

# ARCHIVED REPORT

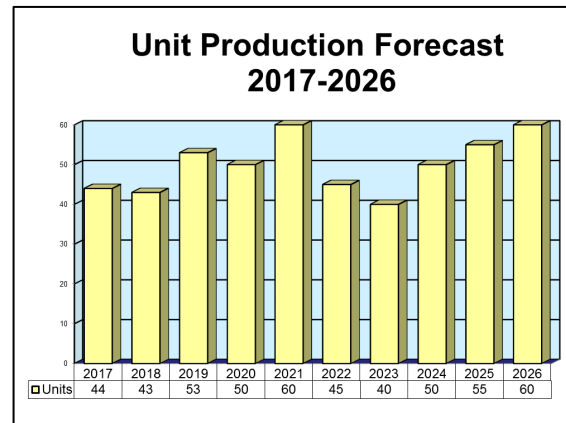
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## Lightweight, Multiband Airborne Radio (LMAR)

### 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](mailto:Product.Support@thalesdsi.com), Prime

Contractors are invited to submit updated information to Editor, International Contractors, Forecast International, 22 Commerce Road, Newtown, CT 06470, USA; [rich.pettibone@forecast1.com](mailto: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 cm<sup>3</sup>)

#### 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

**Lightweight, Multiband Airborne Radio (LMAR)**


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**

<u>Year</u>	<u>Major Development</u>
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 Program	High Confidence					Good Confidence			Speculative			Total
	Thru 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
<b>Thales Defense &amp; Security Inc (Prime)</b>												
<b>Lightweight, Multiband Airborne Radio (LMAR) Military &lt;&gt; Europe &lt;&gt; Army &lt;&gt; WK 450</b>												
	58	4	8	8	10	10	0	0	0	0	0	40
<b>Lightweight, Multiband Airborne Radio (LMAR) Military &lt;&gt; Worldwide &lt;&gt; Department of Defense</b>												
	180	40	35	45	40	50	45	40	50	55	60	460
<b>Subtotal</b>	238	44	43	53	50	60	45	40	50	55	60	500
<b>Total</b>	238	44	43	53	50	60	45	40	50	55	60	500