Thales at the Navy League Sea Air Space Exhibition 2005

Washington, DC March 22-24, 2005

Hall C, Booth 3105 Business Suite 6300, Wardman Tower

Thales is one of the world's major players in the military naval industry. The Group is the world's largest exporter of naval systems and ranks No. 2 in Europe and No. 3 worldwide for overall sales. Thales has the capability to deliver complete naval vessels on a turnkey basis, as well as integrate a combat system, design an integrated communications system or supply subsystems or equipment.

Building on over 70 years' experience and a successful track record delivering equipment, systems and services to more than 50 navies worldwide, Thales has unique capabilities in the naval field.

The Group's global, multi-domestic organization provides unique opportunities for synergies both within Thales and with local partners to develop and produce the systems that meet the precise needs of client navies. For several years, Thales has pursued a policy of external growth and implemented a unique model of customer-oriented multi-domestic development to emerge as a global player with the local industry presence that each market requires. In the naval arena, Thales has industrial operations in ten countries.

This unique multinational presence enables Thales to offer the interoperable solutions that are essential in today's environment, in which navies around the world frequently have to work together.

Thales Naval Activities

Key figures 2004

Naval sales: over \$2.5 billion

6,100 Naval employees worldwide

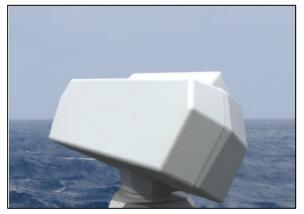
Industrial operations in 10 countries

More than 400 ships equipped for 50 navies

NEWS

Protecting the Sea Base with Thales newest 3D radar SMART-S MK 2

Thales introduces a superior new 3D radar, compliant with the US Navy, Sea Power 21 strategy. SMARTS Mk2 is different, easy to install, supports the reduced manning requirements and is an innovative approach on life cycle support issues. SMART-S Mk2 is the cost saver the USN and many other navies are looking for today.



SMART-S Mk2

SMART-S Mk2 is a multi-mode, multi-beam 3D E/F band solid-state volume search radar with an instant coverage of 250 km in range and up to 70 degrees in elevation. With its situational awareness and target designation, the radar displays excellent littoral surveillance capabilities, including an ultra low false alarm rate and fast classification of small targets. Furthermore, SMART-S Mk2 offers dedicated helicopter capabilities. Its technology concept

guarantees maintenance-free mission capability and makes the system very easy to operate. On-board installation is simple.

SMART-S Mk2 is the newest member of Thales' worldwide-acknowledged 3D-radar family. It demonstrates state-of-the-art functionality and proven technology; the revolutionary littoral warfare standard of modern AAW defense and offers a full match with the engagement ranges, of for instance, the Evolved SeaSparrow Missile. Thales provides the SMART-S Mk2 for the Danish Navy's FSS program.





Thales North America, Inc.- 675 N Washington St. Suite 400, Alexandria, VA 22314 USA -Tel (703) 838-9685 Fax (703) 838-1688 Website: www.thalesgroup.com/northamerica

Meeting customers' underwater mission requirements

Thales is a world leader in the application of advanced technologies to meet Customers' underwater mission requirements.

Thales demonstrates this leadership in all fields of Anti-Submarine Warfare and Mine Countermeasures, with an unrivalled Customer base, and technologies, which evolve to meet the changing operational environment.

ANTI-SUBMARINE WARFARE SYSTEMS

Thales' Hull-mounted and Towed Array sonars are the state-of-the art for the antisubmarine warfare surface ship missions. Recent successes include UK (Sonar 2087); France/Italy, in partnership with WASS (Horizon); Norway (CAPTAS & Spherion); Australia (FFG7 UPG); South Africa and Indonesia (Kingklip).

Thales' FLASH helicopter-borne dipping sonar is has been chosen by the UK



Royal Navy (EH101 MERLIN), the US Navy (MH-60R), the French Navy (NH90), the UAE Naval Force (Naval Cougar), the Royal Swedish Navy (NH90), and the Royal Norwegian Air Force (NH90). The Sonobuoy processing system UMS 2000 is part of the maritime patrol aircraft mission system chosen by the Turkish Navy (MELTEM).

AN/AQS-22 ALFS is the world standard in airborne low frequency dipping Sonars. ALFs is based on the successful FLASH design. It is optimized for maximum effectiveness in tactical ASW operations.

