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VESSEL SPECIFICATIONS

Ship's name	Fairfield New Venture
Owner	Fairfield Industries, Sugar Land Texas
Year re-built	2003 at Bollinger shipyard, Texas City
Year re-built	1999 Brazil (Solas)
Year re-built	1991 - North American Shipyard
Year built / at	1986 at North America Shipyard, Larose Louisiana
Hull Number	131
Previous name	New Venture
Type	Research Vessel
Official number	694201
IMO no.	8851522
Call sign	WERD
Flag	United States
Port of registry	Houston, Texas USA
Classification society	American Bureau of Shipping (ABS)
Class assigned	ABS A1
Class Number	8600828
Length overall /length between perpendiculars	250 feet or 76.21meters
Length between perpendiculars	222'8" feet or 67.7 meters
Breadth (molded)	56 feet or 17 meters
Depth (molded)	28.5 feet or 8.7 meters

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Draft (Max)	16.4 feet or 5 meters
Gross Tonnage (US regulatory)	298
Gross Tonnage (International)	2912
Net Tonnage (US regulatory)	199
Net Tonnage (International)	873
Helideck rating	Sikorsky S-76 Rated 10/56
Speed Max, Calm sea state	12 Knots
Speed Economy, Calm sea state	10 knots
Daily Consumption (Transit)	3400
Daily Consumption (Working)	5500 US gallons
Transit Endurance	55 days leaving in 10% reserve
Operational Endurance	45 days leaving in 10% reserve
Last dry docking	Oct.2006

Radio Comm. & Navigation Aids

GMDSS		Yes
MF-HF Radio	Furuno FS-2570-C	
VHF DCS (2)	Furuno FM-8800D	
Inmarsat C	Furuno Felcom 15	
Printer (2)	Furuno PP510	
Data Terminal	Furuno Type IB-583	
Inmarsat Mini C	Furuno Felcom 16 (SSAS)	
GMDSS Survival Radio (3)	ACR 2756A	
VHF	4- Standard Horizon GX1270-s	
VHF	1 - Sailor C-403A ,3-Uniden Solara	
Radar	2 - Furuno Model FAR-28X7 (ARPA)	
Email (Master)	NewVenture_capt@fairfield.com	
Email (Party Manager)	NewVenture_PM@fairfield.com	
Phone Number V-sat (Master & Instrument Rm)	832-461-8222	
Phone Number V-sat (Party manager)	832-461-8223	
Autopilot	Robertson AP9 MK3	
Interface box	Robertson ST5500 Simrad - Robo Track	
Speed Log	Furuno Doper DS-80	
Sound Power Phone	HENSCHEL	
V-sat	Stratos KU Band	
Weather Fax	Furuno Dfax 208- A/N	
Echo Sounder	Furuno Color Video FCV 582	
Navtex	JRC - NCR 300A	

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GPS	(2) Furuno GP-90
Automatic Identification System (AIS)	JRC-- JHS 182
PA System	Speco Technologies Model PL-260H
Magnetic compass	Ritchie
Gyro Compass	Sperry SR 130 with Two bridge wing repeaters
Single Side Radio	Sea 222
Aircraft radios	2- Icom VHF-FM # IC86 portable
Aircraft radios	DX Radio system #835
Closed Circuit TV	Model PIDB-CCTVAD-18
Cellular Phone	(337) 316-6124 cellular
Satellite Phone Iridium	Back up to V-sat.(011-881-631-458-918)

Lifesaving and Firefighting Equipment

Life Raft # 1		25 Man V
Life Raft # 2	25 Man Revere	
Life Raft # 3	25 Man Viking	
Life Raft # 4	25 Man Revere	
Life Raft # 5	25 Man Revere	
Life Raft # 6	25 Man Viking	
Life Raft # 7	25 Man Viking	
Life Raft #8	25 Man Revere	
Life Raft Gun Deck Aft.	6 Man Revere	
Fire Zone Alarm System	Notifier AFP-200 (Heat,smoke detectors, plus pull stations)	
12 - Rocket Parachute Distress Flares	Service Dates Good	
Line Throwing Appliance	(5) Pains-Wessex SpeedLine - 250	
Fast Rescue lifeboat	Rigid Rescue Boat-(SOLAS) Fassmer-FRR 6 /Cap. 18 persons Motor Type: Steyr MO114 Inboard Diesel.	
Davit for FRC	Load Test 26 Oct. 2008 (9800 lbs. Winch Man. Odim Winch Co.)	
Ring Buoys	10 with lights and retrieving lines and 2 fitted with Smoke signals	
Pilot Ladder	1- COMAR/MARK/I (SOLAS APPROVED)	
Jacobs Ladders	40 ft. Embarkation/Debarkation.(Adonic II)	
Daylight Signalling Lamp	1 Aldis Lamp- Francis Searchlight Co. Model MKV	
Ships Security Alarm System (SSAS)	Furuno Felcom 16 (SSAS)	
Emergency escape breathing devices	64	
Epirb	1-ACR 406 (Model RLB-35 Cat1)	
SARTS	1-ACR partfinder 3, 1 - ACR model RTE-2707	
Extinguishers	2- 30 lb. dry chemical	

