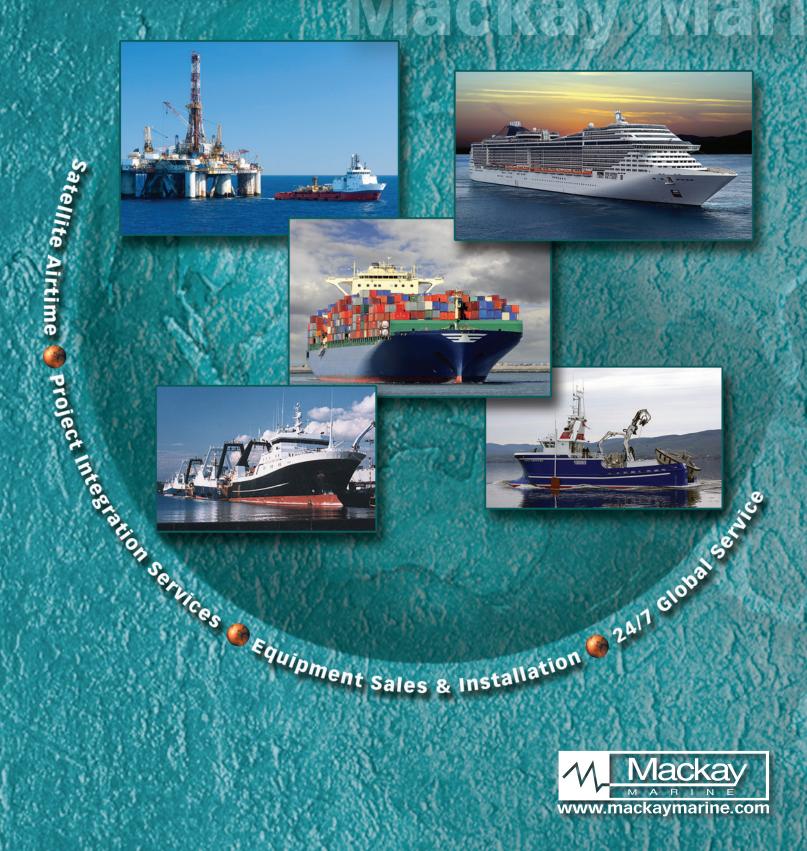
Mackay Marine





Mackay Marine

Leaders in Marine and Off-Shore Electronics

Complete Portfolio of Electronic Equipment

Communications

Entertainment Interior Comm. Systems Radios – Handheld & ShipBoard Satellite Terminals & Airtime Sound Reception Systems

Navigation

AutoPilot/ Gyros Chart Plotters/ECDIS Depth Sounder GPS & Compass Integrated Bridge Radar / ARPA Speed LOGs Steering Systems Weatherfax

Safety & Security

Anti-Piracy Systems

Bridge Alarm (BNWAS) CCTV & Video Compression

EPIRBS GMDSS

NAVTEX

Search & Rescue (SART) Ship Sec. Alert (SSAS) Tracking Systems

VDR/(S)VDR & Acoustic Beacons

Anti-Pollution

Engine Rm. Alarm Monitors
Fuel Blending System
Fuel Consumption Meas.
Fuel/Flow Measurement
Fuel Viscosity Control
Oil Discharge Monitor
Oily Water Monitor & Separator
Torque Measurement

Console Integration

We Keep Professional Mariners on the Move



When it comes to one-stop communications and navigation capabilities, the name to know is **Mackay Marine**. Mackay can manage your vessel's entire electronics investment through equipment sales, installation, service, regulatory inspections, comprehensive maintenance agreements, airtime and network applications. Mackay's goal is to understand your needs from start to finish.

For 130+ years, Mackay has served the marine and offshore industries. We are committed to delivering timely, cost-effective, quality solutions for your electronic equipment needs and to keep your marine electronics performing optimally. Mackay is the largest high-seas service company in North & Central America, with facilities in every major port, and 19+ locations in Asia, Europe and South America. **Mackay World Service** coordinates global service 24/7 to keep your vessels "on the move".

SPECIAL MACKAY PROGRAMS

Mackay World Service (MWS) dispatches marine equipment service worldwide, 24 hours/day. MWS will coordinate the most qualified and cost effective service for repair, maintenance, installations and inspections, through Mackay-owned 40+ global offices or with our network of 90 affiliated service agents. Mackay offers three levels of Service, Repair and Maintenance Contracts to keep your bridge electronics operating at optimum performance. Customer Equipment Service Reports and consolidated billing statements are also available.

