



S-300 Marine Unit Patrol Boat

Barnstable County Sheriff's Office

Acquired through successful competition in the 2014 Port Security Grant Program, S-300 is the Barnstable County Sheriff's Office custom made 31' Patrol Boat. Built by SAFE Boats International of Bremerton, WA., creators of the highly successful USCG Defender Class RBS. S-300 was delivered in December of 2015 and will be fully operational in the late winter of 2016. Complete with a full communications package and marine electronics, S-300 is capable of meeting the most demanding mission requirements for a boat of her size and class in today's maritime domain.



MISSION CAPABLE:

With a capacity of 300 gallons of fuel, S-300 has an operating limit that exceeds 6 hours and range of 300+ miles (time and range will vary with operating conditions). Dual 300 HP 4-Stroke Yamaha engines ensure reliable operation and provide rapid response capability with speeds in excess of 40 knots. At the crew's disposal are dual 12" Multi-Function Displays providing Navigational, Radar, Sidevision Sonar, Downvision Sonar, FLIR Thermal Infra-Red, Lowlight / Daylight Video, AIS and Engine information. Mobile data from CJS and streaming video is also possible due to the integrated mission rated cellular data modem. The cabin is fitted with a 120 CFM CBRN rated filtration system, allowing the crew to work in the harshest environments with the Thermo Scientific PackEye Radiation Detection system.

S-300 is supplied with a custom trailer and has a tow vehicle dedicated to get her wherever she needs to be in Southeastern Massachusetts.

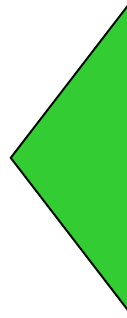




MISSION READY:

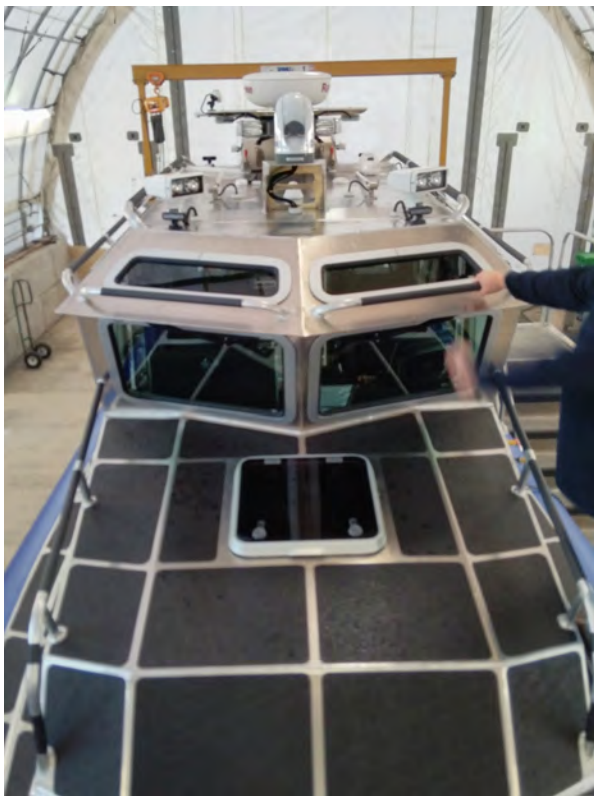
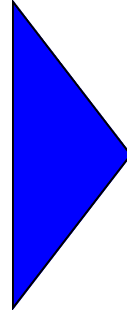
Full Communications suite with redundancy covering all Cape & Islands Public Safety Channels, plus Marine VHF.

Dual GPS receivers and Class B AIS.



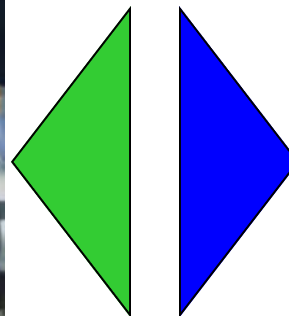
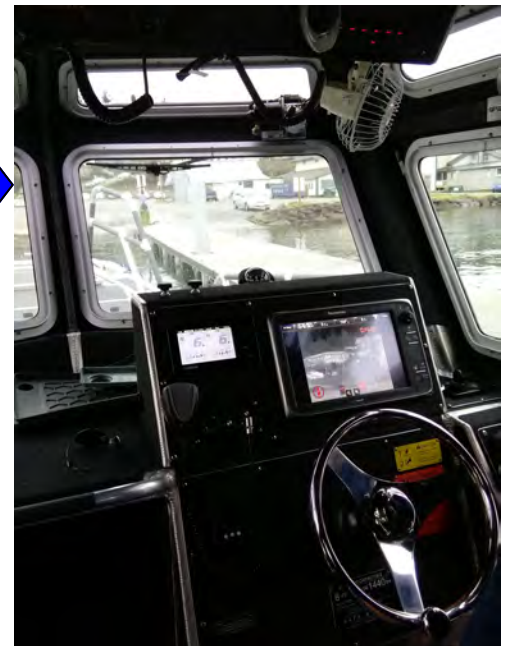
CREW READY:

Crew Endurance is enhanced by dual SHOXS seats, provide shock mitigation and decreasing physical Impact on crew.



