

Ferguson Group Accommodation Service Vessel ASV Pioneer





The Ferguson Group

The Ferguson Group had its beginnings in Aberdeenshire, Scotland, over 35 years ago and today has grown to one of the world's leading suppliers of containers, accommodation and workspace modules and accommodation service vessels to the offshore energy industry, with many onshore applications too.

The main bases are located in the UK, Norway, Australia, Singapore and UAE.

Today the Ferguson Group supplies high quality containers and modules around the world, working closely with partners in many areas, extending the global reach of the Ferguson name and products.

All our containers and modules are manufactured to DNV 2.7-1 standards and the Ferguson Group has pioneered the acceptance of these safety standards in every area in which it operates.

The Ferguson Group - global reach with service local to you.

Accommodation Service Vessel

ASV Pioneer

ASV Pioneer is a versatile offshore accommodation solution which is unique in the marketplace. Built to the highest quality and safety standards it offers unprecedented flexibility of accommodation configuration and a large open deck space capable of a multitude of uses to support the offshore oil and gas or renewable energy industries.

The vessel is an evolution of over 35 years of experience of the Ferguson Group providing high quality offshore accommodation and workspace modules and transportation containers to locations worldwide.

ASV Pioneer currently has accommodation for 120 POB in well appointed en-suite rooms, and is complete with office, galley, mess, medical and recreational facilities, to provide an ideal living and working environment.

This brochure outlines the full specification of the vessel as originally built, but we welcome all enquiries for specifications to which it could be adapted, whether for flexibility of POB accommodation numbers, or the large range of uses for which the deck space is ideally suited.

When you have read the specification please get in touch and discuss your own specific requirements, you will find Ferguson Group to be very accommodating people.

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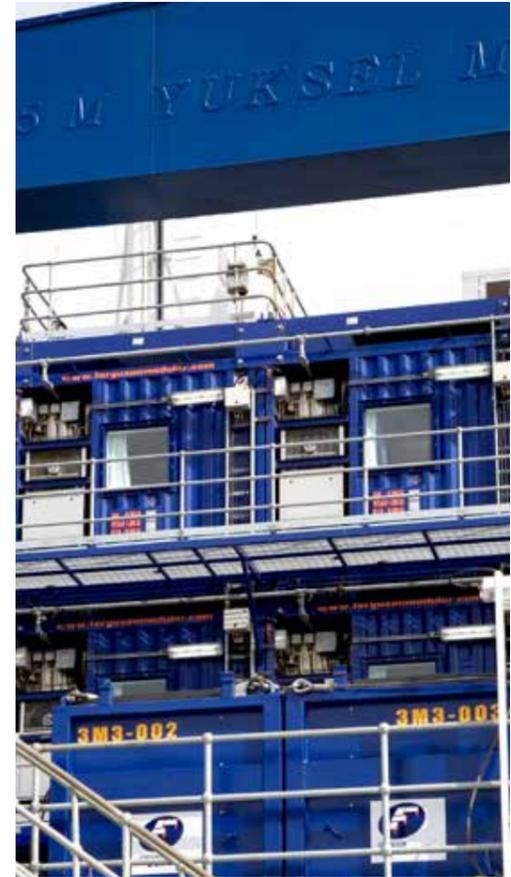




