
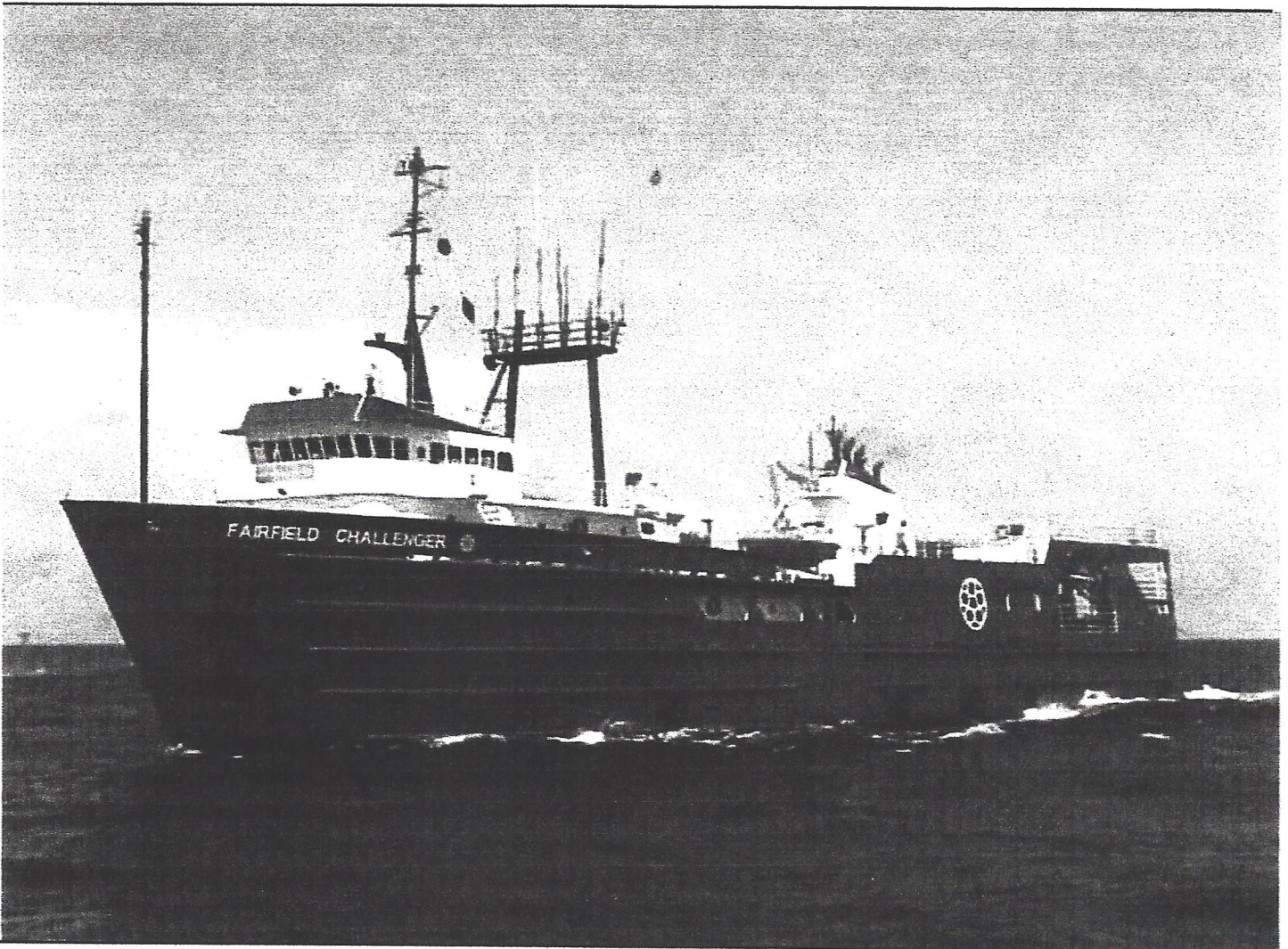



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MMSI # 367056202



## VESSEL SPECIFICATIONS


Ship's name	Fairfield Challenger
Owner	Fairfield Industries
Year re-built	2009 (Fairfield Industries)
Year re-built	1996
Year built / at	1984 North American Shipyard / Larose, Louisiana
Hull Number	129
Previous name	C-Explorer
Type	Seismic Research Vessel

