SAFETY

# **Recognition for free-fall lifeboat**

by Paul Schaap

It has taken some 25 years before the Verhoef company's idea for a free-fall lifeboat has been fully recognized by the maritimeand offshore industry. The Cullen Report, prepared as a result of the Piper Alpha production platform disaster, itself supports the idea. This has also contributed to the fact that the free-fall lifeboat from the Aalsmeer company now sells like hotcakes.



n 1941, the experienced yacht builder, Joop Verhoef, started his own engineering works for aluminium boats in the Aalsmeer area. Several months later, he was joined by his brother Aart, 10 years younger than himself. Now, exactly 50 years further on, both employers head a flourishing concern employing about 130 people, together with their sons Martin and Joop Verhoef Jr.

The company made it's name by building all types of aluminium flat-bottomed craft, boats, yachts and other aluminium products for the shipbuilding industry such as fixed stairways, footbridges, entrance stairs, deckhouses etc. In 1947, Verhoef was also kept extremely busy with designing and building aluminium lifeboats, the first of which were destined for Norwegian clients. Since then, more than 5000 lifeboats, of all types and sizes, have already left the company's engineering works. And numerous ships, including the largest passenger ships, have meanwhile been equipped with Verhoef lifeboats. Aart Verhoef (1) and Joop Verhoef Sr. in front of the world's first ever free-fall lifeboat, built by their company in 1960 and found again 30 years later in Central America.

#### Alternative

It was evident after many shipping accidents that bad weather conditions in particular make it nearly impossible to launch a lifeboat by means of two wires, and it became ever more necessary to find a good and reliable alternative. Joop Verhoef Sr. reacted to these signals and designed the first, completely enclosed aluminium free-fall lifeboat in 1960. A boat which could be safely launched at all times, even when other ships listed in bad weather. The world's first freefall lifeboat was built by Verhoef shortly afterwards. Despite the fact that this innovative idea was given a lot of media attention, it's development hardly got off the ground.

Everything then became quiet around the free-fall lifeboat for some 20 years. But Verhoef again picked up the thread at the be-

IRO-FOCUS ON HOLLAND

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ginning of the eighties, and the idea was perfected further. In 1982, the company surprised everyone by being the first in the world to bring a lifeboat onto the market that was self-righting, even under the most extreme conditions. Even if it was full of water. A series of impressive capsizing trials, with hatches open, demonstrated that the company had a lifesaving appliance that could satisfy even the most stringent safety demands. Soon afterwards, several other impressive tests were carried out to show that the lifeboat could sail through a large expanse of burning oil. All these qualities, combined in a revolutionary type of free-fall lifeboat, made Verhoef's design something which could not be ignored.

# **First orders**

It still took a while before the conservative maritime- and offshore sector became involved. The shipowners, Chemgas, were the first by ordering a free-fall lifeboat for the tanker, Zephyr. Later, still more of these vessels would follow for the tankers Sturgeon, Salmon, Trout and Twaith among others. Several other ship owners, such as Anthony Veder, Bowker & King, Jaczon, Nigoco and Fulton Marine, followed the example of Chemgas as time went by. This meant that not only tankers, but also reefers and cargo vessels were provided with this type of freefall lifeboat.

Unocal was the first oil company to go along with Verhoef. Martin Verhoef can still remember the exact date. 'Unocal ordered from us the first free-fall lifeboat to be installed on an offshore platform in the Dutch sector of the North Sea. In this case, it meant an FI 30 type boat with a maximum rescue capacity for 25 people. The vessel was destined for the Unocal platform in the L11 block. Smit Internationale from Rotterdam followed suit shortly afterwards, by ordering three free-fall type FL 40 boats for each of the multipurpose offshore support vessels, Semi 1 and Semi 2. The next customer from the offshore sector was NAM, who ordered a boat for their L13FD platform. This oil company then did the same for a whole series of large and small gas production platforms,' Martin Verhoef then says. Verhoef's reference list shows that the NAM has already bought more than 20 free-fall boats from the company in the meantime.