Thales' underwater systems activity has recently been awarded a contract from Raytheon Integrated Defense Systems (IDS) for the production of 10 AQS 22 Airborne Low Frequency Sonar (ALFS) dipping sonar subsystems for the U.S. Navy's MH60R multimission helicopter.

The proven AN/AQS-22 (ALFS) is perfectly adapted to the requirements for sprint-anddrift ASW operations from an Unmanned Surface Vessel.





SUBMARINE SYSTEMS

Thales proposes a world leading performance in hull adaptable array technologies. Submarine Conformal Array technologies and associated beam forming techniques have been developed and proven in operational service with the Royal Navy (2076) and French Navy (PFAS). Adaptable to a variety of hull forms, the next generation 2076 TFA design is now developed to provide dramatic reductions in cost and weight.

MINEWARFARE SYSTEMS

The supplier of Mine countermeasures systems for over half the world's in-service fleet of Mine hunters, Thales Under Water Systems has developed the first generation of Large Bandwidth sonars. Recent successes include upgrades for the UK Royal Navy Hunt class, the French Navy Tripartite Mine hunters, the Dutch and Belgian Navy Tripartites, and Turkey (2093).

High Frequency Wideband MCM Sonar Technology for MCMVs is the advanced mine counter measure solution in operational use with the Royal Navy. Pull-through of proven wideband technology from Sonar 2193, it enables extended performance for littoral operations, high coverage rate with long-range classification of stealth mines and computer aided detection & classification.

SAS Payload for BPAUV is a high-resolution synthetic aperture sonar enabling mine surveillance and rapid environmental assessment payload. It combines a high resolution to reduce false alarms and long range for faster coverage rate. It is proposed with a containerized UUV support infrastructure; it is also user friendly Man Machine Interface.



PETREL is the Obstacle avoidance and navigation system, selected by the Royal Australian Navy.

3D sonar with instantaneous resolution of range, bearing and elevation, it is high frequency and high resolution for optimal littoral performance; its unique intuitive 3D display capability minimizes operator training.

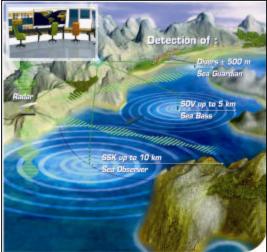


A Comprehensive maritime security offer

Thales' expertise is also demonstrated in services. This naval support capability is tailored to meet individual needs and budgets, and to make maximum use of existing infrastructure and local skills. This extends from basic spares provisioning, in-service repairs and technical support to comprehensive maintainer and operator training, long-term Contractor Logistic Support (CLS) arrangements and turnkey dockyard and facilities management. Modernization, upgrading and overhaul operations are other support activities that Thales has experience in. Since maritime surveillance cuts across all areas of naval warfare and encompasses an extensive range of needs and capabilities, this seminar examines a large number of critical issues.

During Navy League 2005, Thales is particularly demonstrating its maritime surveillance capacities with a wide range of systems covering both sensitive area protection and costal surveillance activities. Thales provides integrated solutions on a turnkey basis, for maritime surveillance systems such as MAPS - Modular Area Protection Systems-(see image).

Thales has developed a multi-level modular protection system consisting of four surveillance layers interlinked to a central command and control post. Based on a flexible, low-cost open



architecture, MAPS typically comprises both above-water and underwater sensors and provides protective surveillance against threats such as divers, swimmer delivery vehicles and submarines.



Land & Joint Systems is Thales' new business group that brings together the activities in information & communications systems, optronics systems, ground surveillance radars, ground robotics and armaments. The majority of these activities were previously part of the Communications and Optronics business groups.

The business group draws synergies and added-value from its expertise in communications and optronics equipment, offering its **Land**, **Air and Naval customers** the benefits of a comprehensive approach, which is key to the effective "tri-service" integration and allied interoperability required in the field.

SOPHIE: A FAMILY OF LOW WEIGHT AND MULTI APPLICATION THERMAL IMAGERS

The Sophie product line meets the full range of observation, surveillance, target detection, target designation and fire control requirements in line with user's needs. These binoculars are heat- sensing and can spot and track targets (sniper and reconnaissance teams) at long distances even at night.

