

MAKING SAR BOATS EFFICIENT IN HARSH  
ENVIROMENT



PER-EGON PERSSON

SWEDISH SEA RESCUE SOCIETY



# 11 & 12 M SEA RESCUE BOATS BUILT AND DEVELOPED UNDER 20 YEARS



***HighSpeedBoat2016***  
***OperationsForum***  
***Göteborg***



# SWEDEN

The Swedish coast stretches from the border to Norway in the west to the border of Finland in the north, in all more than 2400 kilometres. Thousands of islands dot the coastline. Only on the West Coast, where we are now, we have more than 8,000 islands with a bustling, boating lifestyle.





Most of Sweden has a typical continental climate with a moderate to large temperature range between summer and winter.

The only exception to this is the southwest part of the country from Göteborg to Malmö, where winter temperatures are modified by an open ocean which rarely freezes.

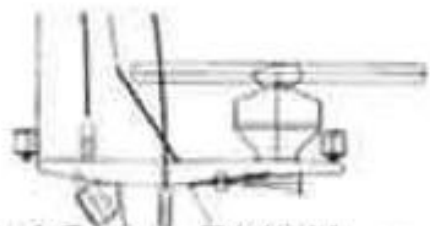
The enclosed waters of the Baltic Sea often freeze, in whole or in part, during winter. Therefore the east coast of Sweden is much colder, particularly towards the north where the waters of the Gulf of Bothnia freeze each winter.



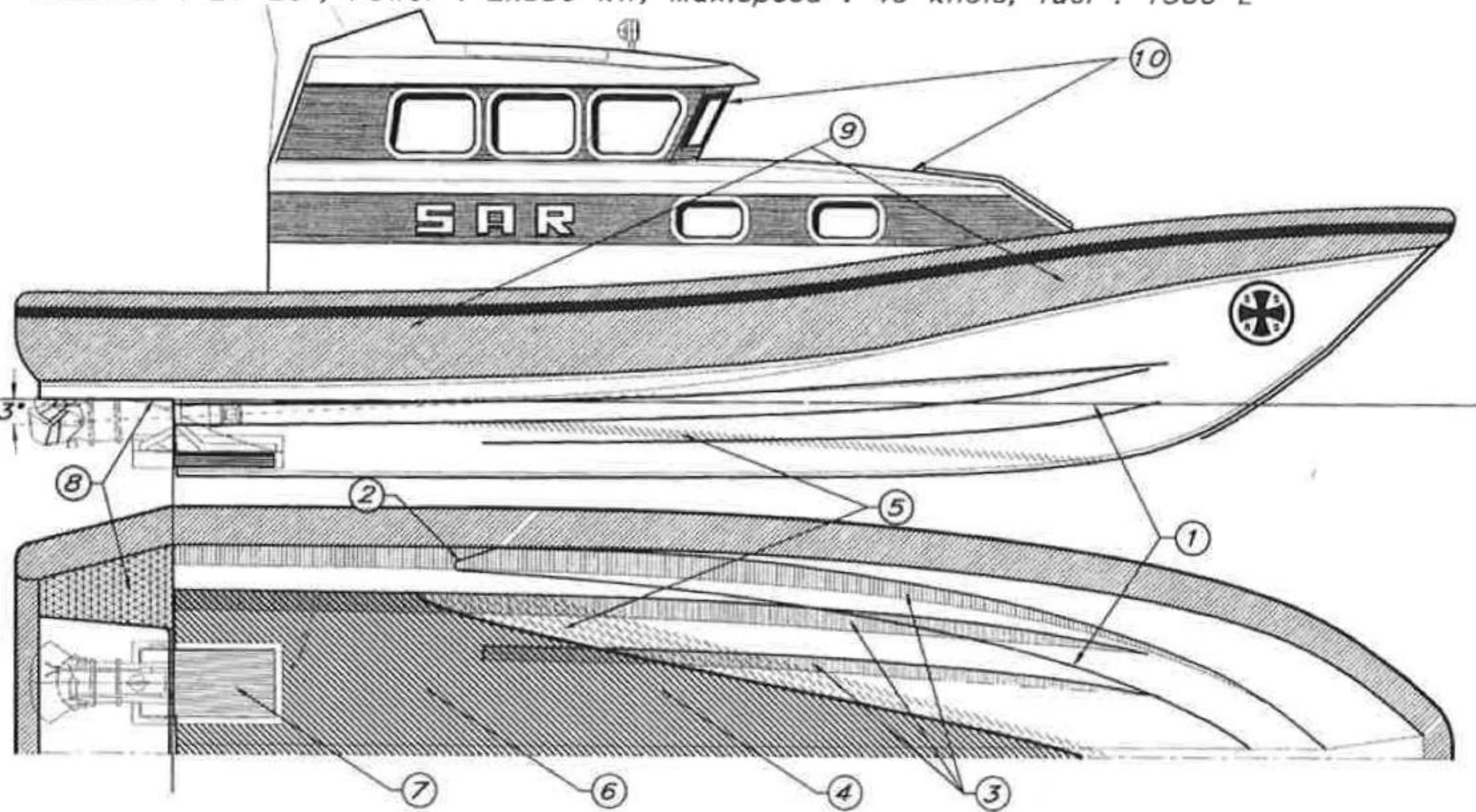
**Okay! Now we know where we are. In the northern latitude between 55 degrees and 69 degrees north and we had to build rescue boats for our waters. 35 knots' all weather boats.**