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Official number	670533
IMO no.	8428571
Call sign	WDC6422
Flag	USA
Port of registry	Houston, Texas USA
Classification society	ABS / SOLAS
Class assigned	A1, AMS
Class Number	8402795
Length overall	67.36 meters
Length between perpendiculars	63.7 meters
Breadth (molded)	14 meters
Depth (molded)	4.9 meters
Draft (Max)	4.8 meters
Gross Tonnage ( US regulatory )	299 US
Gross Tonnage (International )	2231 ITC
Net Tonnage ( US regulatory )	203 US
Net Tonnage ( International )	669 ITC
Helideck rating	SK 76 C+
Speed Max, Calm sea state	9 Knots
Speed Economy, Calm sea state	5 Knots
Daily Consumption (Transit )	2500 US gallons
Daily Consumption (Working )	2500 US gallons
Transit Endurance	75
Operational Endurance	60 Days
Last dry docking	June 2012

## Radio Comm. & Navigation Aids


GMDSS	1 suite
VHF DCS (2)	Furuno VHF-FM 88005 marine radios. DSC capable. Serial Numbers 3565-4504 & 3565-4505.
INMARSAT: Mini C	Furuno Felcom 15 s/n 3561-4520
GMDSS Survival Radio (3)	Product # 2726A
VHF(4)	Standard Horizon handheld VHF's. Model Number Submersible HX750S.
Radar	Furuno, FAR - 2117. Type MU 201 CR. Serial Number 1445. ARPA & AIS Integrated.
Radar	Furuno FAR-2127, Type MU-190. Serial Number 8073 -0734.
Email (Master)	Challenger <a href="mailto:capt@fairfieldnodal.com">capt@fairfieldnodal.com</a>
Email (Party Manager)	Challenger <a href="mailto:pm@fairfieldnodal.com">pm@fairfieldnodal.com</a>
Phone Number V-Sat (Crew Telephone)	832-461-8581

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Phone Number V-Sat (Party Manager)	337-761-8802
Autopilot	Robertson STS 500 Simrad, advanced auto pilot.
Autopilot	Robertson AP9 MK-III autopilot with Robertson RI-9 rudder angle indicator and navigation computer.
Interface box	N/A
Speed Log	N/A
Sound Power Phone	8 McCann
V-Sat	Ku Band Stratos
Weather Fax	N/A
Echo Sounder	Furuno FCV-620 Color Video Sounder. Serial Number 8058-7584.
NAVTEX	Furuno NX-300. Serial Number 3550-8984.
GPS	Furuno GPS. Model GP-31. Serial Number 3443-2141
GPS	Furuno GPS. Model GP-90. Serial Number 4400-0386.
Automatic Identification System (AIS)	Furuno FA-150 # 010790
PA System	Specto Technologies, Model PL-260A
Magnetic compass IB-500	Ritchie Magnetic Compass.
Gyro Compass	Meridian Surveyor 19-36 VDC 931060 Serial Number 7224
Single Side Radio	Furuno SSB Transceiver. Model FS-2570. Serial Number 001072
Aircraft radios	ICOM Model 1C-A110B-05 Serial Number 0521027
Aircraft radios (2 handheld)	ICOM Model 1C-A6-01 Serial Numbers 2125729 & 2128089
Closed Circuit TV	CS Lilin Video Switcher. Model Number PIH 200-8.
Cellular Phone (Offshore)	337-504-0808
Cellular Phone (Onshore)	337-316-6124
Satellite Phone Iridium - Handheld Motorola Model 9555	011-88-1641417512

