

Don't Let Your Fleet Be Detained or Risk a More Serious Disaster!



Firefighter ATEX Radio SOLAS Ch. II-2/10.10.4

EVERY SOLAS regulated vessel must have a minimum of two (2) explosion-proof & intrinsically safe, portable two-way radios for <u>each fire-party</u> by the next inspection after July 1, 2018.

- Non-Compliant Daily Estimated Costs: Port Fees USD\$20-30k+; Shipping Schedules \$100k
- Key Factors Impact FireFighter UHF Radio Selection (See Pg. 2, Radio Model Features)
- Attractive Purchase Options Mackay Offers Bulk, Fleet & Package Discounts

Best Practices Using Firefighter Radios to Avoid Potential Perilous Consequences

- Use Dedicated UHF Firefighter Radios which are Stored in Recharging Station; in a Central Location.
 - Don't Rely on Daily Radios Risks Poor Functioning Devices & Worn Batteries
 - Fully Charged Batteries Enable Sustained Critical Communications
 - Avoids Scrambling to Find Radios During a Crisis
 - Hands-Free Accessories Permit Focus on the Crisis & Communication
 - Ensures Easy Passage of Flag and Class Inspections; Avoiding Costly Delays
- UHF vs. VHF Radios Proven UHF Provides SUPERIOR Communication Between Decks in Steel Structures
- Critical Firefighter Updates Impact Decision Making
 (i.e., Fire Location, Firefighting Progress, Track Personnel, Monitor SCBA Air Pressure, Medical Needs; Real-time Status Can Aid in Vessel Position Decisions, How to Trim the Ballast Differently, etc.)
- Minimal Investment in Firefighter-Specific Radios <u>versus</u> Major Costs if Not Prepared
 - Equipment, Cargo and Structural Loss
 - Crew and Passenger Safety and Liability

Fires Won't "Wait" for Teams "To-Get-Ready"
Shipboard Fires Happen Every Year (2017 est. 10% of Shipping Losses Globally*)

Key Factors Impact FireFighter Radio Selection

- Required Radio Standard* for Vessels Depends on Flag State, Port Region, Cargo-Type
 - ATEX Approved IIA, IIB, IIC, or IECEx and UL913 SGS Approved (Non-ATEX)
- Frequency Band (UHF) Customer Submits Frequency Table to Supplier to Pre-Program Radios
- Vital Accessory Options, such as:
 - Microphones: Skull or Throat (Bone-Conduction) w/ PTT; Speaker-phone & Headset
 - 2nd Primary Lithium Battery for Back-Up
- Number of Onboard Fire-Parties Mackay Fleet & Package Discounts Available

	MOTOROLA		SALOR.		Entel			JRC	TP RADIO	MCMURDO
					RAMARIAE I	RAMERIAL I	RAMERIAL I		0.0	
Model	VX 451	VX 454	Sailor 3965	Sailor 3560	HT 583	HT 883	HT 983	JHS 431	Thor 1 TP 9000ex	R8F Smart Find
*Intrinsically Safe Rating	**UL913 SGS	**UL913 SGS	ATEX IIB T4	ATEX IIC T4	IECEX IIA T4	ATEX IIA T4	ATEX IIC T4	ATEX IIA T3	ATEX IIC T4	ATEX IIB T4
Frequency	VHF/UHF	VHF/UHF	VHF/UHF	VHF/UHF	VHF/UHF	VHF/UHF	VHF/UHF	VHF/UHF	VHF/UHF	VHF/UHF
Battery Capacity	1300-2300 MAH	1300-2300 MAH	1800-3000 MAH	1800-3000 MAH	2000 MAH	2000 MAH	2000 MAH	1850 MAH	3000 MAH	1800-3000 MAH
IP Rating	IP57	IP57	IP67	IP67	IP68	IP68	IP68	IP67	IP67	IP67
Power Output	Wattage Selectable 5W-2.5W to 1W-0.25W	Wattage Selectable 5W-2.5W to 1W-0.25W	Wattage Selectable 2W to 0.4W	Wattage Selectable 2W to 1W	Wattage Selectable 2W to 1W	Wattage Selectable 2W to 1W	1 Watt	Wattage Selectable 2W to 0.2W	1W to 2W	Wattage Selectable 2W to 0.4 W
Special Features	FCC Approved for US Waters	FCC Approved for US Waters	Large Buttons for Easy FF Use	Large Buttons for Easy FF Use	Exceeds MIL-STD 810 C/D/E/F	Exceeds MIL-STD 810 C/D/E/F	Exceeds MIL-STD 810 C/D/E/F	Small, Light, compact design	2W output, Man Down Function, 5-year Li-on Battery	Large Buttons for Easy FF Use

Mackay Marine Contact for Pricing & Availability:

Fleet Sales: marinesales@mackaymarine.com +1 281 479 1515 OTC/Global Distribution: houston_inventory@mackaymarine.com OTC/National Parts Center: michael.gabriel@mackaymarine.com * * With QA007156 battery