DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

3A1 Revision 12

Meyers MAC-145 Meyers MAC-125C Micco MAC-145A | Micco MAC-145B

December 12, 2000

TYPE CERTIFICATE DATA SHEET NO. 3A1

Type Certificate Holder	Estumkeda, Ltd.
	d.b.a. Micco Aircraft Company
	3100 Airman's Drive
	Ft. Pierce, Florida 34946

Type Certificate Holder Record	Meyers Aircraft Company transferred 3A1 to Interceptor Corporation on January 8, 1969
	Interceptor Corporation transferred 3A1 to Interceptor Company on
	December 31, 1974
	Interceptor Company transferred 3A1 to Prop-Jets Incorporated on July 1, 1977
	Prop-Jets Incorporated transferred 3A1 to Nydia Meyers Trust on
	March 2, 1981
	Nydia Meyers Trust transferred 3A1 to Ralph Haven May 8, 1981
	Ralph Haven transferred 3A1 to The New Meyers Airplane Company on
	March 21, 1994
	The New Meyers Airplane Company transferred 3A1 to Estumketda, Ltd. on
	January 18, 1995

I - Model MAC-145, 2 PCLM, Approved November 2, 1948

Engine	Continental C145-2	
Fuel	80 Min. octane aviation g	asoline
Engine limits	For all operations,	2700 rpm (145 hp)
Propeller limits (with Equipment Item 1)	Static rpm at maximum p Not over 2380, not und No additional tolerance Diameter: Not over 76 in	e permitted.
Airspeed limits	Glide or dive Level flight or climb Flaps extended Gear extended	200 mph True Ind. 155 mph True Ind. 95 mph True Ind. 110 mph True Ind.
C.G. range	(+16.7) to (+19.0) at 1910 (+15.0) to (+19.0) at 1733 (+13.7) to (+19.0) at 1600 Straight line variation bet	0 lbs. or less.

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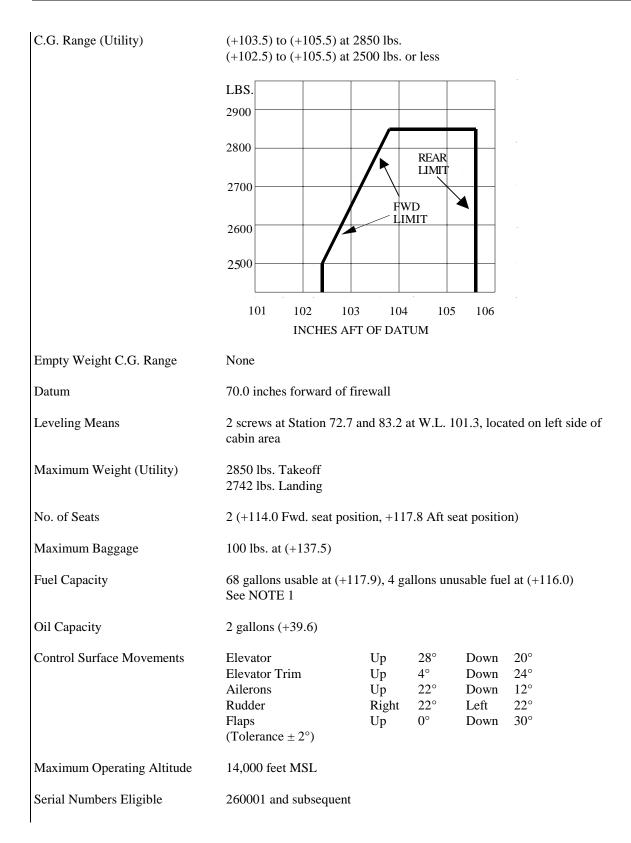
	LBS. 2000
	1900
	1800
	1700 (For unmedified
	1600 airplanes)
	1500 FWD REAR
	13 14 15 16 17 18 19 20
	INCHES
Empty weight C.G. range	(+10.5) to (+14.3). When empty weight C.G. falls within this range, computation of critical force and aft C.G. positions is unnecessary. Range is not valid for non-standard configurations.
Datum	12 inches aft of forward face of firewall at centerline of airplane
Leveling means	Lower door sill
Maximum weight	1735 lbs. (1910 lbs. when modified in accordance with provisions of NOTE 4)
No. of seats	2 (+26)
Maximum baggage	100 lbs. (+54) (Main) 20 lbs. (+61) (Map shelf per Meyers Dwg. No. 43G027)
Fuel capacity	32 gals. Main (+33). (See Equipment Item 107 for auxiliary fuel system)
Oil capacity	2 gals. (-40)
Control surface movements	Elevator -RestrictedUp 9° Down 20° UnrestrictedUp 22° Down 20° Elevator trim tabUp 14° Down 50° AileronsUp 22° Down 9.5° DelayDick 0.5° Lefe 0.5°
	Rudder -RestrictedRight9.5°Left9.5°UnrestrictedRight21°Left16°
6 · 1 · 1 · 1 · 1 ·	Flaps Up 0° Down 45°
Serial Nos. eligible	203 and up
Export eligibility	Eligible for export to all countries subject to the provisions of MOP 2-4 except as follows: (a) Canada - Landplane - eligible Skiplane - not eligible
Required equipment	Equipment Items 1 (or 2 or 3 or 5 or 6), 101, 102, 104, 105, 106, 201, 202, 204, 301, 302, 303.

