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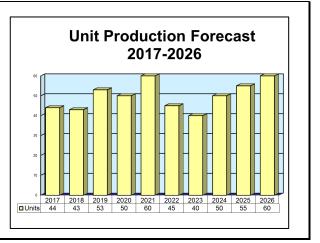
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Lightweight, Multiband Airborne Radio (LMAR)

Outlook

- Forecast International estimates that Thales Defense & Security will sell some 500 LMARs over the next decade
- Thales is providing a unique version of its LMAR to the U.K. MoD's Watchkeeper UAV program
- Information regarding the LMAR is sparse at best



Orientation

Description. The Lightweight, Multiband Airborne Radio (LMAR) is an airborne military radio manufactured by Thales Defense & Security Inc. It is software-operated.

Sponsor

Thales Defense & Security 22605 Gateway Center Dr Clarksburg, MD 20871 Tel: + 1 (240) 864-7000 Fax: + 1 (240) 864-7920 Website: http://www.thalesdsi.com Status. Available for sale.

Application. Communications.

Price Range. Forecast International estimates the price of one Lightweight, Multiband Airborne Radio to be \$45,000.

Contractors

Prime

Thales Defense & Security Inc	http://www.thalesdsi.com, 22605 Gateway Center Dr, Clarksburg, MD 20871 United States, Tel: + 1 (240) 864-7000, Fax: + 1 (240) 864-7920, E-mail: Product.Support@thalesdsi.com, Prime
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Contractors are invited to submit updated information to Editor, International Contractors, Forecast International, 22 Commerce Road, Newtown, CT 06470, USA; rich.pettibone@forecast1.com



Lightweight, Multiband Airborne Radio (LMAR)

Technical Data

Frequency Range

- 30-512 MHz contiguous
- 5 and 6.25 kHz Step Size

Modulation Types

- AM and FM
- HAVEQUICK I/II
- FM Narrowband (12.5 kHz)

Frequency Stability

• 5 ppm

Receive Sensitivity

- FM: < -116 dBm 12 dB SINAD
- AM: < 1.5 uV 10 dB SINAD (-103.5 dBm, 30 percent mod)

Transmit Output Power

- 0.1, 0.5, 1.0, 3.0, and 5.0 W (FM)
- 1.0 and 5.0 W (AM)
- User Selectable

Transmit Characteristics

- Radiated Spurious Output: < -13 dBm
- Audio Distortion: less than 10 percent
- Adjacent Channel Power Ratio: less than 62 dBc

Power

- 28 VDC nominal input, 50-W max
- MIL-STD-704D
- MIL-STD-1275B

Reliability

• MTBF: greater than 4,605 hours

Emergency Beacons and GPS

- AM Swept Tone Beacon
- GPS Interface

Programmable Channels

- 100 Memory Preset Channels
- Selectable Groups
- User Programmable from: Remote Control Interface PC Programmer

Connectors

- Antenna: 50 Ohm (female) TNC
- Digital: 37-Pin MIL-C-38999
- Maintenance: 22-Pin MIL-C-38999
- Audio: 13- Pin MIL-C-38999
- Power: 8-Pin MIL-C-38999
- Keyfill/Audio: 6-Pin MIL-C-55116

Physical Parameters

- Height: 5.16 inches (13.11 cm)
- Width: 6.23 inches (15.82 cm)
- Depth: 4.11 inches (10.44 cm)
- Weight: 3.2 pounds (1.45 kg)
- Volume: 132 cubic inches (2.163 cm³)

Environmental Specifications

• Temperature:

Operating: -31° to +60° C Storage: -33° to +71° C

- Humidity: 95 percent noncondensing
- Shock: MIL-STD-810F
- Vibration: MIL-STD-810F
- Altitude: 16,000 feet
- Fluid Contamination Exposure
- Explosive Atmosphere



Thales Defense & Security manufactures the LMAR.

Source: Thales

Program Review

Thales Defense & Security Inc (formerly Thales Communications) introduced the Lightweight, Multiband Airborne Radio (LMAR) in 2006. The LMAR is a repackaged Thales Defense & Security PRC6809 Multiband Inter/Intra Team Radio (MBITR) with power conditioning and filtering suitable for airborne applications. Thales Defense & Security developed the LMAR primarily for unmanned aerial vehicle applications.

Thales Defense & Security is providing a unique version of the LMAR to the U.K. Ministry of Defence's Watchkeeper UAV program (a Watchkeeper UAV flew for the first time in the U.K. on April 14, 2010).

Funding

Thales Defense & Security Inc

Contracts/Orders & Options

No detailed contract information has been released.

Timetable

Year	Major Development
2006	Thales Defense & Security Inc introduces the LMAR
Present	Thales Defense & Security is providing a version of its LMAR to the U.K. MoD's Watchkeeper
	UAV program

Worldwide Distribution/Inventories

Thales Defense & Security is providing a version of the LMAR to the **United Kingdom** MoD's Watchkeeper UAV program.



Lightweight, Multiband Airborne Radio (LMAR)

Forecast Rationale

Recent information is sparse on the Lightweight, Multiband Airborne Radio. The most current information available on the radio states that Thales Defense & Security is providing a unique version of the LMAR to the U.K. Ministry of Defence's Watchkeeper UAV program.

The Lightweight, Multiband Airborne Radio is a repackaged Thales Defense & Security PRC6809 Multiband Inter/Intra Team Radio (MBITR) with power

conditioning and filtering suitable for airborne use. Thales Defense & Security developed the LMAR mainly for UAV applications.

Forecast International estimates defense departments worldwide will procure more than 475 LMARs over the next 10-plus years. Most of these purchases will be driven by purchases from Europe, including the U.K. Army.

Ten-Year Outlook

ESTIMATED CALENDAR YEAR UNIT PRODUCTION														
Designation or F	High Confidence				Good Confidence			Speculative						
	Thru 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total		
Thales Defense & Security Inc (Prime)														
Lightweight, Mu	Lightweight, Multiband Airborne Radio (LMAR) Military <> Europe <> Army <> WK 450													
	58	4	8	8	10	10	0	0	0	0	0	40		
Lightweight, Multiband Airborne Radio (LMAR) Military <> Worldwide <> Department of Defense														
	180	40	35	45	40	50	45	40	50	55	60	460		
Subtotal	238	44	43	53	50	60	45	40	50	55	60	500		
Total	238	44	43	53	50	60	45	40	50	55	60	500		