

## Supplemental Type Certificate

Number: SVA516 Issue 3

**This certificate issued to:** AeroRescue Pty Ltd  
Level 20,  
Charles Darwin Centre, 19, The Mall  
Darwin, NT 0800

Previously issued to: Aeronautical Engineers Australia  
1C Eagle Drive  
Jandakot Airport WA 6164

*certifies that the change in type design of the **Dornier 328-100** aircraft, when installed in accordance with the conditions and limitations specified in STC Data Sheet SVA516 Issue 3, meets the airworthiness requirements of regulation 21.101 of CASR 1998.*

*This Supplemental Type Certificate consists of*

**Type Acceptance Certificate A215, Issue 2, 13 March 2008**

Reference: EASA Type Certificate A.096, or  
LBA Type Certificate 2534, and  
Type Certificate Data Sheet JAA/25/93-007

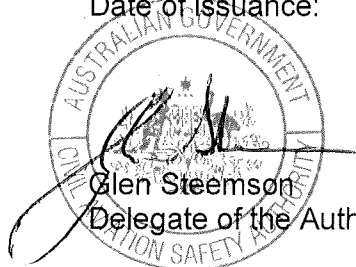
AND

*the change in type design described in **Data Sheet SVA516 Issue 3**, which forms part of this certificate.*

*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.*

Date of application: 31 January 2007  
Date of issuance: 20 August 2008

Date Reissued: 30 July 2009  
Date Reissued: 14 January 2022



Glen Steemson  
Delegate of the Authority

This certificate may be transferred in accordance with CASR (1998) 21.120

*safe skies for all*

## Supplemental Type Certificate Data Sheet

Number	SVA516 Issue 3
Revision	4
Date	14 January 2022
Reference Type Certificate	TAC A215, Issue 2

This data sheet, which is part of Supplemental Type Certificate SVA516 Issue 3, 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 Authority.

<b>Certificate Holder</b>	AeroRescue Pty Ltd Level 20, Charles Darwin Centre, 19, The Mall Darwin, NT 0800
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**The Type Design Change** consists of a modification of Dornier model 328-100 to incorporate a new design left-hand rear cargo door, opening inwardly in flight, to facilitate the dropping of stores.

### Conditions and Limitations

The conditions and limitations specified herein, modify or supersede the conditions and limitations specified in reference JAA TCDS JAA/25/93-007. Where no condition or limitation is specified, the original reference data sheet conditions and limitations continue to apply.

### Operating Categories

This STC approves the aircraft, as modified, to operate in both the Transport category, and the Restricted category.

### Transport Category Operating Limitations

In Transport category, the cabin divider net is required to be installed, and remain closed for the duration of the flight. The cargo door is not permitted to be opened in Transport category operations. This STC imposes no other *operational* limitations in Transport category.

### Restricted Category - Door Open Operating Limitations

<b>Airspeed Limits</b>	Max Operating Speed - Door Latched Open 225 KIAS - Door in transit (Opening or Closing) 180 KIAS
<b>Weight and CG</b>	Door open operations are restricted to the Take-off and Landing Weight and CG envelope.
<b>TO and Landing</b>	Not permitted with the door open.

<b>Minimum Crew</b>	Pilot, co-pilot and door operator. Australian regulations prohibit the carriage of persons on board a restricted category operation, unless those persons perform an essential function associated with the door open operation. See CASR Division 91.T.2.
<b>Icing conditions</b>	Flight into known icing conditions is prohibited.
<b>Max Operating Altitude</b>	10,000 ft AMSL

**Additional Data – Both Categories**

<b>Levelling Means</b>	Unchanged, except that it is necessary to first remove cargo door plastic filler inserts. Refer to Maintenance Manual Supplement, Chapter 8.
<b>Serial Numbers Eligible</b>	3051, 3052, 3053, 3057, 3059
<b>Production Basis</b>	Production Certificate 751981-1, amended 10 August 2007, or APMA 751981 - Supplement 003, dated 31 July 2009.
<b>Required Equipment</b>	<ol style="list-style-type: none"> <li>1. The CASA approved Airplane Flight Manual Supplement FMS13070.037-2, Revision 3 dated 25 May 2009.</li> <li>2. Flexible Cabin Divider Net, Part number AV-13070.037-201.</li> <li>3. For door open operations - Personal safety harnesses as specified in FM Supplement FMS13070.037-2.</li> <li>4. Other equipment may be required, to meet applicable operational regulations.</li> </ol>
<b>Placards</b>	<ol style="list-style-type: none"> <li>1. The placards required are listed in Maintenance Manual Supplement Document MMS13070.037-02, Chapter 11.</li> </ol>
<b>Type Design Data</b>	<ol style="list-style-type: none"> <li>1. Master Drawing List AV13070.001/1 Issue 8 dated 12 July 2010, or later approved issue.</li> <li>2. The CASA approved Airplane Flight Manual Supplement FMS13070.037-2 Revision 5 dated 13 July 2010, or later approved revision.</li> <li>3. Maintenance Manual Supplement MMS13070.037-02 Issue 4 dated 13 April 2010, or later approved revision.</li> <li>4. Aeronautical Engineers Australia Engineering Order EO13070.001/1 Issue 3 dated 13 July 2010, or later approved issue.</li> </ol>