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Extinguishers	24 - 20 lb. dry chemical
Extinguishers	23 - 10 lb. dry chemical
Extinguishers	21 - 2.5 dry chemical
Extinguishers	7 - 5 lb. dry chemical
Extinguishers	8 - 20 lb. CO2
Extinguishers	8 - 20 lb. CO2
Extinguishers	5 - 20 lb. CO2
Extinguishers	12 - 15 lb. CO2
Extinguishers	3 - 10lb CO2
Extinguishers	2- 5 lb. CO2
Helideck foam system	Chemical Guard - Fitted Port and STBD forward of helideck.
Fire alarm system	Smoke and heat detectors fitted throughout vessel
Survival Suits	68
Lifejackets	138 SOLAS (Model IL5-110) 1 ea. Berth,3 float free boxes@Muster
SCBA's	6 complete packs with 9 spare bottles
Fire Suites	7 Complete
Fire Axes	11
Oil Spill Kits	2 complete kits/spare boom, and pads
Fixed Fire Fighting Systems	
Emergency Generator Room	CO2
Paint Locker	CO2
Galley	Fixed wet chemical
Engine Room	Halon
Compressor Room	Halon


Accommodation

Total		57 Bulks
Crew accommodation	17	
Seismic accommodation	15	
Offices (One office can be given to Charterer)	1 office for Client's - 196 Sq Feet	
Hospital Room	1 bed/bathroom/Equipped for sick bay.	
Mess room	Seating for 30	
TV Lounge	Comfortable seating for 20	

MACHINERY

Main Engines

NO.	2
TYPE	EMD 645-E7B turbo
BHP	6140 total @ 900 RPM


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Starters	Air start both units
CLUTCH/ CPP	
SAFETY DEVICES	Over speed shut down, pressure and low level shut down
CONTROL & MONITORING	
Propellers	Ulstein A/S 600 AGSCS - 4 blade - Variable pitch
Bow Thrusters	Caterpillar 3408 drive motor
NO.	1
TYPE	Ulstein TV90
BHP	400 HP
Propeller	4 -fixed blades (90TV-A)
SAFETY DEVICES	Over speed shut down, pressure and low level shut down
CONTROL & MONITORING	Full Alarms
Main Generators	Caterpillar 3508 drive motors
NO.	2
TYPE	KATO
Voltage	480 Volts - 3 phase @ 60 Hz
KW	2 x 560 KW
SAFETY DEVICES	Full Alarm System
Starters	One Air start the other Electric Start
Emergency Generators	Caterpillar 3412 drive motor
NO.	1
TYPE	Caterpillar SR4
Voltage	480 Volts - 3 phase @ 60 Hz
KW	1 x 230 KW
SAFETY DEVICES	Full Alarm System
Ships Air Compressors	
Number of units	3
Type	Quincy 350-21 Twin Cylinder 2 stage electric motor driven
CAPACITY	3 X 60 Gallons
SAFETY DEVICES	Pressure Pop off Valves
Switchboard	
DISTRIBUTION	Point 8 Full Function Panel
MAIN VOLTAGE	480
AUX. VOLTAGE	480
PARALLEL LOAD	Yes
REVERSE POWER	Relays
Steering Gear	
Number of units	2
Make	Vickers Hydraulic Driven by 30 HP electric motors
Reservoir	110 Gallon Hydraulic fluid
Vessel Blackout	GMDSS Reserve source energy. V-Sat UPS