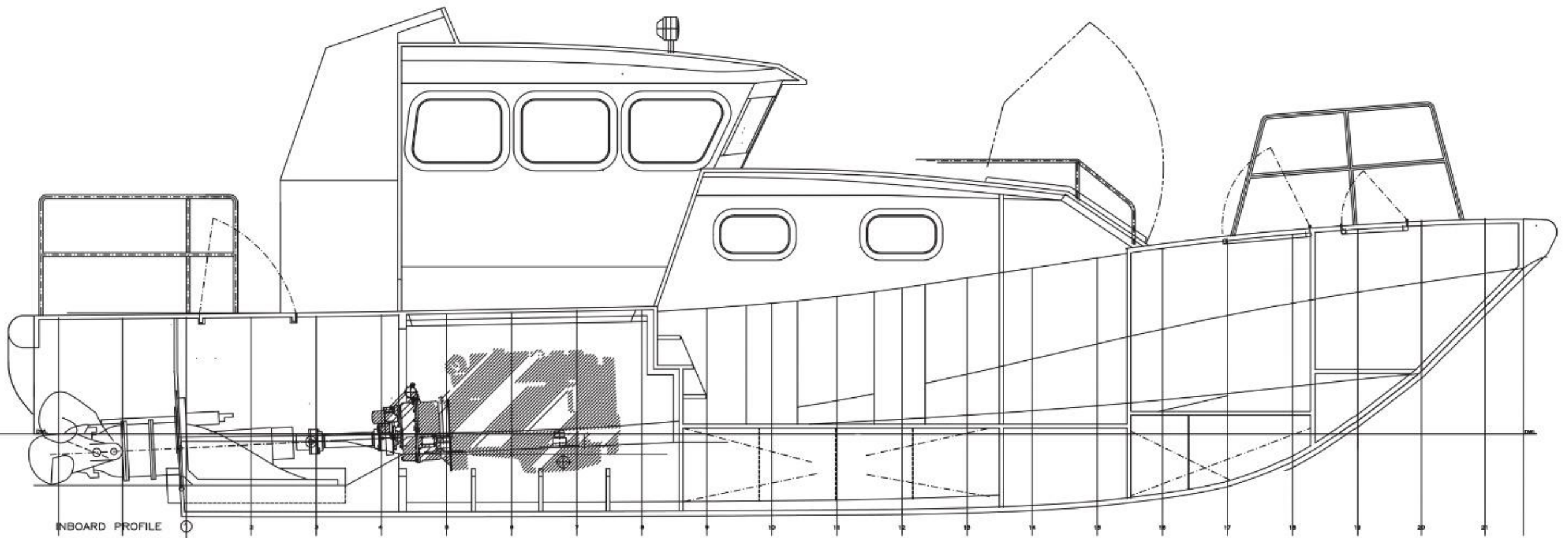




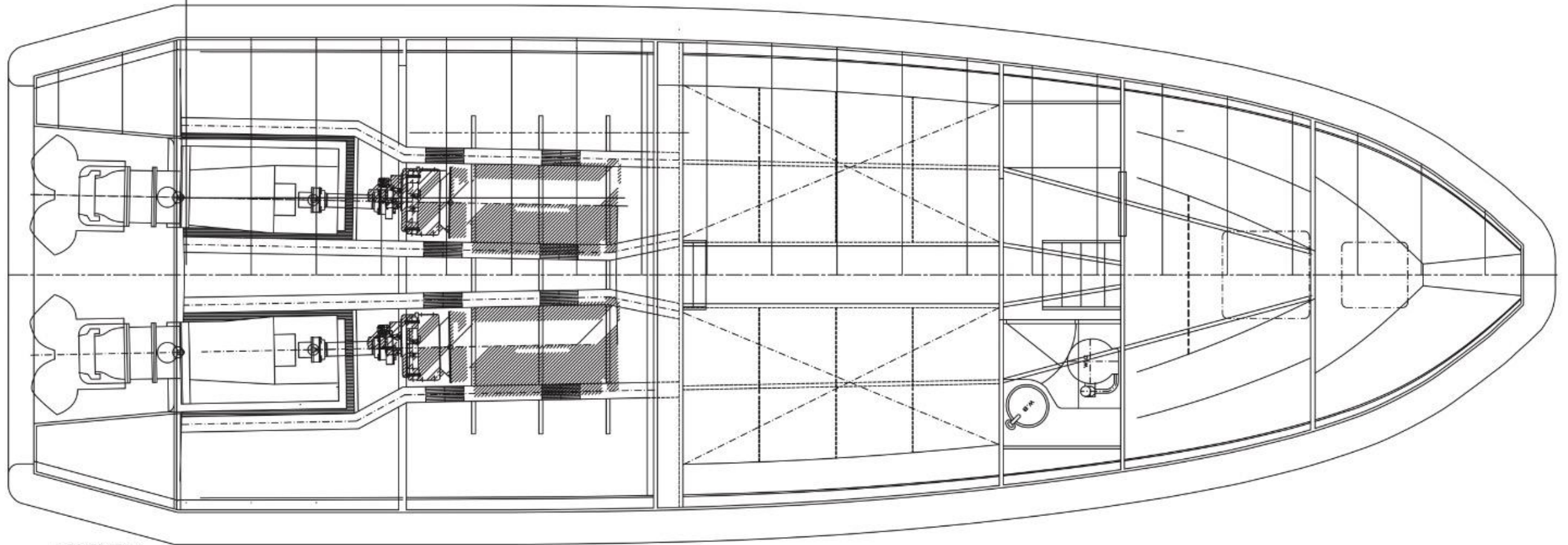


LOA = 12.12m, BMAX = 4.20m,  $T_c = 0.65m$ , Displ = 9.75 tonnes (light cond.)  
Deadrise : 21-23°, Power : 2x330 kW, Max.speed : 40 knots, fuel : 1500 L





INBOARD PROFILE



INBOARD PLAN









STÖRÄMNING  
MARC ALLENBERG JR.



# SSRS 12

- The 12 meter rescue craft has been built in more than 37 units for SSRS and is also operated by several other rescue societies. The “Victoria Class” is designed for operations at open sea, along the coasts and in the archipelagos.
- The hull is self-righting. The waterjet propulsion allows for operation in shallow waters and have very good manouverability. The design has nowadays an overzised driveline, That makes the boat more efficiant and have less maintenance for the volantery crew.



# SSRS 12

- The 12 meter high speed rescue boat's hull is designed for an operating speed up to 40 knots. To get a smoother ride in head sea there is a built in trim tank in the front. broaching in following sea will be reduced as center of gravity is far aft. In the past we had trim Tabs but nowadays we have interceptors to adjust the trim.



## 12 m High Speed Rescue Craft - Data

Length o.a:	11.95 m
Length hull:	11.65 m
Beam o.a:	4.20 m
Beam hull:	3.70 m
Displ:	14 ton with full stores
Hull draft:	0.70 m
Top speed:	38 knots
Bollard pull:	3.2 ton
Range:	10 hrs – 33 knots

Engines  
Waterjets

Scania or Volvo  
Rolls Royce FF 375

2 X 500 Hp























# SSRS II

- Based on the larger 12 m the SSRS II m is developed to be a craft with small environmental footprints.
- The hull is equipped with a ballast tank that is filled under 8 knots. The tank is automatically emptied at higher speeds. This gives the wanted stability when lying still and at low ship speeds and also better fuel economy and lower waves at transit and top speeds. In collaboration with the Chalmers University of Technology a study has been made targeting a safer and better working environment for the crew.