2 Accommodation Service Vessel

Principal Particulars Summary

Type of Barge:	+A1, Barge + Notation 'Accommodation Barge'
Port of Registry:	MPA Singapore – Registrar of Singapore Ships
Classification:	American Bureau of Shipping (ABS)
Built:	2007, Nantong Tongcheng Ship Manufacturing Co. Ltd., modified 2010/11
Length:	100.6 metres
Breadth:	30.48 metres
Depth:	6.09 metres
Maximum Draft:	3.82 metres
Gross Tonnage:	4953
Net Tonnage:	1485
Deck Capacity:	15 tonnes/m2
Free Deck Area:	1100 m2
Fresh Water Capacity:	1360 m3
Fuel Oil:	600 m3
Load Line:	International Load Line certificate valid until 23rd August 2012
Main Generators:	3 x 900 kW at 440 v 60 Hz 3 ph
Emergency Generator:	1 x 900 kW at 440 v 60 Hz 3 ph
Mezz Deck Service Crane:	7.5 tonnes at 25 metres maximum lifting capacity
Mooring:	8 point mooring system, 4 x 100 tonne double drum winches equipped with 1100 metres x 58 mm wire, tension monitoring system and local and remote control facilities. 8 x 7 tonne anchors
Gangway:	2 position gangway port side
Boat Landings:	Port and stbd
Rescue Boat:	Davit Launch rescue boat – stbd side
Watermaker:	Capacity up to 290 tonnes per day
Galley:	Fully equipped, state of the art, galley and mess room
Accommodation:	Serviced accommodation for up to 220 POB



1 General

1.1 Introduction

This Outline Technical Specification provides a summary of the Ferguson Group Accommodation Service Vessel. ASV Pioneer is designed to comfortably accommodate 220 POB working personnel.

1.2 Classification and Regulations

- [1] IMO Code for the Construction and Equipment of Mobile Offshore Drilling Units, Consolidated Edition 2001
- [2] ABS Rules for Building and Classing Steel Barges
- [3] Solas Chapter III – Life saving Appliances and Arrangements

1.3 Building Standards

The Accommodation Vessel was built, outfitted and surveyed in accordance with the American Bureau of Shipping's relative Rules and applicable Regulatory Requirements as specified in references [1-3] above.

1.4 Vessel Safety Case

Under preparation.





High Standards of Accommodation

Ferguson Modular has a reputation for high quality and safety standards across our entire product range. The units which comprise the accommodation complex on ASV Pioneer are all DNV 2.7-1 A60 modules encompassing the best of our design and manufacturing principles.

- High structural integrity through excellent design and quality materials.
- Safety First - with the Ferguson Programmable Logic Controller (PLC) fire and gas detection system.
- Air conditioning standard, with individual controls for each cabin area for maximum comfort.
- Under floor heating in the spacious and easy to keep clean 'en-suite' facilities.
- Quiet and comfortable living quarter facilities, a place to rest and relax after a hard shift.

The accommodation facilities also include a medic suite, gymnasium and sauna, recreational space, large galley and 84 person mess room, laundry, offices and all the facilities required for offshore operations.

Flexibility to meet customer needs

ASV Pioneer is ground breaking in its capability to adapt its accommodation to suit client needs. Although currently configured to accommodate 120 POB, this can be re-configured for up to 220 POB, depending on your requirements.

Each cabin is currently fitted out with bunks for 2 persons, but they can easily be fitted with an additional bed or bunks to accommodate 3 or 4 persons.

The vessel has been designed with ancillary facilities capable of operating smoothly with maximum 220 POB capacity, making ASV Pioneer unique in the marketplace and an ideal accommodation support solution for many projects in the offshore oil and gas or renewable sectors.



3 Accommodation Complex

3.1 Accommodation

The accommodation complex comprises 60 x 2 person cabins (upgradeable to 4 person cabins) complete with en-suite facilities.

The contents of accommodation complex stacks are as follows:

3.1.1 Stack 1 – Level 1

Is comprised of galley, 84 seat mess room, food stores, w/c and locker room.

3.1.2 Stack 1 - Levels 2 and 3:

30 x 2 person cabins each equipped with en-suite facilities.
2 x janitors stores (1 on each level).

3.1.3 Stack 2 – Level 1:

Is comprised of laundry, bond store, recreation space, fully equipped gym, medical rooms and locker rooms.

3.1.4 Stack 2 – Levels 2 and 3:

30 x 2 person cabins each equipped with en-suite facilities.
2 x janitors stores (1 on each level).

