



Western Flyer Specifications



PRINCIPAL PARTICULARS			
Year Built:	1937 (Rebuilt 2023)	Vessel Type:	Purse Seiner
Built in:	Tacoma, Washington, U.S.	Material:	Wood
Port of Registry:	Monterey, California, U.S.	Hull Planking:	Mahogany
U.S. Coastguard Vessel ID:	236142	Hull Framing:	White Oak
Vessel Call Sign:	WDN9028	Decking:	Douglas Fir
Length:	77 feet	Hull Fasteners:	Non-magnetic Bronze
Gross Tons:	93 GT	Beam Max:	20 feet
Net Tons:	63 N.T.	Draft Max:	8 feet 6 inches
Flag:	U.S.	Bridge Clearance Max:	45 feet
Classification:	Oceanographic Research Vessel (ORV)		

PERFORMANCE			
Max Speed Diesel:	10 knots	Fuel:	Diesel
Max Speed Hybrid:	6 knots	Fuel Consumption:	8 gal/hour @ 8 knots
Economical Speed:	8 knots	Hybrid Range:	50 nm @ 5 knots

MAIN ENGINE/HYBRID & SYSTEMS			
Main Engine:	6135 John Deere	Hybrid Drive System:	Transfluid
Main Engine Horsepower:	425 hp	Maximum Hybrid Output:	100 kw
Reduction Gear Box:	6:1	Maximum Hybrid Generation:	100 kw
Fuel Capacity:	2000 gal in 4 tanks	Hybrid Battery Bank:	400 ah/288 volts
Fresh Water:	600 gal in 2 stainless tanks	Auxiliary Generator:	28 kw
Water Maker:	FCI 1200 gal/24 hr	Steering System:	Kobelco Hydraulic
Hot Water Heater:	30 gal	Main Steering Station:	Hydraulic helm pump + FFU
		Flying Bridge Station	Electronic helm pump + FFU

NAVIGATION & ELECTRONICS			
Radar:	48-mile Furuno	Main VHF:	Furuno FM-4850
Chart Plotter:	Furuno TZTL12F (x2)	Second VHF:	Furuno FM-4850
GPS Compass Antenna:	Furuno SCX-21	Handheld VHF:	Icom ICM73
Satellite communicator	Garmin Inreach	AIS vessels tracking:	Furuno FA-170
Autopilot:	Furuno NAVPILOT-711C	Emergency vessel tracking:	Epirb ACR

FIRE FIGHTING & SAFETY			
Engine Room:	Halon Fire Boy	Life Rafts:	2 16-person offshore Zodiac
Handheld Fire Extinguishers:	10 total	Life Jackets:	30 USCG type 1
On Deck Fire Fighting:	1 high-output saltwater pump	EPIRB:	ACR
Bilge Pumps:	5 @ 2000 gal/minute	Second Anchor:	85 lb Fortress
Main Anchor	350 lb Forfjord anchor	Second Anchor Scope:	50 feet ½" chain/300 feet ¾" rode
Main Anchor Winch	Kolstrand Drum	Main Anchor Scope	100 feet 1" chain/300 feet ½" cable

ACCOMMODATIONS			
Main Cabin:	6 bunk bed style berths 1 captain's stateroom 2 sinks & 1 toilet	Below Deck:	4 bunk bed style berths 1 sink, 1 toilet & 1 shower 1 washer/dryer
Total Accommodation:	11 persons	Refrigerators:	1 Vitrifirigo on main deck 2 Vitrifirigo below deck 1 freezer below deck

RIGGING MAST & BOOM			
Mast:	10-inch schedule 40 aluminum	Standing Wire:	¾" 7 x 19 galvanized
Boom:	8-inch schedule 40 aluminum	Cargo Winch:	P.L. 8 wire
Boom Sliding Winch:	P.L. 5 wire	Boom Vang Winch:	P.L. wire
Boom Topping Winch:	P.L. 5 wire		



DECK EQUIPMENT & CAPACITIES			
Winch, reel, and cable:	Hydraulic oceanographic winch with 600m line	Deck area	300 square feet
Crane capacity	Main boom and cargo winch – 2,400 lb Safe Working Load		

SCIENTIFIC EQUIPMENT	
Flow-through system	Seabird SBE21 SeaCAT TSG with vortex de-bubbler, SBE38 remote digital oceanographic thermometer, C-Star transmissometer, and WETLabs ECO-FL fluorometer
Meteorological array	Campbell Scientific CR6 datal logger with CS125 Present Weather and Visibility Sensor, ClimaVUE50 weather sensor, IRGASON open-path gas analyzer, Heitronics CT15 IR pyrometer, Vaisala HUMICAP humidity and temperature probe, Apogee SN-500 net radiometer, and VectorNav VN-300 dual GNSS/INS.
Profiling CTD	Seabird SBE19 Plus V2 SeaCAT profiler with 40" titanium cage and PDIM/SBE33 Carousel Deck Unit. Includes SBE 43 Dissolved Oxygen sensor, SBE18 pH sensor, WETLabs ECO-FL fluorometer. 1200m depth rating.
Scientific Echosounder	Simrad EK80 Portable Echosounder with ES38-18/200-18C transducer
Observation-Class ROV	Poseidon Robotics Lanai Pro ROV with SPU and hand reel with 250m tether