Mackay Satellite Airtime: Mackay provides a comprehensive line of services, offering fast and unlimited access to the global switched terrestrial network at competitive rates. We offer satellite airtime



for Inmarsat, Iridium, Globalstar & VSAT systems, with options for voice, fax, data & video conferencing services. Our consolidated monthly statements provide detailed vessel & terminal usage, with summaries for comparative analysis over time & across fleets.

New Build & Retrofit Projects: Mackay is a proven leader in the field of "turn-key" integrated electronics and communications systems. Ranging from a simple GMDSS station to a complete system with an integrated navigation bridge, satellite & internal comms, security components and below-deck systems. Mackay's *Project Integration Group* works with new-build, retrofit, and military/government integration projects to devise cost effective systems to meet their unique requirements and schedule.

Governmental and Regulatory Compliance: Working with over a hundred flag-states, we provide installation, licensing & publications, activation & commissioning, regulatory testing & certification, re-flagging & upgrade services for all navigation & communications equipment requirements. Mackay's customer information system tracks equipment servicing, enabling insight for scheduling required periodic inspections.

Mackay's

Full-Service Operations Saves You Money!

MACKAY'S COMMITMENT TO YOU



- Responsiveness: Mackay is a 24/7 worldwide maritime service dispatcher, with live-manned coordinators on 4 continents; providing rapid service schedule confirmation and prompt response to parts and equipment inquiries. Authority is delegated to the field level for quick decision-making and efficient processing to satisfy the customer's needs.
- Prepared Service and Sales Personnel: Mackay maintains a state-of-the-art database on all *Customers, Vessels and Equipment* we have sold or serviced. This enables our salespeople to offer appropriate recommendations and enhances repair diagnostics by Mackay's Service Technicians, prior to dispatch.
- Quality Equipment Serving Multiple Sectors: Mackay represents both leading and specialized manufacturers of electronic equipment for commercial marine, offshore, fishing, and passenger vessels; paired with a wide range of terrestrial communication applications.
- **Knowledgeable Technicians**: Mackay staffs over 150+ licensed Marine Service Engineers (MSE's), averaging fourteen years of field experience. Our MSE's regularly attend factory training and are supported by Service Managers, who average over 20 years of experience.
- Strategic Locations: Mackay has field offices in 40 strategic global ports (and growing) to expedite service and delivery and minimize travel expense. We will coordinate your domestic and international repairs, 24 hours a day, 365 days a year, through Mackay World Service.
- Stock-On-Hand: Mackay maintains and updates a multi-million dollar inventory of Parts and Finished Goods for immediate delivery.
- Accurate, Clear Reporting:
 Mackay service orders provide you with useful feedback, in an easy-to-read format, which can be consolidated into periodic, analytical reports.



Put Mackay's efficiencies to work to save you money!

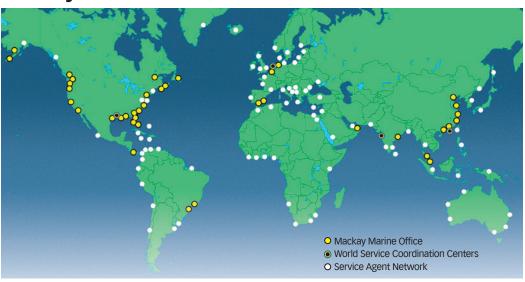
Authorized Sales and Service For:

Applied Satellite Engineering **Axis Communications** Cassens & Plath Cobham SATCOM **SAILOR** Sea Tel Thrane & Thrane Consilium Selesmar Danelec Marine Deckma Hamburg **Digital Barriers** Dukane **Eaton Gitiesse** FLIR Furuno Globalstar Highlander Icom Inmarsat Intellian Interschalt Iridium Jotron **JRC** Kahlenberg Kelvin Hughes Kobelt Koden **KVH** Lars Thrane Lilley & Gillie Marport metOcean telematics Navitron **Netwave Marine** Olex Phontech Pole Star Raytheon RM Young Rutter RWO Veolia Saab Samsung Setel Powerline Simrad **SKIPPER Electronics** Sperry Marine TOKYO KEIKI **TRANSAS VAF Instruments** wideye Addvalue Yokogawa

Service available for all brands of equipment

Zenitel

Mackay World Service coordinates customer service worldwide:



MACKAY WORLD SERVICE - 24/7

Phone: +1 888 361 8532 (U.S. Toll Free)

+1 281 478 6245 (International)