<u>II - Model MAC-125C, 2 PCLM</u> (Same as Model MAC-145 except for engine and propeller installation).

Engine	Continental C125-2
Fuel	80 min. octane aviation gasoline
Engine limits	For all operations, 2550 rpm (125 hp)
Airspeed limits	Glide or dive200 mph True Ind.Level flight or climb155 mph True Ind.Flaps extended95 mph True Ind.Gear extended110 mph True Ind.
Propeller limits	See Equipment Item 4
C.G. range	(+16.7) to (+19.0) at 1735 lbs. (+13.7) to (+19.0) at 1600 lbs. Straight line variation between points given. LBS. 1735 1600 1600 1500 1500 1400 1300 12 13 14 15 16 17 18 19 20
Empty weight C.G. range	(+10.6) to (+14.3). When empty weight C.G. falls within this range, computation of critical fore and aft C.G. positions is unnecessary. Range is not valid for non-standard arrangements.
Datum	12 inches aft of forward face of firewall at centerline of airplane
Leveling means	Lower door sill
Maximum weight	1735 lbs.
No. of seats	2 (+26)
Maximum baggage	50 lbs. (+41)
Fuel capacity	32 gals. Main (+33). (See Equipment Item 107 for auxiliary fuel system)

Oil capacity	2 gals. (-40)
Control surface movements	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Serial Nos. eligible	203 and up
Export eligibility	Eligible for export to all countries subject to the provisions of MOP 2-4 except as follows: (a) Canada - Landplane - eligible Skiplane - not eligible
Required equipment	Equipment Items 4, 101, 102, 104, 105, 106, 201, 202, 204, 301, 302, 303.
III - Model MAC-145A, 2 PCLM	(Utility Category), Approved January 5, 2000
Engine	Textron Lycoming IO-360-C1E6
Fuel	100/100LL minimum grade aviation gasoline
Engine Limits	For all operations 2700 rpm (200 hp)
Propeller and Propeller Limits	McCauley B3D36C424-E/74SA-0 Avoid continuous operation below 15 inHG manifold pressure setting between 1650 and 2250 rpm when above 85 KIAS
Airspeed Limits (IAS)	
C.G. Range (Utility)	(+103.5) to (+105.5) at 2600 lbs. (+101.5) to (+105.5) at 2000 lbs. or less LBS. 2600 2400 2400 2400 2000 1800 100 101 102 103 104 105 106 INCHES AFT OF DATUM

Empty Weight C.G. Range	None			
Datum	70.0 inches forward of	front cabin	bulkhea	nd
Leveling Means	2 screws at Station 72. cabin area	7 and 83.2 a	at W.L.	101.3, located on left side o
Maximum Weight (Utility)	2600 lbs. Takeoff 2492 lbs. Landing			
No. of Seats	2 (+114.0 Fwd. seat po	osition, +11	7.8 Aft s	eat position)
Maximum Baggage	100 lbs. at (+137.5)			
Fuel Capacity	68 gallons usable at (+ See NOTE 1	117.9), 4 ga	allons ur	nusable fuel at (+116.0)
Oil Capacity	2 gallons (+30.0)			
Control Surface Movements	Elevator Elevator Trim Elevator Trim* Ailerons Rudder Flaps (Tolerance ± 2°) * Elevator Trim travel	Up Up Up Right Up for airplane	28° 9° 4° 22° 22° 0°	Down20°Down20°Down24°Down12°Left22°Down30°
Maximum Operating Altitude	12,000 feet MSL			
Serial Numbers Eligible	304 and subsequent			
<u>IV - Model MAC-145B, 2 PCLM</u> Engine	<u>(Utility Category), Appr</u> Textron Lycoming IO-		er 19, 20	000
	100/100LL minimum	grade aviation	on gasol	ine
Fuel				
Engine Limits	For all operations	2700 rj	om (260	hp)
	For all operations Hartzell HC-C3YR-1F	-	om (260	hp)