## Certification Basis

### Transport Category

The design standard for the aircraft as modified with the rear cargo door, cargo compartment partition removal, and associated changes, will be as specified by the EASA TCDS A.096, Issue 1, 7 June 2006, with the following interpretation:

- IN-1 Provided the rear cargo door is clearly inaccessible to passengers when the aircraft is operated in Transport category, the cargo door need not be regarded as an emergency exit, and therefore need not meet the requirements specific to passenger emergency exits. The meaning of 'clearly inaccessible' will be agreed with CASA, but may employ physical barriers, placards and/or briefings from flight crew.

The EASA design standard for the Dornier 328-100 is included in reference TCDS JAA/25/93-007.

### Restricted Category (Door Open Operations Permitted)

The design standard for the aircraft as modified, in the restricted category, will be as for transport category, with the following exemptions, special conditions and interpretations:

#### Exemptions

- EX-1 Compliance need not be shown with the following paragraphs which are inapplicable to the special purpose (door open operations): 25.103 to 25.115, 25.125, 25.143(a)(1), 25.149(e), 25.231 to 25.237, 25.253, 25.255, 25.471 to 25X519, 25. 783(f).

#### Special Conditions

SC-1	Compliance with JAR 25.251 is to be demonstrated up to a speed of $V_{MO-DOOR} / .90$
SC-2	Compliance with the flutter requirements of JAR 25.629 is to be demonstrated up a speed of $V_{MO-DOOR} / 0.90$ .
SC-3	There must be a defined adequate working space for the door operator or operators, with adequate space to open and close the door without hazard to the door operator.
SC-4	The working area defined in SC-3 must be clearly marked on the floor with instructions to keep clear during door open operations.
SC-5	The requirements of JAR 25.793 must be applied to all floors within the working area defined by SC-3.
SC-6	Crew restraint hard points of adequate strength must be provided for all crew required to work in the area defined by SC-3.
SC-7	There must be handholds of adequate strength and number provided for the crew required to work in the area of the door.
SC-8	Two-way voice communications must be provided between the cockpit crew and door operator.

SC-9	There must be latching means to hold the door open. The latching means must meet the requirements of JAR 25.789, and be designed to prevent inadvertent release.
SC-10	There must be means to ensure that the door does not pose a hazard, either to the door operator or the airframe, during the opening and closing transition phases, due to sudden upset or acceleration of the airframe.
SC-11	There must be means to indicate to the flight crew the status of the door, ie; 'closed and locked', 'open and locked' or 'open and not locked'.
SC-12	There must be lighting to adequately illuminate the door latching and operating mechanisms, and the defined working area, in all conditions.
SC-13	There must be acceptable means for the flight crew to address all occupants of the aircraft when the door is open. If the Public Address system is used, acceptability must be shown by flight test.

#### Interpretations

- IN-2 Ground tests may be employed in lieu of flight tests for the purposes of JAR 25.855(e)(1).
- IN-3 The required flight test envelope for showing compliance may be negotiated with CASA.
- IN-4 Demonstration of compliance with JAR 25.831 must consider sideslip and yaw angles that occur when the aircraft is operated within the limitations defined.
- IN-5 Certification to the ditching provisions per JAR 25.801 is not applicable for this project. The basic aeroplane is not certified with ditching provisions.
- IN-6 The impact of any Special Conditions, Exemptions or other certification items relevant to the existing aeroplane is to be considered.

- Notes**
1. This STC does not approve the dropping of stores from the aircraft. A separate operational approval is required for this. The safety of stores dropping has not been assessed as part of this STC.
  2. The Airworthiness Limitations and Inspections specified in Chapter 5 of Maintenance Manual Supplement are mandatory.
  3. Unless otherwise stated, later approved documentation revisions are accepted as meeting type data requirements.
  4. Issue 2 Revision 2 adds eligible serial numbers 3051, 3052, 3053, 3059, updates type design data, adds APMA reference, and amends the layout.  
Issue 2 Revision 3 updates the type design data.
  5. Issue 3 Revision 4 records change in STC Holder.

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