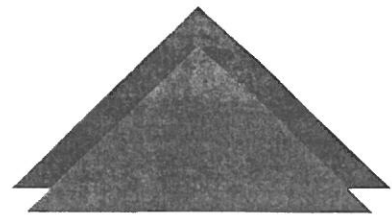


FLEETWOOD TESTING LABORATORY



ISO 9002
FS 12369

CE



**BLACKPOOL AND
THE FYLDE COLLEGE**

An Associate College of Lancaster University

DAR/FTL/442
8.6.99.

FLEETWOOD TESTING LABORATORY

**TESTS OF THE
HAMMAR
AUTOMATIC INFLATION MECHANISM
Mk 2
Commencing Batch No A119-9904/2**

**ON BEHALF OF
SAFETY TECHNICAL SERVICES LTD
10 HOLLYTREE ROAD
LIVERPOOL
L25 5PA**

THIS REPORT CONTAINS 4 PAGES

REPORT ORIGINATOR
D. RALPHSON

REPORT CHECKER
A. RAYNER.

442 Page 1

Principal & Chief Executive
R. T. Chapman

FLEETWOOD TESTING LABORATORY
FLEETWOOD NAUTICAL CAMPUS
BROADWATER, FLEETWOOD
LANCASHIRE, FY7 8JZ
Telephone (01253) 779123
Fax (01253) 770611
e-mail: ftl@blackpool.ac.uk

The Fylde Towns
Blackpool Fleetwood Garstang
Kirkham Lytham St Annes
Poulton-le-Fylde Thornton Cleveleys

NOTIFIED BODY IDENTIFICATION NUMBER 0514

Samples of a modified automatic inflator were submitted.
The batch numbers were A1199904/2 and A1219905/2

Heads No 442/1,3,4,5,6,7,9,10,11,12,13,14,and 16 were batch no A 1219905/2

Heads No 442/2,8,15,17,18,19 and 20 were batch no A1199904/2,

Tests Carried Out.

1/

10 samples fitted to test sleeves, maintained at -30°C for 8 hours and immersed in salt water at a temperature of -1°C
Time to fire recorded.

2/

10 samples fitted to test sleeves maintained at a temperature of $+65^{\circ}\text{C}$ for 8 hours and immersed in salt water at a temperature of $+30^{\circ}\text{C}$. Time to fire recorded.

3/

3 lifejackets of different manufacture were fitted with the mechanism and the "Test for Inadvertent Inflation" as described in EN 399 Para 4.18.3 carried out.

4/

One mechanism was fitted to a lifejacket bladder.
This was folded and the Rotating Shock bin test described in EN 399 Paragraph 6.9.2. carried out.



Test Results :-

1/

Time to Fire after 8 hours at -30°C

Head No	Time To Fire/ Seconds
442/11	4.3
442/12	4.9
442/13	6.00
442/14	3.93
442/15	5.01
442/16	4.6 (Very slow discharge poor puncture)
442/17	5.05
442/18	4.3
442/19	6.08
442/20	4.83

2/

Time to Fire after 8 hours at +65°C

Head No	Time To Fire /Seconds
442/1	0.8
442/2	1.7
442/3	1.56
442/4	1.63
442/5	1.36
442/6	1.53
442/7	1.40
442/8	1.39
442/9	1.37
442/10	1.40



3/

Spray Test

Tests as per EN 399 Paragraph 4.18.3 were carried out using lifejackets manufactured by Mullion, Crewsaver and Marinepool fitted with Hammar heads as supplied.

After the exposure in the spray chamber each lifejacket was immersed in water and the time to fire was as follows

Mullion	3.46 Seconds.
Crewsaver	3.10 Seconds
Marinepool	2.59 Seconds

4/

Rotating Shock Bin.

One mechanism was fitted to a lifejacket bladder
This was folded four times and taped in a parcel.
The parcel was placed in the shock bin and 150 revolutions carried out.
On completion the parcel was removed, unwrapped and immersed in water.
The time to inflation was recorded.

Time to inflation was 2 seconds.