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COMMUNICATIONS	Sound powered phone/ UPS powered intership phone
EMERG. LIGHTING	12 Volt powered battle lanterns
ALARMS	12/24 volt general alarm.
Sludge Pump TYPE	Peabody Barnes Model 5CCE
GS Pumps (bilge/ball/fire) TYPE	Peabody Barnes Model 15CCE
Emergency Fire Pump TYPE	Aurora Pump Model 421 BF
Fire Monitors FiFi PUMP TYPE	Aurora Pump Model 85-7146 2X2.5x7A
F.O. Transfer Pump TYPE	Peabody Barnes Model 25 CCE
F.W. Transfer Pump TYPE	Peabody Barnes Model 25 CCE
F.O. Separator TYPE CAPACITY	Alfa Lava MAB104 Varies with emulsification
Oily Water Separator TYPE CAPACITY	BOSS 10T/107 Varies with emulsification
Sewage Plant Type CAPACITY	Orca II - 500 The unit can process as much as 15 K per day
Water Maker Number of Units TYPE CAPACITY	2 Alfa Laval Desalinater Varies with jacket water temperature
Deck Crane Rated Capacity Load Test Load Test	EBI-C20 Model C20B50 5,000 lb. Single Line 10,000 lb. @ 10° Radius 4,500 lb. @ 45° Radius
Trash Compactor TYPE Volume	MAX-20 EX (Manufacturer GB International) 20 Cu./Ft.
Windless TYPE Chain Length Anchor's (2)	Hydraulic Driven HBL Double anchor windlass 1 1/2 " Port 11 shots/Stb. 10 shots Balt Snug Stowing 4,000 lbs.

Capacities

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Fuel Type		#2 Diesel
Fuel	248,000 US gallons	
Potable Water	146,664 US gallons	
Ballast water	212,820 US Gallons	
Lube Oil	7499 US Gallons	
Refrigerator / Freezer	510/540 Cubic Feet	
Sewage Tank Capacity	9,488 US Gallons	

Seismic Equipment

Seismic Compressor Systems


Number of units	3
Drive engines	DI - 3516 Caterpillar
Type of Compressors	Joy 1600 - 5 stage compressors
Cubic Feet Per Minute Per Unit	1600
Total (CFM) all three units	4800

