



Civil Aviation Authority

# EMERGENCY MANDATORY PERMIT DIRECTIVE



Number: 2024-001-E

Issue date: 05 January 2024

In accordance with 41(1) of Air Navigation Order 2016 as amended the following action required by this Mandatory Permit Directive (MPD) is mandatory for applicable aircraft registered in the United Kingdom operating on a UK CAA Permit to Fly.

Type/Design Approval Holder's Name:

FLYLIGHT AIRSPORTS LTD

Type/Model Designation(s):

Exodus DeltaJet 500 StingRay

Effective Date:	08 January 2024
TCDS:	Not Applicable
Foreign AD (if applicable):	Not Applicable
Supersedure:	Not Applicable

## Aircraft Structure – Trike Frame – Operational Limitation

### Manufacturer(s):

Flylight Airsports Ltd.

### Applicability:

Exodus DeltaJet 500 StingRay Microlights (Serial numbers EA010-EA019 inclusive).

### Definitions:

For the purposes of this MPD, the following definitions apply:

**The SB:** Flylight Airsports Ltd. Service Bulletin #003 – Deltajet 500 - Temporary Lowering of the MTOM, dated 5 January 2024, or later approved revision.

### Reason:

During a routine sub-contractor audit by the type approval holder, it was noted that an alternative aluminium tubing supplier had been selected to supply tubing that is used in the fabrication of later trike units. During the audit, discrepancies were noted between the material specification on the quality certificates and the type design data.

Chemical and structural testing has shown that differences exist between the material specification listed on the quality certificates and the actual chemical composition of the tubing. Structural testing has confirmed that the tubing does not meet the required strength specifications as specified in the design data for the trike.

Work carried out by the Type Approval Holder, including calculations and load testing of affected trikes, has shown that an acceptable level of safety exists with a revised Maximum Take-off Mass (MTOM) of 400kg.

This condition, if not corrected, could lead to failure of the trike unit, possibly resulting in loss of the aircraft.

To address this potential unsafe condition, Flylight Airports Ltd have issued the SB with instructions to temporarily amend the operating limitations until replacement parts can be sourced. In the meantime, work carried out by the Type Approval Holder; including calculations and load testing of an affected trike, has shown that an acceptable level of safety exists with a revised Maximum Take-off Mass (MTOM) of 400kg.

For the reasons described above, this MPD requires a temporary operating limitation to control this potential unsafe condition.

This MPD is considered as an interim action and further MPD action may follow.

#### **Required Action(s) and Compliance Time(s):**

- 1) From the effective date of this MPD, affected aircraft can only operate with the following limitations:
  - a. The Maximum Take-off Mass (MTOM) of the aircraft is restricted to 400kg.
- 2) From the effective date of this MPD, before next flight:
  - a. Insert the POH Amendment, found in Appendix 1 of the SB, into the DeltaJet 500 POH in accordance with the SB.
  - b. Install revised placarding in the aircraft in accordance with the SB.

#### **Reference Publications:**

Flylight Airports Ltd. Service Bulletin #003 – DeltaJet 500 – Temporary Lowering of the MTOM, dated 5 January 2024.

The use of later approved revisions of this document are acceptable for compliance with the requirements of this MPD.

#### **Remarks:**

1. The safety assessment has warranted immediate publication and notification without implementing the full consultation process.
2. If requested and appropriately substantiated, CAA can approve Alternative Methods of Compliance for this MPD.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this MPD, and which may occur, or have occurred on a product, part or appliance not affected by this MPD, can be reported to the [CAA aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this MPD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed.
4. Enquiries regarding this MPD should be referred to: [ga@caa.co.uk](mailto:ga@caa.co.uk)
5. For any questions concerning the technical content of the requirements in this MPD, please contact: Flylight Airports Ltd., E-mail: [info@flylight.co.uk](mailto:info@flylight.co.uk)