## Lifesaving and Firefighting Equipment

Life Raft # 1	25 man
Life Raft # 2	25 man
Life Raft # 3	25 man
Life Raft # 4	25 man
Life Raft # 5	25 man
Life Raft # 6	25 man
Life Raft # 7	25 man
Life Raft # 8	25 man
Life Raft Gun Deck Aft	6 man
Fire Zone Alarm System	Notifier Fire Alarm System / Model 640/ Smoke & Heat
20 - Rocket Parachute Distress Flares	

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Line Throwing Appliance	(4) IKAROS
Fast Rescue lifeboat and Davit	Viking 470 GRPI with Evinrude 40
Ring Buoys (13)	7 with lights, 3 with smoke signal device and lights
Pilot Ladder	15 ft.
Jacobs Ladders (2)	20ft each
Daylight Signalling Lamp (1)	Francias Search light #c06740
Ships Security Alarm System (SSAS)	Furuno ssas # 014760 / Reset # 014860
Emergency escape breathing devices (7)	Self Contained Breating Apparatuses.
EPIRB (1)	ACR RLB-B8 Beacon ID 2bcc6 AB8BE FFBFF
SARTS (3)	ACR Pathfinder 3
Extinguishers (41)	10# Dry Chem
Extinguishers (2)	10# CO2
Extinguishers (21)	15# CO2
Extinguishers (3)	20# Dry Chem
Extinguishers (5)	2 1/2# Dry Chem
Extinguishers (1)	5# CO2
Extinguishers (8)	5# Dry Chem
Extinguishers (7)	20# CO2
Extinguishers (1)	30# CO2
Extinguishers (1)	2 1/2 # Halon
Helideck foam system	Chemical Guard-Fitted Port and Stbd forward of Helideck.
Fire alarm system	Smoke & Heat detectors fitted throughout vessel
Survival Suits	N/A
Lifejackets (128)	SOLAS
SCBA's (4)	4 sets with 10 spare bottles
Fire Suites (4)	4 Complete
Fire Axes	7
Oil Spill Kits	5
<b>Fixed Fire Fighting Systems</b>	
Emergency Generator Room	(2) 100# Fixed CO2
Paint Locker	35# CO2 Fixed
Galley	Wet Chem Hood System
Engine Room	Shared engine room system. (18) 100# Fixed CO2
Compressor Room	Shared engine room system. (18) 100# Fixed CO2
<b>Accommodation</b>	
<b>Total</b>	49
Crew accommodation	18

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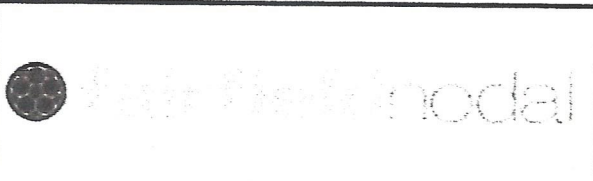
Seismic accommodation	25/ 4 MMO / 2 Clients
Offices ( One office can be given to Charterer)	2 ( 1 PM office & 1 Capt. Office )
Hospital Room	1
Mess room	Accommodation for 21
TV Lounge	Accommodation for 12