**SJÖRÄDDNING**





**SJÖRÄDDNING**

ATLANTICA  
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FURUNO

SUZUKI

SUZUKI





**SJÖRÄDDNING**

**SAR**



# SSRS I I

Length:	11.6 m
Width:	4.0 m
Draft:	0.6 m
Material:	FRP composite
Displacement:	6 ton
Engines:	2 x 300 hk OBM with electronic control
Speed:	34 knots
Operation:	approx. 10 h
Crew:	3-4 people

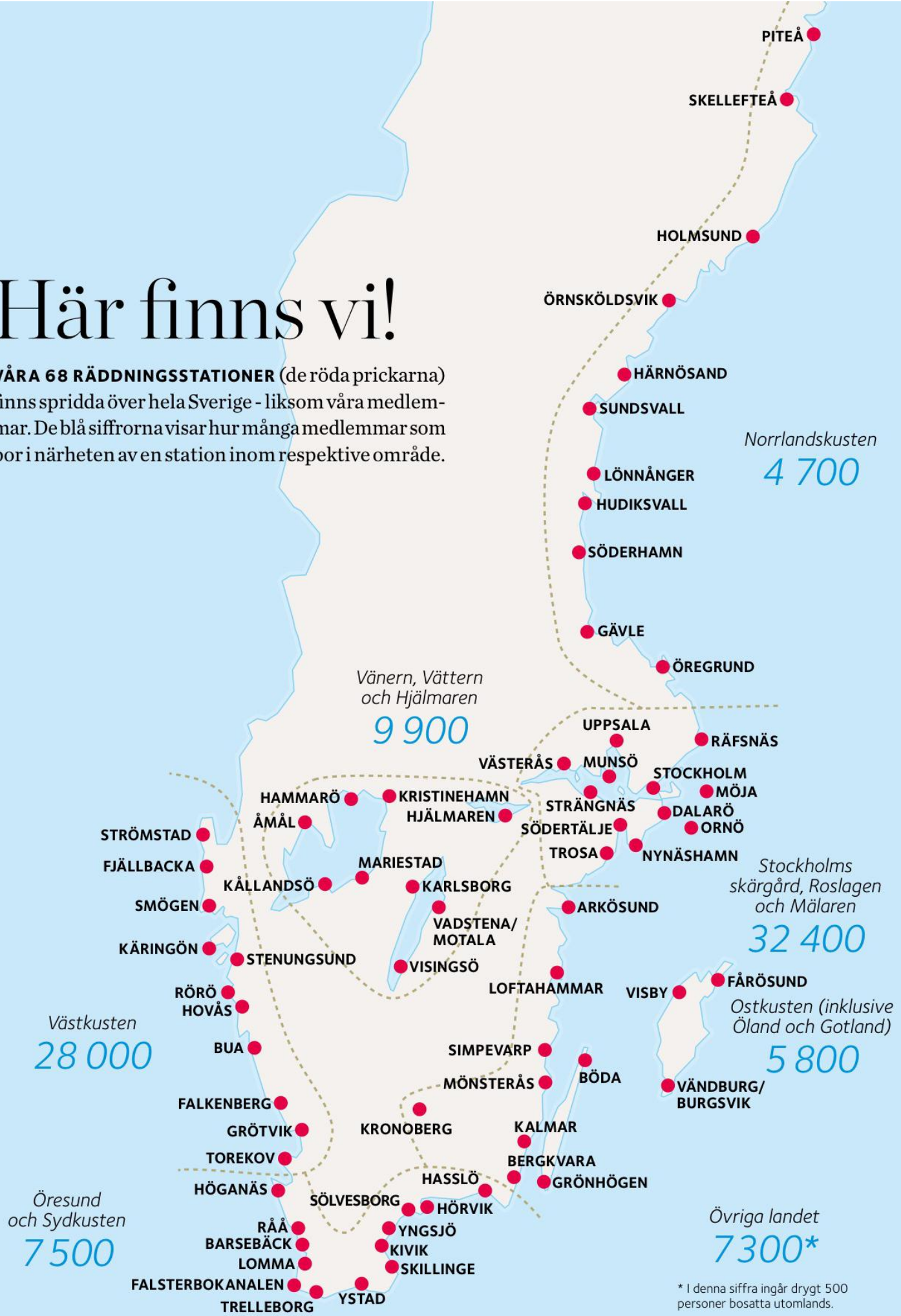






# Här finns vi!

VÅRA 68 RÄDDNINGSTATIONER (de röda prickarna) finns spridda över hela Sverige - liksom våra medlemmar. De blå siffrorna visar hur många medlemmar som bor i närheten av en station inom respektive område.



\* I denna siffra ingår drygt 500 personer bosatta utomlands.



SSRS rodlivbåt "HJÄLPAREN", byggd 1907.













