Supplemental Type Certificate

Number: ASA137ML Issue 3

This certificate, issued to:

Paspaley Pearling Company Ltd ARN 435102, *of* 19 The Mall Darwin NT Australia 0801,

certifies that the described change in type design of the **Grumman Mallard G-73** aircraft, when installed in accordance with the conditions and limitations specified in STC Data Sheet ASA137ML, meets the airworthiness requirements of regulation 21.101 of the CASR 1998.

This Supplemental Type Certificate consists of:

Type Acceptance Certificate A124, Issue 2, 1 June 2001 (References: FAA Type Certificate A-783) and the change in type design described in Data Sheet ASA137ML Issue 3, which forms part of this certificate.

Date of Original Application:

Date of Original Issue:

Date of Issue 2:

Date of Issue 3:

27 May 2004

30 June 2006

30 January 2009

04 May 2018



This certificate is issued pursuant to Part 21.113A of the Civil Aviation Safety Regulations (CASRs) 1998, and is valid until suspended or cancelled by the Civil Aviation Safety Authority,

Supplemental Type Certificate Data Sheet

Number ASA137ML
Revision Issue 3
Date 04 May 2018

This data sheet, which is part of Supplemental Type Certificate ASA137ML, lists the conditions and limitations under which the subject aircraft, as modified by the described type design change, meets the airworthiness requirements of the Civil Aviation Safety Regulations.

Certificate Holder

Paspaley Pearling Company Ltd

19 The Mall Darwin

NT Australia 0801

Description of Type Design Change: An increase in aircraft maximum take-off weight when aircraft is modified in accordance with CASA approved Aeronautical Engineers Australia engineering order EO10945.006/1. Issue 2 of this STC requires the incorporation of EO10945.006/1 at Issue 2, and removes the interim Issue 1 fatigue limitations. Issue 3 of this STC removes the passenger number limitation from serial number J-26 only.

Conditions and Limitations

The conditions and limitations specified herein, modify or supersede the conditions and limitations specified in the reference type certificate. Where no condition or limitation is specified, the original reference data sheet conditions and limitations continue to apply.

This approval may not be incorporated unless it is determined by the installer that the interaction between this change and any other previously approved modifications will not produce any adverse effect upon the airworthiness of the aircraft.

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

(a) Airspeed Limits

Max Operating Vmo	180 KCAS	178 KIAS
Max Structural Cruising Vc	180 KCAS	169 KIAS
Manoeuvring Va	137 KCAS	136 KIAS
Max Flap Extended Vfe	124 KCAS	123 KIAS
Max Landing Gear Extended Vie/Vig	128 KCAS	127 KIAS
Min Control Speed Vmc	72.2KCAS	77 KIAS
Stall, Landing Flap 20° Vso	69 KCAS	71 KIAS
Stall, flap 10° Vs1	74.4KCAS	74 KIAS
Stall, takeoff flap 0°, Vs1	78.4KCAS	81 KIAS

(b) Maximum Certified Weights

Maximum Ramp Weight	6382 Kg	(14070 lb)
Maximum Takeoff Weight	6350 Kg	(14000 lb)
Maximum Landing Weight	6123 Kg	(13500 lb)
Maximum Zero Fuel Weight	5443 Kg	(12000 lb)

(c) Maximum Operating Altitude

12000 feet

(d) Flight Load Factor

Maximum Positive Manoeuvre Load Factor – 3.10G Maximum Negative Manoeuvre Load Factor – 1.24G

(e) Number of Occupants

– Serial numbers J-22, J-23

15 total – 2 flight crew, 13 passengers (private operations only)

11 total – 2 flight crew, 9 passengers (charter operations)

- Serial number J-26

15 total – 2 flight crew, 13 passengers

(f) Aircraft Designation

No Change

(g) Certification Category

Commuter.

- (h) Certificate of Airworthiness Aircraft complying with this certificate is eligible to be issued with a Certificate of Airworthiness in the Commuter Category.
- (i) Serial Numbers Applicable

J-22, J-23, J-26 only

(j) Airworthiness Limitations

Flight is prohibited with more than two vortex generators (VG's) missing in total, or more than one VG missing from any one surface. Specified surfaces and required numbers of VG's are:

RH Wing 18 in 9 pairs

LH Wing 18 in 9 pairs
FIN LHS 23 above stabilizer 4 below stabilizer
FIN RHS 10 above stabilizer in front of tab

RH stabilizer 13 doubles and 2 singles in front of trim tab

The fatigue life limit of Issue 1 of this STC is 2 calendar years or 1500 hours time in service, whichever occurs first, from the date of issue of a Certificate of Airworthiness for operation in commuter category at increased gross weight.

Incorporation of EO10945.006/1 Issue 2 requires incorporation of EO10945.313/1, Issue 5, and the installation of wing spar straps together with incorporation of a fatigue inspection program (see below).

(k) Continuing Airworthiness Instructions. The instructions for continued airworthiness required by incorporation of this issue STC are contained in Paspaley Pearling Company Pty Ltd, Engineering Procedures, document number

MMS10945.006/001 Issue 1, rev. 02 dated 30.01.09 or later approved revisions. The airworthiness limitations contained in Chapter 4 of this document are approved by CASA.

(l) Certification Basis: The certification basis for this STC is contained in CASA paper titled 'Mallard Design Standard' dated 8th June 2004. Issue paper 001 also refers.

Required Equipment

- 1. The CASA approved Flight Manual Supplement FMS10945-006/1, Issue 4, dated 14 May 2008.
- 2. Other equipment as detailed in the approved flight manual supplement.

Type Design Data

- 1. Drawing Listed in Master Document List AV10945.313/016, Issue 6, dated 15 Jan 09.
- 2. The CASA approved Flight Manual Supplement FMS10945-006/1, Issue 4, dated 14 May 2008.
- 3. The Airworthiness Limitations and Inspections specified in Chapter 4 of Maintenance Manual Supplement MMS10945.006/001 Issue 1, rev. 02 dated 30.01.09 are mandatory.
- 4. Engineering Order EO10945.006/1, Issue 2 dated 30 January 2009.
- 5. Engineering Order EO10945.313/1, Issue 5 dated 16 January 2009.

Notes

- 1. Incorporation of Issue 2 of this STC is required before exceeding the interim fatigue limitations specified in Issue 1.
- 2. Unless otherwise stated, later revisions of approved documentation are accepted as meeting type data definition.