## MACHINERY


<b>Main Engines</b>	
NO.	2
TYPE	Caterpillar Model 3516 / Total HP 3000
SERIAL NUMBERS	Port Ser# 29201098/AR2 W 8864 Stbd Ser# 29200763
BHP	1748 @ 1600 RPM
Starters	Air starter
CLUTCH/PPP	Caterpillar MG-7271 marine gears with 5.55:1 reduction
SAFETY DEVICES	Engines fitted with a full alarm protection system and air-pneumatic engine enunciator controls in engine room and pilothouse. All internal combustion engines are supported by various fuel, lubricating oil and water circulating pumps.
CONTROL & MONITORING	
Propellers (2)	Kahlenburg 4 blade 92" X 67" propellers. Thrust enhanced by two Kort nozzles.
<b>Bow Thrusters</b>	
NO.	1
TYPE	One Caterpillar 3408 diesel engine driving a Twin Disc MG-514-C marine gear with a 1.5:1 reduction ratio. Bow thruster diesel engine fitted with a Caterpillar PTO that provides rotational power for auxiliary fire pump.
SERIAL NUMBER	99U04419
BHP	Rated at 400 HP @ 1800 rpm. Electric over air start, 120 VAC.
Propeller	
SAFETY DEVICES	Engines fitted with a full alarm protection system and air-pneumatic engine enunciator controls in engine room and pilothouse. All internal combustion engines are supported by various fuel, lubricating oil and water circulating pumps.
CONTROL & MONITORING	
<b>Main Generators</b>	
NO.	2
TYPE	Caterpillar 3508 diesel engine driving Kato 560-KW
SERIAL NUMBERS	Port Ser# 23200709 Stbd Ser# 23200710
Voltage	480 V A/C synchronous.
KW	560 KW @ 1800 RPM.

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<b>SAFETY DEVICES</b>	Engines fitted with a full alarm protection system and air-pneumatic engine enunciator controls in engine room and pilothouse. All internal combustion engines are supported by various fuel, lubricating oil and water circulating pumps.
Starters	Air started and grid cooled.
<b>Emergency Generators</b>	
NO.	1
TYPE	Caterpillar Model C18, 806 HP
SERIAL NUMBER	Serial Number SNJ 01291
Voltage	480 V A/C 60 Hz 3 phase
KW	550 KW @ 1800 RPM
<b>SAFETY DEVICES</b>	Engines fitted with a full alarm protection system and air-pneumatic engine enunciator controls in engine room and pilothouse. All internal combustion engines are supported by various fuel, lubricating oil and water circulating pumps.
<b>Ships Air Compressors</b>	
Number of units	2
Type	Quincy Model Number 350. Electric Motor(s) are General Electric Model Number 5K215BL2050. Frame Number 215T. 10 HP. 1745 RPM
CAPACITY	60 gallon cylindrical horizontally mounted cylindrical air receivers with receivers and safety valves.
<b>SAFETY DEVICES</b>	
<b>Deck air Compressors</b>	None on board
CAPACITY	SHIPS AIR
<b>SAFETY DEVICES</b>	
<b>Switchboard</b>	
DISTRIBUTION	Point Eight
MAIN VOLTAGE	560kw / 480 VAC / 3 phase
AUX. VOLTAGE	110 V A/C 60 HZ / 3 phase
PARALLEL LOAD	Generators do not run in parallel
REVERSE POWER	
<b>Steering Gear</b>	
Number of units	2
Make	Engine Motor Inc.
Reservoir	100 gals
<b>Vessel Blackout</b>	
COMMUNICATIONS	Sound powered phone / UPS powered intership phone
EMERG. LIGHTING	12 Volt powered battle lanterns
ALARMS	12 / 24 Volt general alarm
<b>Sludge Pump</b>	


