

Submarine Rescue Seat Certification Service

Submarine Rescue Seat Certification Service



INTRODUCTION

JFD’s Rescue Seat Certification service provides assurance the Submarine Authority that their submarines rescue seat(s) are designed, manufactured and maintained in accordance with the dimensional and structural requirements of the most current NATO standard.

This document summarises the unique service provided by JFD.

ISSUE

Rescue Seat Certification is an essential requirement to enable a Submarine Rescue Vehicle (SRV) to be deployed to conduct rescue operations with a Distressed Submarine (DISSUB).

A rescue seat, and supporting structure, not only must have sufficient strength to support an SRV during a ‘mate’, but it must have compliant dimensions and not be exposed to any significant degradation.

Only through assessment of the seat design against the NATO standard and a recurring survey of the manufactured seat can true assurance can be gained.

STANDARDS

Rescue Seat Certification compliance to ANEP/MNEP 85 is required.

ANEP 85.1 describes the survey process of a Rescue Seat and provides details of a “Technical Data Package” which a submarine operating nation should supply to a Rescue Asset operating nation in order to facilitate mating of the Rescue Asset to the submarine. Therefore to give the submarine operating nation the best possible case for a Rescue Asset operating nation to mate with a submarine, a Technical Data Package in accordance with ANEP 85.1 will be produced.

JFD offers a ANEP 85.1 compliant Technical Data Package with the additional services included:

- **SRV Skirt Interface Assessment** - Unique to JFD’s service, JFD will assess relevant skirt designs and operational envelopes (wedding cake) for each.
- **Operations Assessment** - JFD operators will provide a documentation package regarding any ANEP non conformity items. This includes casing protrusions, GO/ NOGO approach angles for the mating seats and any offset required when mating to the rescue seat. ANEP only identifies non-conformities but not how they impact the SRV operational capability. JFD’s service takes the next step to aid National Authorities.

TYPES OF SURVEY

JFD’s surveys can be broken down into 5 types depending on the seat being surveyed. Each will utilise one or more of the parts described above. Survey types are described within the table below.

First of Class	Other submarines of same Class	Any previously certified submarine	Any submarine which has previously failed to achieve certification
↓	↓	↓	↓
Design Survey (First in class)	Physical Survey	Recertification Survey	Repeat Survey
Physical Survey (First in class)			

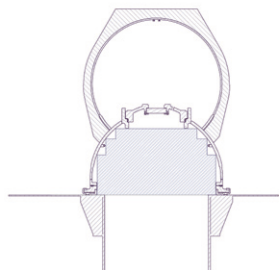
PREREQUISITES & SCOPE OF ACTIVITY

Prior to any work being carried out, JFD will require any nation to supply the following information:

- Detailed ‘as built drawings’ of the rescue seat and supporting structure
- Material documentation including material certificates, welding records etc.
- Maintenance plan and records

Following receipt of the prerequisite documents listed above JFD will then carry out the following tasks:

- First of Class “Design Survey”
- Detailed structural analysis
- Physical survey
 - a. Rescue seat external dimensions
 - b. Rescue seat plate thickness
 - c. Rescue seat plate atness
 - d. Rescue seat operation / obstructions
 - e. Hold down point / turnbuckles (if fitted)
 - f. Additional fittings etc.
- Quality assurance
- Outcomes and documentation
- Delivery
- Assistance with owner discussions



Skirt Interface Assessment



Structural Analysis