Fax: +1 212 500 0013 service@mackaymarine.com

COMMERCIAL MARINE SALES

Phone: +1 281 479 1515 e-Fax: +1 212 901 0909 marinesales@mackaymarine.com

GOVERNMENT DIVISION

Phone: +1 904 880 4633 government@mackaycomm.com

MACKAY SATELLITE SERVICES

Airtime Plans, Satellite Terminals & SatPhones Phone: +1 919 850 3100 satserv@mackaycomm.com

CORPORATE MARKETING

Phone: +1 919 850 3000 marketing@mackaycomm.com

MACKAY MARINE'S NORTH AMERICAN SALES & SERVICE FACILITIES:

EAST COAST

New York / New Jersey +1 732 225 0909

newyork@mackaymarine.com

Norfolk, Virginia

+1 757 548 8900 norfolk@mackaymarine.com

Charleston, South Carolina

+1 843 747 6250 charleston@mackaymarine.com

Savannah, Georgia

+1 912 354 4542 savannah@mackaymarine.com

MACKAY MARINE CANADA (Eastern)

St. John's, Newfoundland

+1 709 726 2422 stjohns@mackaymarine.com

Halifax, Nova Scotia

+1 902 468 8480 halifax@mackaymarine.com

Yarmouth / South Nova Scotia

+1 902 742 3423 (Yarmouth) +1 902 575 2025 (Barrington) yarmouth@mackaymarine.com barrington@mackaymarine.com

Quebec / Ontario

+1 418 614 0782 quebec@mackaymarine.com

Mackay M A R I N E A Division of Mackay Communications www.mackaymarine.com







FLORIDA & CARIBBEAN

Miami, Florida

+1 954 431 7223 miami@mackaymarine.com

Jacksonville, Florida

+1 904 880 4633 jacksonville@mackaymarine.com

Tampa, Florida

+1 813 229 0080 tampa@mackaymarine.com

GULF COAST

Mobile, Alabama

+1 504 733 5824 mobile@mackaymarine.com

New Orleans, Louisiana

+1 504 733 5824 nola@mackaymarine.com

Houston, Texas

+1 281 479 1515 Fax: +1 212 901 0909 houston@mackaymarine.com

Corpus Christi, Texas

+1 361 452 1241 corpus@mackaymarine.com

NORTH AMERICAN – PACIFIC COAST

Dutch Harbor, Alaska

+1 907 581 1679 dutchharbor@mackaymarine.com

Naknek, Alaska

+1 907 246 4493 (Seasonal) naknek@mackaymarine.com

Vancouver, BC CANADA

+1 604 435 1455 vancouver@mackaymarine.com

Seattle / Ballard, Washington

+1 206 282 8080 ballard@mackaymarine.com

Seattle / Tacoma, Washington

+1 253 922 6260 seattle@mackaymarine.com

Portland, Oregon

+1 503 720 8351 Alt. Ph: +1 253 922 6260 portland@mackaymarine.com

San Francisco, California

+1 510 669 9560 sf@mackaymarine.com

Los Angeles, California

+1 310 519 7539 la@mackaymarine.com

MACKAY WORLD SERVICE Available 24/7

Houston, Texas

U.S. Toll Free: +1 888 361 8532 International: +1 281 478 6245 Fax: +1 212 500 0013 service@mackaymarine.com

Mackay Communications, Inc. (Corporate)

3691 Trust Drive Raleigh, NC 27616 USA

Phone: +1 919 850 3000 Fax: +1 919 954 1707 info@mackaycomm.com

www.mackaycomm.com www.mackaymarine.com

MACKAY EUROPE

Rotterdam, Netherlands +31 168 744021 rotterdam@mackaymarine.com

Antwerp, Belgium +32 3 808 3963

+32 3 808 3963 antwerp@mackaymarine.com

Hamburg, Germany

+49 40 66 892 140 hamburg@mackaymarine.com

Algeciras & Valencia, Spain +34 856 143 006

spain@mackaymarine.com

MACKAY CENTRAL & SOUTH AMERICA

Panama City, Panama

+507 315 0697 US Dir. +1 954 3811051 panama@mackaymarine.com

Rio de Janeiro & Santos, Brazil +55 21 3410 8803 brazil@mackaymarine.com

MACKAY ASIA

CHINA: Guangzhou, Ningbo, Qingdao, Shanghai, Shenzhen, and Tianjin +86 21 6190 0683

china@mackavmarine.com

Hong Kong

+852 3956 4788

hongkong@mackaymarine.com

Singapore & Malaysia

+65 6686 2806 singapore@mackaymarine.com malaysia@mackaymarine.com

Mumbai & Vizag, India +91 22 6279 4700

india@mackaymarine.com

Coming Soon

Fujairah, U.A.E. (3-19) middleeast@mackaymarine.com