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TYPE	Electric motor driven bilge/slop oil pump. Viking pump Model Number HL4195 Motor by Baldor. Frame 184T. 5 HP. Cat M3615T.
<b>GS Pumps (bilge/ball/fire)</b>	
TYPE	15 HP electric motor driven 4" X 3" Peabody Barnes bilge pump #2. Motor US Electric, Model Number 4030HCU. Frame 254T. ID # F7853-01-818.
TYPE	15 HP electric motor driven 3" X 3" Peabody Barnes bilge pump #1. Motor 208/230/460 VAC 3 phase, 60 Hz, 3500 RPM. Serial Number 0837890-1101.
<b>Emergency Fire Pump</b>	
TYPE	Harrisburg. Centrifugal Pump Model 546. Serial Number P7607670
<b>Fire Monitors</b>	
<b>FiFi PUMP</b>	
TYPE	
<b>F.O. Transfer Pump</b>	
TYPE	15 HP electric motor driven 3" X 3" Peabody Barnes fuel transfer pump with Veeder-Root gallon meter. Veeder Root Form Number 789001-001. Serial Number FR189191. Pump Model 25CL. Motor General Electric Frame # S215TCZ. 460 VAC. 3 phase. 60 Hz. 3500 RPM.
<b>F.W. Transfer Pump</b>	
TYPE	Jacuzzi Jet Pump
<b>F.O. Separator</b>	
TYPE	MAB 104B
CAPACITY	Viscosity 65 @ 100 deg F. Throughput is 1 imp gal per hr.
<b>Oily Water Separator</b>	
TYPE	Alfa-Laval fuel oil purifier. Type MAB-103B.24. Gear pump part number 529209-82. Motor: 1 HP. Frame NL143TC5592083, Class F (35). 208/230 VAC. 60 Hz, 3 PH, 4.2 A, 1720 RPM.
CAPACITY	8.8 GPM
<b>Sewage Plant</b>	
Type	EVAC ORCA IIIA-100 Sewage pump with piping system to holding tank. Evac pump S/N #120025001001 – Type 25-181/0332-CS-W1 Year/Mon 2012/03
CAPACITY	2,642 GPD
<b>Water Maker</b>	
Number of Units	1

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TYPE	Parker Pure Water Series PW – 8000
CAPACITY	8000 GPD
TYPE	
CAPACITY	
<b>Deck Crane</b>	Coastal Hydraulics Cranes Inc.
Rated Capacity	5000 lbs
Load Test	10,000 lbs
<b>Trash Compactor</b>	1
TYPE	Max International, Model Max 20 EX
Volume	20 cubic feet
<b>Windless</b>	HBL Industries
TYPE	Mod #ODW-1.25H-1 Serial #521002
Chain	1 1/2" x 2" x 5"
Length	Port 6 shots Stbd. 10 shots
Anchor's (2)	2
<b>Capacities</b>	
Fuel Type	#2 Diesel
Fuel	196,000 gallons
Potable Water	29,004 gallons
Ballast water	167,456 gallons
Lube Oil	12,152 gallons , T15W40
Hydraulic Fluid	1,026 gallons /HYD 68 Symthetic
T-40 oil / DSL 100	442 gallons each
Refrigerator / Freezer	2 freezer @ 3hp / 2 cooler @ 2hp
Sewage Tank Capacity	16,064 gallons
<b>Seismic Equipment</b>	
<b>Seismic Compressor Systems</b>	
Number of units	2
Drive engines	Caterpillar DI-3516
Type of Compressors	Joy 1800 CFM 5
Cubic Feet Per Minute Per Unit	1800 cu
Total (CFM) both units	3600 cu
<b>Seismic Source</b>	
Gun QC System	AG SSMS
Gun Positioning	NA
Gun Positioning	NA
Source Controller	RTS Big Shot 72 channels



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<b>Active Strings</b>	<b>Client Request</b>
Standard array size	Client Request
Gun umbilical reel	6 / Odom's
Bolt Air Guns	1900 / 1500
Bolt Air Guns	NA
Bolt Air Gun Solenoids	NA
Gun Floatation system	Sausage type
Paravanes	Rigged for Baro #12 Paravanes
<b>Seismic Navigation Systems</b>	
Integrated Navigation System	Provided by Client
Primary Navigation Input	Provided by Client
Secondary Navigation Input	Provided by Client
Third Navigation Input	C - Nav
P294 logging of raw GPS data	
Primary Gyro Input	Meridian
Secondary Gyro Input	GPS Vector
Echosounder	Odom CV2 12/200 KHz
WaterSpeed	None
Gun Positioning	RGPS
Multi-Vessel Links	None
Multi-Vessel Links	None
Quality Control	None
Real-time Binning	None
Processing	None