3.1.5 Mezzanine Deck:

1 x control / radio room.

3.1.6 Mezzanine Deck Galley Storage Containers

Three (3) galley storage containers are located on the mezzanine deck, one each of the following units (The provision of these items is subject to contract requirements):

- Dry Store Container
- Refrigerated Container
- Freezer Container (split for storage of meat and fish)



Versatile Deckspace

A major asset of ASV Pioneer is the large open deck area of 1100m², with a load capacity of 15 tonnes/m². This means that the vessel can carry large deck loads for oil and gas service support, or potentially a cable lay carousel and associated equipment for the renewable sector. The on-board mezzanine deck service crane has a maximum lifting capability of 7.5 tonnes at 25 metres.





4.3 Mezzanine Deck Service Crane

7.5 tonnes at 25 metres maximum lifting capacity.

4.4 Sewage Treatment Plant

Type: OMNIPURE 12MXMP
No. Units: 2
Capacity (Persons): 250 persons (black water), 120 persons (black & grey water)
Treatment Capacity: 28,390 litres of human wastewater per day
Treatment Flow Rate: Average @ 5.21 GPM (19.70 LPM)
 Surge @ 15.62 GPM (59.10 LPM)
Electrical: 18 kVA (220-460 VAC, 50/60 Hz 3 ph)
Seawater: Filtered, 5.0 GPM (18.9 LPM)
 @ 100 psig max (6.9 Bar)
Utility Air: 1 SCFM (1.70 metres³/min) @ 6 psig (0.4 Bar)

4.5 Reverse Osmosis Plant

Type: Danfoss North Sea 121metres³/D2 type
No. Units: 2
Capacity: 5,047 litres/hour
Electrical: 220-460 VAC, 50/60 Hz 3 ph



4 Machinery Particulars

4.1 Diesel Generators

Marine Service Diesel Generators (3): 900 kW at 440 v 60 Hz 3 ph
Make: Cummins Diesel
Type: KTA38D (M1)
Speed: 1800 rpm
Cont. power ISO3046: 888 kWm
Cycle of the engine: 4 cycles
Type of injection: Direct
Aspiration: Turbocharged / Aftercooled
Cylinders/configuration: 12(V) formation
Bore: 159 mm
Stroke: 159 mm
Displacement: 38 litre
Type of cooling: Water
Consumption at full load: 185 litres/hour

4.2 Emergency Generator

Marine Service Diesel Generator (1): 900 kW at 440 v 60 Hz 3 ph
Make: Cummins Diesel
Type: KTA38D (M1)
Speed: 1800 rpm
Cont. power ISO3046: 888 kWm
Cycle of the engine: 4 cycles
Type of injection: Direct
Aspiration: Turbocharged / Aftercooled
Cylinders/configuration: 12(V) formation
Bore: 159 mm
Stroke: 159 mm
Displacement: 38 litre
Type of cooling: Water
Consumption at full load: 185 litres/hour





5 Fresh Water and Fuel Tanks

5.1 Fresh Water Tanks

Fresh water tank no.1 capacity: 680 m3 (hull tank)
Fresh water tank no.2 capacity: 680 m3 (hull tank)

5.2 Diesel Storage Tank

Diesel storage tank capacity: 600 m3 (hull tank)

5.3 Diesel Day Tank Generator No's 1, 2 & 3

Diesel day tank generator capacity: 3.5 m3 (12hrs) ea.
(Generator accessory)

5.4 Diesel Day Tank Emergency Generator

Diesel day tank emergency generator capacity: 3.5 m3 (18hrs)
(Emergency generator accessory)

5.5 Sewage Treatment Holding Tank

Sewage treatment holding tank capacity: 680 m3 (hull tank)

6 Systems

The vessel is equipped with the following integral utility systems;

- Fresh Water System
- Sea Water System
- Black & Grey Water System
- Fuel System
- Compressed Air System
- Fire Main System
- Control & Alarm System
- Fire, Smoke & Gas Detection System
- Navigation, Communication & Computer Systems
- Public Address System & Telecoms
- HVAC System

7 Workshop/Storage Container

The vessel is also equipped with a workshop and storage facility, suitable for carrying out minor maintenance & repair works and storage of essential spare parts.