Thales has sold over 6,000 Sophie infrared cameras in 45 countries for surveillance. combat and peacemaking missions. Sophie cameras operate in the thermal infrared spectrum making them undetectable and enabling day and night observation of camouflaged targets in all weather conditions. The Sophie thermal cameras have a complete optic suite of gear for all the weapons even during the night. The Sophie camera is perfectly suited to the needs of infantry soldiers and enables tank recognition at ranges of over 3 km. The band used makes



the camera immune to fire, smoke, fog and reflected sunlight. These cameras are also operating perfectly in areas having high temperature and high humidity. These characteristics make it ideal for battlefield conditions and peacekeeping and security missions. Additional new products of the Sophie family also include a multi-function version, which is already available. Incorporating a GPS, an eye-safe laser rangefinder, direction finder and laser pointer, the multi-function version is a complete system for target acquisition, location and designation for the Armies, Air Forces, Navies and Special Forces.



Phalanx HDTI

The Thales High Definition Thermal Imager (HDTI) is an integral part of the Phalanx Close-In Weapon System Block 1B upgrade. The Block 1B surface mode provides unequalled capabilities in near-shore, littoral environments. It provides protection to ships and their crews against an increased number of threats including small, fast gunboats, standard and guided artillery, helicopters, mines and a variety of shore-launched, anti-ship missiles. Phalanx, fitted with HDTI, detects, tracks and engages threats to provide an autonomous point defense system for high value assets and day/night situational



awareness capability directly to the Operations center. HDTI is fully qualified and ruggedized for the military environment and to date more than 100 have been delivered for deployment on U.S. and other platforms.

FICS

Thales developed the FICS fully-integrated communication system to meet the needs to manage massive amounts of information during multi-nation Network Centric Warfare operations that hinge on interoperable, open, scalable communication systems.

FICS was recently delivered for the *Mistral* force projection & command vessel launched on October 6

2004. This illustrates the Group's ability to offer turnkey communication systems meeting the French Navy's latest requirements.

FICS offers external communications (VLF, HF, V/UHF, tactical datalinks, satellite links, etc.) to NATO standards and secure internal communications using IP technologies. This new-generation open system interconnects users by offering them a range of interoperable services, including videoconferencing and real-time data exchange. FICS is also designed to accommodate the Rifan naval aviation intranet and the SIC 21 new-generation command information system, also developed by Thales.

Thales is also currently supporting some significant naval communications initiatives in the US, for example:

JTRS AMF* program as part of the Lockheed Martin Team which has been selected along the Boeing Team to compete for the pre-SDD phase.

LCS** program along General Dynamics and BAE Systems for Flight 0

MIDS J program in the framework of the transatlantic partnership between the ***MIDS LVT Nations

*JTRS AMF: Joint Tactical Radio Systems (Airborne, Maritime and Fixed Station) **LCS: Littoral Combat Ship

***MIDS LVT: Multifunctional Information Distribution System (Low Volume Terminal)

NEWS



Thales A Powerful Force in Electronics

Thales is a global electronics group employing 61,500 people across the world and serving professional markets in three areas: defense, aerospace and security. With 2004 revenues of **\$13.3 billion**, its activities include prime contracting for large-scale programs, complex system architecture and the supply of equipment, systems and services.

Following a recent reorganization to better meet customer needs, the Group is now structured as follows:

<u>Aerospace</u>

Avionics Airborne Systems Computers Microwave Microelectronics

Land & Joint Systems

Broadcast & Multimedia Land & Joint Systems T solutions

Security

Secure Operations Information systems (Transport & Energy/Real Time) Navigation Electron Devices SHIELD

Leveraging dual-use technologies

As the boundaries between civil and military technologies become less distinct, know-how developed for defense systems is becoming increasingly valuable to Information Technology & Services businesses. Conversely, the defense businesses have access to the commercial electronics now replacing earlier generations of military components.

A multi-domestic strategy

For several years, Thales has pursued a policy of external growth for its defense business and implemented a unique model of multi-domestic development to emerge as a global player with the local industry presence that each market requires. This strategy is succeeding: half of all orders booked last year came from countries where the company now has industrial operations.

<u>Air Systems</u> Air Traffic Management Air Defense Galileo

Services

Training & Simulation Information Systems IT Outsourcing Consulting

<u>Naval</u>

Warship prime Above water systems Under water systems Naval services



Thales North America, Inc.

Thales North America, Inc. (<u>www.thalesgroup.com/northamerica</u>) located in Alexandria, Virginia, provides a wide variety of services and products in the areas of aerospace, defense and information technology to the American market. With 30 domestic operating units, Thales North America's companies generated sales of \$1.1 billion in 2004 and employed more than 2,000 people throughout the region.

For more information, please contact:

Corporate Communications Thales North America, Inc. Tel: 703-838-9685 Fax: 703-838-1688 www.thalesgroup.com

