NEW CLAIMS

1. A safety chair (1) for a free fall lifeboat with a chair body shell (12) formed as one unitary chair body shell, including a seat portion (15) with a width Ws and a concave back portion (14) with a width Wc;
the width Ws of the seat portion (17) is less than width Wc, of the concave back portion (14)
an integrated concave reinforcement channel in the concave back portion (14);
an integrated convex reinforcement cannel in the seat portion (15) integrated side reinforcement portions at each side of the chair body shell (12); and
seat base attachment portions (16) at each side of the integrated convex reinforcement cannel of the seat portion (15). .

2. The safety chair (12) according to claim 1 wherein the concave back portion (14) terminates in an end portion (13) forming a stiffening edge along the upper part of the concave back portion (14) of the body shell (12), and wherein holes (11) for slide tubes extend through the end portion (13).

3. The safety chair (12) according to claim 1, further including a narrowed base portion (20) located at each side of a rearward portion of the seat base (16) for providing room for a seat portion (17) of a neighboring chair.

4. The safety chair (1) according to claim 1, wherein the wherin the concave back portion (14) includes an upper part and a lower part, the safety chair further including:
a seat belt system (2) with at least two shoulder straps (25, 26) with upper parts;
a head support assembly;
a slide arrangement located in the attaching the upper parts of the at least two shoulder straps (25, 26) and the head support assembly to the concave back portion (14) of the chair body shell (12) whereby the upper parts of the at least two shoulder straps (25, 26) and the head support assembly are adjustable along the concave back portion (14) between an upper position towards the upper part of the concave back portion (14) and a lower position towards the lower part of the concave back portion (14).

5. The safety chair of claim 4, further including at least one slide tube (8) extending along the concave back portion (14) for attachment of the head support assembly, and wherein the head support assembly includes a slide tube receiving portion including at least one slide tube receiving opening.

6. The safety chair of claim 5 wherein the concave back portion (14) of the channel shaped stiffening portion also serves to accommodate the at least one slide tube (8).

7. The safety chair of claim 5, wherein the slide tube receiving portion further includes a friction lock arrangement.

8. The safety chair of claim 6, wherein the at least one slide tube (8) extending along the concave back portion (14) is fixed to the a lower part of the concave back portion (14) and extends through at least one opening in the chair body shell (12) at the upper part of the concave back portion (14).

9. The safety chair of claim 4, wherein the head support assembly and the adjustable upper seat belt attachment means are interconnected for simultaneous adjustment along said concave back portion (14) between the upper position towards the upper part of the concave back portion (14) and the lower position towards the lower part of the concave back portion (14).

10. The safety chair of claim 4, wherein the upper seat belt attachment means connected to said concave back portion (14) of said body shell (12) are attached to said slide tubes (8).

11. The safety chair of claim 4, wherein the head support assembly includes side supporting elements with a head support face and a shoulder support face.

12. An assembly of at least four safety chairs (1) with safety chair (1)shell (12) of claim 1, installed in at least two lines whereof a first line with at least two chairs each having a maximum width Wc;

at least one second line of at least two chairs adjoining the first line of chairs in a staggered relationship to the first line of chairs wherein the number of lines is n; wherein a chair back portion of each of the chairs of the first line overlap a seat potion of each of the chairs of the adjoining second line; and

wherein a total width of n lines is less than n times the total width Wc of each chair.