Seismic Source

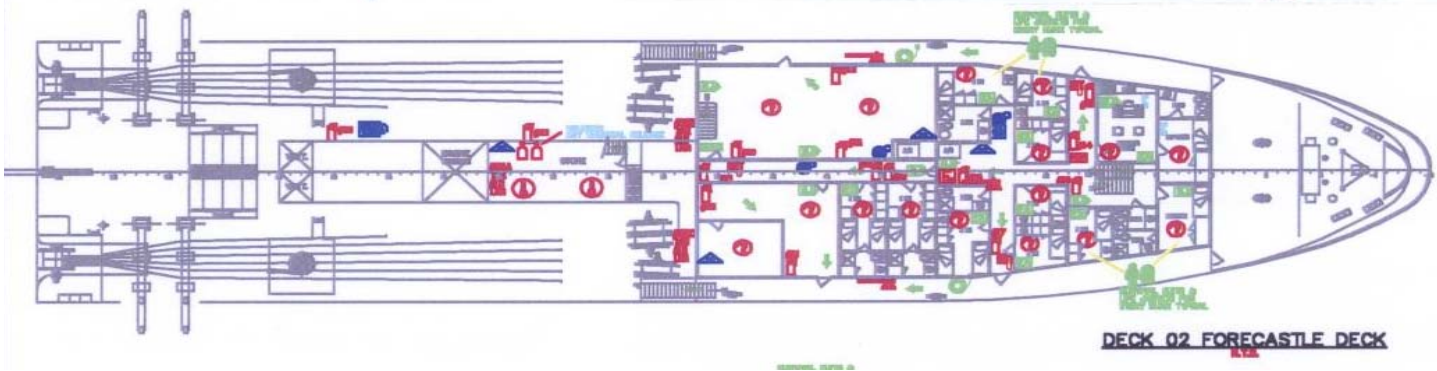
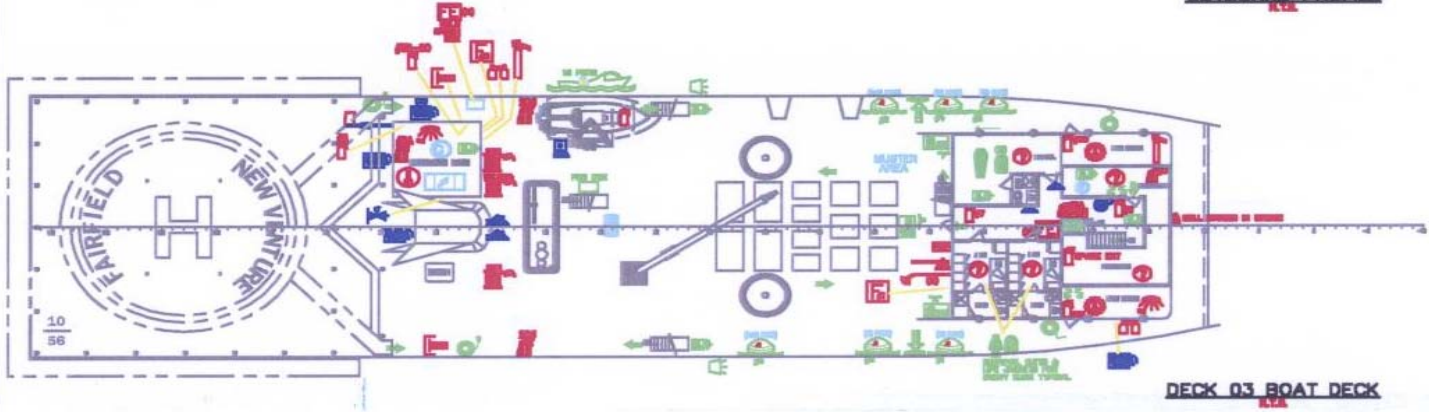
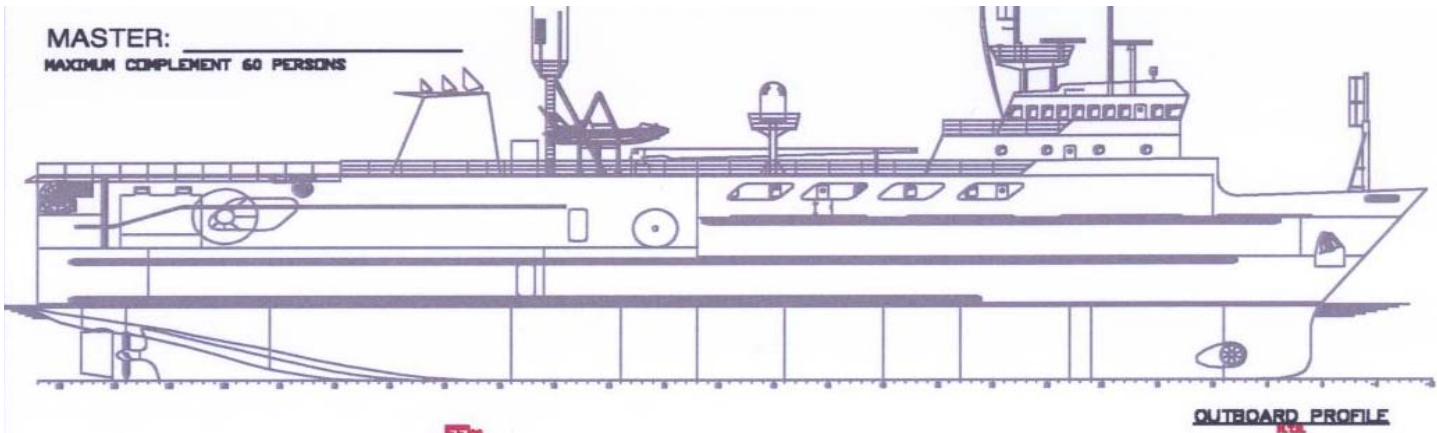
Gun QC System	SSMS - Depth, pressure and Near field phone at each gun saddle.
Gun Positioning	Furgo Seatrack 320 RGPS Gun Pods
Gun Positioning	MDL Fanbeam Mark4 Laser available upon client request
Source Controller	Real time Systems - Big Shot/ Capacity: 72
Active Strings	6 - 3 port and 3 STBD
Standard array size	4330 cubic inches
Gun umbilical reel	8 - Odin , Each reel capacity in 300 meters at 74mm dia umbilical
Bolt Air Guns	62 X 1900 LLX
Bolt Air Guns	4 X 1500 LL
Bolt Air Gun Solenoids	Make and Model: Bolt SV 1200-511
Gun Floatation system	Sausage 18" with rided head float (Flexible Tubular Floatation)
Paravanes	4 units 2 in service Baro # 12


Seismic Navigation Systems

Integrated Navigation System	Concept Systems Gator version 8.9.1 running on Linux workstations Concept Systems RTNu's used for event triggering and interfacing
Primary Navigation Input	Furgo MRDGPS Starfix
Secondary Navigation Input	C and C Technologies C-Nav2000
Third Navigation Input	CSI Wireless Vector DGPS
P294 logging of raw GPS data	(2) Trimble 4000 DL GPS
Primary Gyro Input	SG Brown TS Meridian Surveyor Gyro
Secondary Gyro Input	CSI Wireless Vector GPS Heading Sensor

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Echosounder	ODOM CV2 Echosounder
WaterSpeed	Furuno Doppler Speed Log
Gun Positioning	SEAMAP RGPS Gun Pods
Gun Positioning	MDL Fanbeam Mark4 Laser available upon client request
Multi-Vessel Links	Freewave 900 MHz Speadspectrum Ethernet Radios
Multi-Vessel Links	Global Wireless 2.4 GHz Speadspectrum Ethernet Radios
Quality Control	Concept Systems Quality Control Node
Real-time Binning	Concept Systems Real-Time Binning Node
Processing	Concept Systems Post Processing Node



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