8 Mooring and Towing Equipment

8.1 Mooring Winches

Model:	ACE Winches 4 complete units
Type:	Double drum mooring winches c/w spooling devices, independent drum operation
Drum capacity:	Approx. 1160 metres of Ø58 mm wire on 9 layers at 2120 diameter
Drum pull (1st layer):	104 tonnes
Drum pull (top layer):	57 tonnes
Drum parking brake type:	Band brake system
Parking brake holding load:	202.5 tonnes (layer 1), 114 tonnes (layer 9)
Speed:	2 speed hydraulic motor, 100% and 33% displacement
Power requirement:	150 Kw per winch
Maximum oil flow:	330 litres per minute
Maximum pressure:	240 bar

8.2 Horizontal Pedestal Sheaves

Capacity:	MBL 200 tonnes
No. off:	4

8.3 Goose Neck Fairleads

Capacity:	MBL 200 tonnes
No. off:	8

8.4 Towing Equipment

Smit brackets:	2 x 102 tonnes SWL, fwd and aft (P&S)
Pennant wires:	Ø42 mm x 18 metres, 6x36+IWRC galvanized steel wire rope, mechanically spliced with 414 thimbles both ends
Bridle wires:	Ø42 mm x 18 metres, 6x36+IWRC galvanized steel wire rope, mechanically spliced with 414 thimbles both ends
Studless chaffing chain:	Ø52 mm, Grade 2, 1480 kN MBL
Delta plate:	SWL 25 tonnes

9 Vessel Fenders

9.1 Side Shell Fender Plate

The upper strake of side shell plating is protected by a 1000 mm x 16 mm continuous fender plate at the port and starboard sides.

9.2 Side Shell Fenders

The vessel is provided with 8 Yokohama pneumatic fenders complete with chain and tyre nets.

10 Mooring System Anchors

10.1 Operational Mooring Anchors

The vessel is fitted with 8 x 7 tonne Delta Flipper anchors located on hull anchor racks. Anchor buoys are included.