VESSEL READY:

Ready for Day or Night Operation, S-300 has been configured for operations in all conditions, year round.



RADIATION DETECTION:

The Thermo Scientific™ FHT 1377 GN-2 PackEye provides survey teams with a tool for effectively addressing the problems of orphaned sources, radiation contamination, and sources for malicious intent. By virtue of the proprietary NBR-technology (Natural Background Rejection) extremely low contributions of artificial gamma radiation are quickly detected, even with larger fluctuations of the natural gamma background radiation.



The NBR measurement method has been developed by Thermo Fisher Scientific for extremely fast discrimination between natural and artificial gamma radiation. Worldwide, more than 10,000 devices based on this technology are in use.

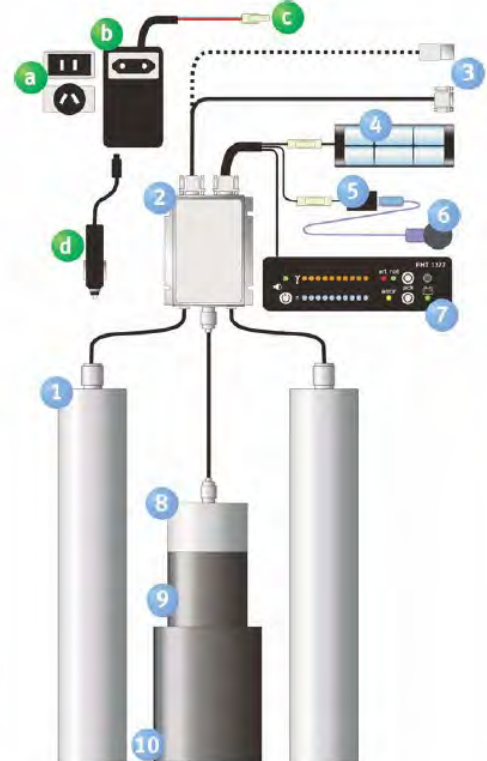
Unlike conventional spectroscopic based gamma identification systems, the systems using NBR do not require the presence and resolution of gamma spectral peaks, and unlike Sodium Iodide detectors, NBR detectors are stable at varying temperatures and for many years of real field use, with no regular re-optimization or stabilization with sources required.

Because of this flexibility, NBR can also definitively distinguish artificial high energy beta sources and heavily shielded gamma ray sources from fluctuating natural background sources. Thus alarm levels in the order of 1 μ R/h are achieved for SNM or heavily shielded industrial sources in outdoor environment. Such sources may be used in Radiation Dispersal Devices (RDD's) known as "dirty bombs". Artificial gamma radiation sources are identified in seconds by operators with basic training levels. Presence of artificial gamma radiation is simply indicated by a red flashing light and an audible alarm.

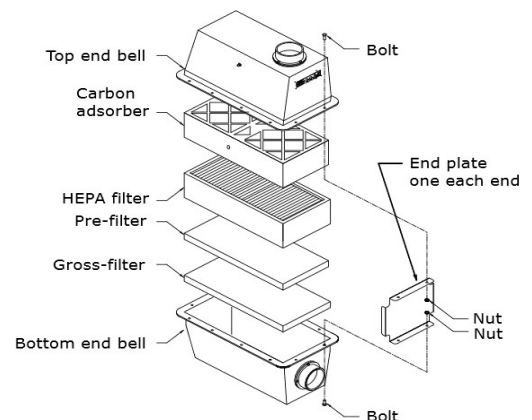
The addition of the ASR-200-AV-NBC Safe Cell cabin overpressure NBC/CBRN filtration system allows the vessel to operate in contaminated areas.

