ft 6.9 ins) aft of Datum

Aft limit: 1146 kg (2525 lb) 0.866 m (2 ft 10.1 in) aft of Datum

Post Mod M605

Forward limit 1157 kg (2550 lb) 0 787 m (2 ft 7 ins) aft of Datum

Aft limit: 1157 kg (2550 lb) 0.864 m (2 ft 10 in) aft of Datum

For limits at other weights refer to the T67M260 Flight Manual T67M260POH

15. Datum: Forward face of Frame 1

16 (reserved)

17 Levelling Means: Levelling board (167B-88-307) placed on aft fuselage

between canopy rail and fin forward fairing

18 Minimum Flight Crew: 1 Pilot

19 Maximum Passenger Seating Capacity: 2, including pilot. This number is limited by the space

available in the cabin

20. (Reserved)

21 Baggage / Cargo Compartments

Location Behind Seats Max. Allowable Load 30 kg (66 lbs)

22. Wheels and Tyres

Nose Wheel Tyre Size 5.00-5 (minimum 4 ply rating)

Main Wheel Tyre Size 6 00 – 6 (minimum 6 ply rating)

H.IV. Operating and Service Instructions

T67M260 I-3A Firefly Aircraft Flight Manual (AFM) I-3A (USAF designation) version only has been approved by the UK CAA on behalf of the FAA, for military operation only

T.O 1T-3A-1

T67M260 T-3A Firefly Aircraft Maintenance Manual (MM) Incorporates Maintenance Schedule as Part of Section 2 (incl. Airworthiness Limitations)
Service, Change (Modification), and Information Bulletins

I-3A/MM

H.V. Notes

- 1. For IFR flight Night operation refer to the Air Navigation Legislation for equipment required.
- 2. Aircraft airframe to be overall white, registration letters accepted, or in accordance with paint restrictions quoted in aircraft Flight Manual T.O 1T-3A-1
- 3. Structural temperature restrictions are applicable; aircraft flight prohibitive above 55°C. Refer aircraft Flight Manual T.O 1T-3A-1 and note 4 below.
- 4 The following G limits apply:
 - 4.1 Post Mod M605, Post Mod M725A:

Weights:	For MTWA up to 975 kg (2550 lb)	below 50°C	50°C & above
Flaps up) :	+6	+4 4
		-3	-2
Flaps do	own:	+3	+3
		-1	-1

Refer Flight Manual T.O 1T-3A-1 for further details.

5. The following CAA Airworthiness Notes apply:

5.1 Airworthiness Notice No. 76 Airworthiness Notice No. 88 Electrical power supplies for aircraft radio systems
Electrical generation systems bus-bar low voltage
warning Special Conditions relating to high intensity
radiation fields, (HIRF), and the direct and indirect effects
of lightning

6. Item of equivalent safety:

FAR 23.961 requires that the fuel systems must be free from vapour lock when using fuel at a temperature of 110°F.

This is approved on the basis of equivalent safety from tests conducted using fuel at 106°F, satisfactory experience with the similar I67M200 and the high fuel flow margin provided by the fuel pump.

SAL FTR 042 cleared the I67M260T-3A variant to 110°F (43 3°C) this showing compliance with FAR 23 961.

Change Record

Issue	Date	Changes
Issue 1	24 August 2007	Transfer from CAA TCDS BA17 issue 8 to the EASA Type Design