DATA PERTINENT TO ALL MODELS

Certification basis	Type Certificate No. 3A1 issued November 2, 1948
	Models MAC 125C and MAC-145 - CAR 4a
	Models MAC-145A and MAC-145B - 14 CFR Part 23 as amended by 23-1 through 23-46 effective June 16, 1994; with the following rules at these listed amendment levels: 23.179, 23.301, 23.305, 23.321, 23.351, 23.479, 23.485, 23.603, 23.605, 23.607, 23.611, 23.613, 23.619, 23.621, 23.655, 23.675, 23.677, 23.679, 23.721, 23.723, 23.731, 23.1331, 23.1351, 23.1353, 23.1357, 23.1365, 23.1385, 23.1387, 23.1389, 23.1391, 23.1393, 23.1395, 23.1397, 23.1411, 23.1413, 23.1431 and 23.1507 effective February 1, 1965; 23.75, 23.77, 23.333, 23.337, 23.341, 23.345, 23.349, 23.361, 23.415, 23.455, 23.473, 23.572, 23.629, 23.733 and 23.1501 as amended by 23-7; 23.1587 as amended by 23-13; 23.173 as amended by 23-14; 23.335 as amended by 23-16; 23.145 and 23.1309 as amended by 23-17; 23.45, 23.175, 23.177 and 23.181 as amended by 23-21; 23.853 as amended by 23-23; 23.397, 23.561 and 23.785 as amended by 23-34; 23.421, 23.423, 23.425, 23.427, 23.441 and 23.443 as amended by 23-48 (Part 23, Appendix A); and 23.71 and 23.73 as amended by 23-50 with Equivalent Safety Finding to 23.1143(g) throttle and mixture control cable attachment and CAR 04a.702 in lieu of 23.65. MAC-145A - 14 CFR Part 36 as amended by 36-20. MAC-145B - 14 CFR Part 36 as amended by 36-22.
Production basis	None. Prior to original certification of each aircraft an FAA representative must perform a detailed inspection for workmanship, material, and conformity with the approved technical data and a check of the flight characteristics.
Equipment	The following equipment is for Models MAC-125C and MAC-145:
(A plus (+) or minus (-)) sign preceding the weight of an optional item indicates the net weight change when that item

(A plus (+) or minus (-) sign preceding the weight of an optional item indicates the net weight change when that item is installed.)

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MAC-125C/MAC-145	Propellers and	Propeller Accessories
1110 1250/1110 145	1 topenets and	

1.	Propeller - Lewis L-6FK-3-54, L-6FK-3-52, L-6FK-48 or any other fixed pitch wood propeller which is eligible for the engine power and speed and which meets the diameter and static rpm limits given under "Propeller Limits" for Model MAC-145. Eligible only with Continental C-145 engine with dampered crankshaft denoted by suffix letter "D" after engine serial number.	15 lbs.	(-59)
2.	 Propeller - McCauley 1A170-DM7657 or any other Model 1A170-DM propeller that meets the following limits: Static rpm at maximum permissible throttle setting: Not over 2230, not under 2110. No additional tolerance permitted. Diameter: Not over 76 in., not under 72.5 in. Eligible on Model MAC-145 only. McCauley propeller spinner, Meyers Dwg. #47R032 optional. 	34 lbs.	(-59)
3.	Propeller - Hartzell ground adjustable HA12UF/8032-6 Blade pitch setting 15° at 3/4 of propeller radius or set to obtain following limits: Static rpm at maximum permissible throttle setting: Not over 2210, not under 2110. No additional tolerance permitted. Diameter: Not over 74 in., not under 72.5 in. Eligible on Model MAC-145 only with Continental C-145 engine dampered crankshaft	22 lbs.	(-59)

denoted by suffix letter "D" after engine serial number.