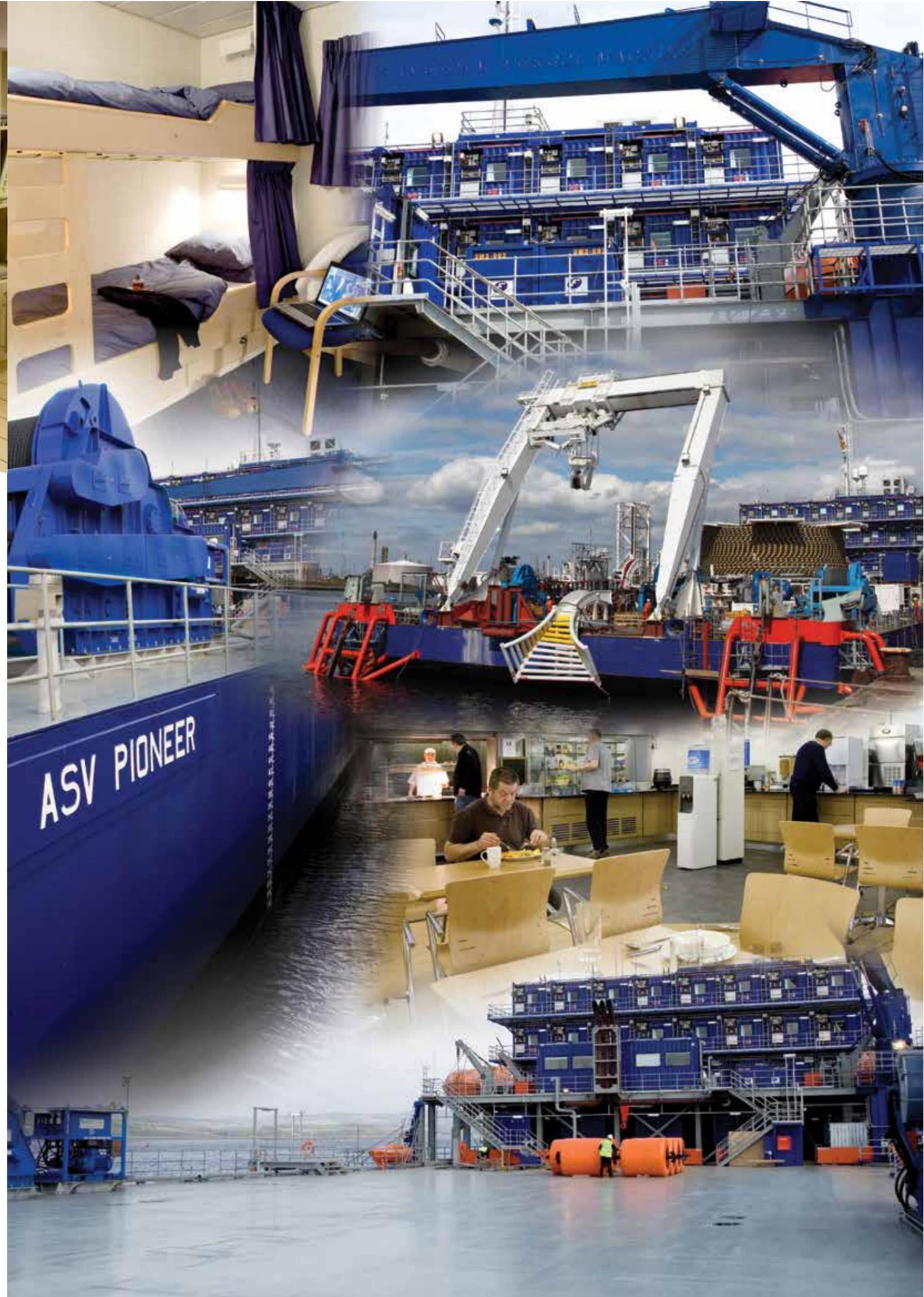
11 Life Saving Appliances and Pennants

11.1 Life Boats and Gravity Davits

2 no. totally enclosed lifeboats located one port and one starboard, access from the mezzanine deck.

Manufacturer:	Jiangyin Neptune Marine Appliance Co Ltd., China
Type:	MSD95F (NPT95F)
Dimensions:	(L) 9.50 metres x (B) 3.60 metres x (D) 1.25 metres
Capacity:	100 persons
Engine Type:	380J-3; 20.6 kW x 2800 rpm; s/n061400
Weight (unladen):	5000 kg
Launching Davits:	138DL Gravity Luffing Arm Type





Summary

The Ferguson ASV Pioneer is the first of a new breed of offshore accommodation service vessels from one of the most respected offshore accommodation and container organisations in the world - The Ferguson Group.

It has been designed and built with all the care and high standards you expect from a company which leads the way in promoting high HSEQ standards in every location in which we operate.

Our experience with supplying and hooking up many offshore accommodation complexes means that we are very aware of the requirements of the industry. We have therefore been able to incorporate many features into ASV Pioneer which we believe makes it the best of its kind available today.

ASV Pioneer also offers a new level of 'customer friendly' flexibility in its accommodation and working space. No longer do you need to adapt your requirements to an available vessel, we will adapt the ASV Pioneer to suit you.

When you are planning a project requiring offshore accommodation for up to 220 POB and a large, usable deck space, contact Ferguson Group to discuss the availability and flexibility of ASV Pioneer.

Further Information

For further information about ASV Pioneer, or to arrange a visit and tour of the vessel please contact us at:

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