## Breakthrough

The real breakthrough onto the world market was unfortunately preceded by a tragic occurrence, namely the disaster on the Piper Alpha production platform where 167 offshore workers lost their lives. The Cullen Report, prepared as a result of this disaster, supported the free-fall lifeboats from Verhoef. Various things indicated that there was now considerable interest in the Aalsmeer company's findings on the part of oil companies operating worldwide. Elf Enterprise Caledonia, currently busy developing the Piper and Saltire offshore fields in the British sector of the continental shelf, purposely selected Verhoef's idea. 'This led to an order for delivery of nine free-fall lifeboats plus one reserve boat for the Piper B production platform, and four for the Saltire production platform,' continues Martin Verhoef. 'In addition, we also delivered a boat with a launching installation to the Robert Gordon Institute in Dundee. This vessel has capacity for 45 people, and is used to familiarize the offshore workers operating in the British sector with this type of lifeboat. Following on from Elf Enterprise Caledonia, Shell Expro also wanted five free-fall boats for a production platform in the British Nelson field. Our boats really have gone over the whole world. For example, our boats are attached to the Maui A and Maui B gas production platforms supporting offshore

activities in New Zealand. Furthermore, Mobil, Elf Petroland and Amoco are also operators working in the Dutch sector who have contacted Verhoef besides Unocal and NAM, and the Dutch Maritime Training Centre in Rotterdam has purchased a free-fall lifeboat for training purposes.'

### Recognition

It's obvious that one way and another, some 25 years after the first idea, there is recognition for the work that Joop Verhoef Sr. has achieved to make the free-fall lifeboat what is is today: a much sought after type of lifesaving appliance that belongs with the safest of its sort in the world.

Nonetheless, not everything went as smoothly as the above suggests. As far as this is concerned, Martin Verhoef says: 'We certified the boat not only with the Dutch Shipping Inspectorate, but also in England and the United States. We designed the boat for the British by using an extensive trials programme, in which the boat was allowed to fall freely into the water various times from a height of 40 metres. The test details were registered by the Royal Airforce's Institute of Aviation Medicine from Farnborough, Hampshire, UK. One way and another, this also led to recognition by the Offshore Safety Division of the British Health & Safety Executive, the government instrument concerned with safety in the British offshore sector. The Civil Engineering Department of the Clemson University's College of Engineering, South Caroline, USA, has also carried out extensive test trials with the free-fall boat where the emphasis lay on acceleration tests. It became evident from the tests that the boat even satisfied the strict American CAR- and CDRR-index recommended by the IMO.'

'All these tests at home and abroad,' continues Martin Verhoef, 'have not only demanded a lot of effort from us, but also considerable investment. Nevertheless, we have indeed got a head start on possible competitors. More importantly, we are also world recordholder as regards manned fall tests. We currently have six types of free fall lifeboat available. Three of these, the FL 25, FL 30 and FL 50, have been specially developed for the offshore industry.' These versions can transport a maximum of 16, 25 and 45 people respectively.

Following recognition by various bodies at home and abroad, founder Joop Verhoef Sr will be awarded a high honour by the Dutch government during the 50-year anniversary of his company. He will in fact receive 'The Gold Ruyter Medal' from the Ministry of Transport and Public Works as a token of esteem for his invention and development of the free-fall lifeboat. An honour, indeed, that is rarely awarded.

'There was yet another surprise waiting for my father during our anniversary,' says Martin Verhoef. 'We were lucky enough to track down the first free-fall boat we ever built during the early sixties, and bring it back to The Netherlands. We found this boat, which was in fact still in very good condition, in the Central American Republic of Belize. We then secretly completely spruced up the boat and unveiled it in its full glory during our anniversary celebrations. For our founder in particular, it was a very emotional occasion. It was striking that, after so many years roaming the whole world, the boat still looked so good. That really says something about the use of aluminium for manufacturing high quality lifesaving appliances,' concluded Verhoef, whose company's work has again made it that much safer at sea.



The new NAM L2 gas production platform (insert) is also equipped with an aluminium free-fall lifeboat from Verhoef. (Photo: Hans Janson)