4.	Propeller - Koppers Aeromatic F200/0074E Parts List assembly No. 4920, dated October 13, 1948. Installation and operation must be accomplished in accordance with Koppers "Installation Procedures and Operating Limitations No. 24," dated October 12, 1948. Low pitch setting 13° at 24 in. sta. Static rpm at maximum permissible throttle setting: Not over 2550, not under 2450. No additional tolerance permitted. Diameter: Not over 74 in., not under 72.5 in. Eligible on Model MAC-125C only.	33 lbs.	(-60)
5.	 Propeller - Koppers Aeromatic F200H/00-74E Parts list assembly No. 4356H-1 (Includes Altitude Control 4427) Adjustment and operation must be accomplished in accordance with Koppers "Adjustment Instructions and Operating Limitations No. 45" Low pitch setting 13° at 24 in. sta. Static rpm at maximum permissible throttle setting: Not over 2675, not under 2575. No additional tolerance permitted. Diameter: Not over 74 in., not under 72.5 in. (Eligible on Model MAC-145 only with Continental C-145 engine dampered crankshaft denoted by suffix letter "D" after engine serial number). Hampton propeller spinner Model 1-B optional. 	34 lbs. 6 lbs.	. ,
6.	Propeller - Sensenich M74DR, fixed pitch metal (Model MAC-145 only) Static rpm at maximum permissible throttle setting: Not over 2380, not under 2210. No additional tolerance permitted. Diameter: Not over 74 in., not under 72 in.	30 lbs.	(-59)
MA	C-125C/MAC-145 Engines and Engine Accessories - Fuel and Oil System		
101	. Carburetor air heater and mufflers (Meyers Dwg. No. 47R003)	14 lbs.	(-35)
102	. Carburetor air intake and filter assy. (Continental No. A40692)	4 lbs.	(-42)
103	. Starter, Delco-Remy No. 1109656 (Continental No. 50309)	16 lbs.	(-25)
	. Engine- driven fuel pump, AC No. 1539051 (Continental No. 40585)	2 lbs.	(-52)
	. Hand fuel pump, AC No. 1539051 (Continental No. 40585)	2 lbs.	(-14)
	. Cowl flaps and control (Meyers Dwg. No. 47R008)	2 lbs.	(-15)
	Auxiliary fuel system installation per Meyers Dwg. 47R004,	13 lbs.	
	R.H. and L.H. wing tanks, capacity 8 ¹ / ₂ gals. each		
	Fuel arm of auxiliary tanks (+29)		
108	Electric fuel pump, Bendix Model No. 476818, replacing		
	Item 05 (Model MAC-145 only).	2 lbs.	(-14)
MA	C-125C/MAC-145 Landing Gear		
201	. Two main wheel-brake assemblies, 6.00-6, Type III	13 lbs.	(+8)
	(a) Goodrich (formerly Hayes) Model 600MD		
	Wheel Assembly No. D-3-47MD		
	Brake Assembly No. D-2-129		
	(b) Goodrich Model 601MD	14 lbs.	(+8)
	Wheel Assembly No. D-3-512-MD		
	Brake Assembly No. D-2-505		
202		18 lbs.	(+8)
204			
	(a) Meyers Dwg. No. 44B039	12 lbs.	(+166)

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MAC-125C	/MAC-145	Electrical	Equipment

301. Battery - 12 volt	31 lbs. (-15)	!		
302. Engine driven generator (Cont. 40435)	10 lbs. (-25)			
303. Voltage regulatory - Delco-Remy (Cont. 40483)	2 lbs. (-14)			
MAC-125C/MAC-145 Interior Equipment				
401. Wheel control, Meyers Dwg. No. 46A040	10 lbs. (+20))		
402. Stick control, Meyers Dwg. No. 46R001	7 lbs. (-20)			

For Models MAC-145A and MAC-145B - The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment are required:

1. FAA Approved Airplane Flight Manual for the Micco MAC-145A, Document No. F-145A-3, dated January 5, 2000, or later FAA approved revision.

2. FAA Approved Airplane Flight Manual for the Micco MAC-145B, Document No. F-145B-3, dated October 19, 2000, or later FAA approved revision.

- NOTE 1 A current weight and balance report including list of equipment included in certificated weight empty, and loading instructions when necessary, must be in each aircraft at the time of original certification. The certificated empty weight and corresponding center of gravity location must include unusable fuel of 24 lbs. at (+116.0) for the MAC-145A and MAC-145B.
- NOTE 2 For Models MAC-125C and MAC-145, the following placards must be displayed in front of and in clear view of the pilot:

"INTENTIONAL SPINNING PROHIBITED." "DO NOT EXTEND FLAPS ABOVE 95 MPH." "DO NOT EXTEND GEAR ABOVE 110 MPH."

- For Models MAC-145A and MAC-145B, all placards required in the FAA Approved Airplane Flight Manual must be installed in the appropriate locations.
- NOTE 3 For MAC-145A and MAC-145B, see FAA approved Airworthiness Limitations section of the Instructions for Continued Airworthiness (Section 4 of Airplane Maintenance Manual) for mandatory inspections or retirement time limits.
- NOTE 4 Model MAC-145 aircraft are eligible at 1910 lbs. maximum weight when following is accomplished:(a) Reinforcement of fuselage tail cone bulkhead No. 4 as per Meyers Dwg. No. 43R001 change C or subsequent.
 - (b) Install propeller equipment item (2) or (5) as noted.

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