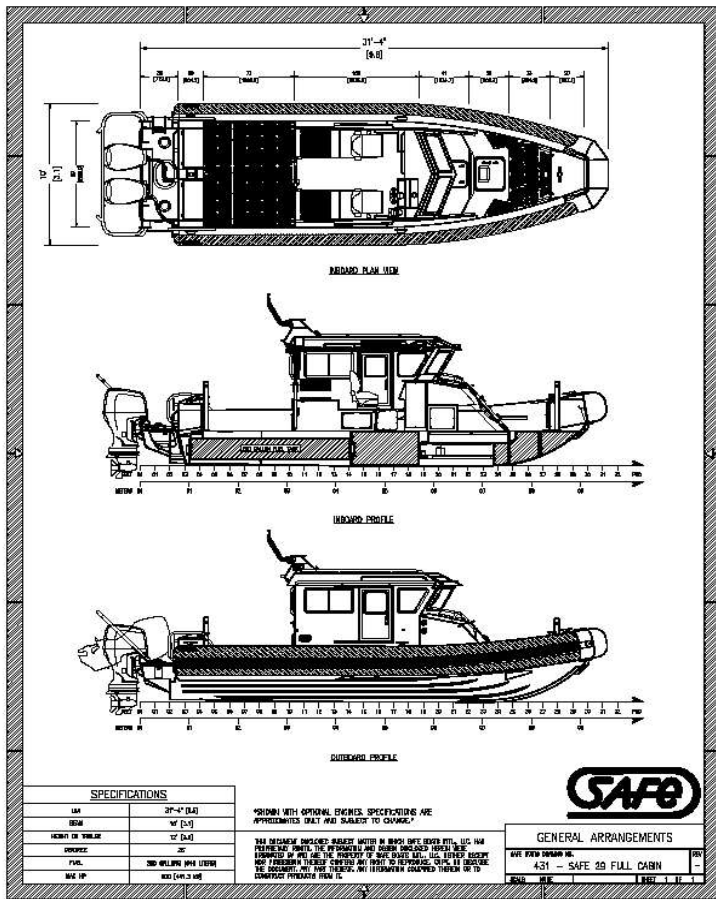
HEPA filter cell: As developed by the Atomic Energy Commission and used in nuclear power stations, hospitals and bio-containment laboratories.

Guaranteed Performance: Each HEPA filter is individually tested before it leaves the factory, your assurance that it meets rated efficiency. The penetration and actual airflow rate are indicated on the label. Each filter is also assigned a serial number.



ASR-200-AV-NBC Safe Cell
Installation and Operation Manual
Revision B - November 11, 2012





Specifications:

31' Full Cabin SAFE Boat

Length: 31' + O/B Bracket = 33.6' LOA Inside Length: 30'

Transom Height/Shaft Length: 30"

Beam: 10 Feet - Inside Beam: 84 Inches

Normal Crew: 3

Person Capacity: 18

Fuel Capacity: 300 U.S. Gallons

MAX HP: 600

Armament:

Armed Officers / Crew

Remington 870 Shot Gun

Armalite M-4 Carbine

Communications:

Two (2) Motorola APX6500 800MHz

One (1) Motorola APX7500 Dual Band VHF/UHF

One (1) iCom IC-M506 Marine VHF with DSC

One (1) CalAmp Fusion Mission-Critical Multi-Network LTE Router (Cell Network Modem)

Raymarine AIS650 - Class B Transceiver

EPIRB - Category 1 ACR 2846 Global Fix iPRO

Electronics:

Thermo Scientific PackEye Radiation Detection Monitor

FLIR M-625L Dual Load Infra Red Thermal Camera

Deck Scan 20/20 Reverse Image Day/Night Camera

KVH AUTOCOMP 1000 Heading Sensor

Dual ACR RCL-100D REMOTE CONTROL SEARCHLIGHT

200,000 CANDELA

Dual Raymarine 125/127 Multifunction Displays Chartplotters

Raymarine RD424D 24IN 4KW DIGITAL RADOME SCANNER

Raymarine CP200 CHIRP Sidevision Sonar with CPT-200 CHIRP Sidevision Transducer

Raymarine CP100 CHIRP Downvision Sonar with CPT-100 CHIRP Downvision Transducer

Safety:

Whelan Mini Ultra Edge Emergency Lights

Whelan 100 Watt Siren and Loudhailer

Four (4) 600 Lumens LED Flood Lights

300' Tow Line 3/4"

SS Collapsible Stokes Litter

(3) 2.5 Lb Fire Extinguisher, One 10 Lb Sodium BiCarbonate



FILTER SPECIFICATIONS:

Protects personnel against fallout particles, toxic aerosols, and biological warfare agents. CERTIFIED TO MEET OR EXCEED MIL F 51079-1998

The nuclear grade media furnished in these filters is certified to meet the requirements of the: Israeli Ministry of Defense and the U.S. Army.

MIL-F-51079D as required in the US Army document for: Design Of Collective Protection Shelters To Resist Chemical, Biological and

Radiological (CBR) Agents, Us Army Corps of Engineers ELT 1110-3-498 24 Feb. 1999. EN 1822-1-1998

High efficiency air filters: Classification,

Performance testing and marking.

Media: Water repellent glass micro fiber 99.97% true HEPA type (A).

Factory Test Certified 99.97% (DOP) UL 866 Label Required