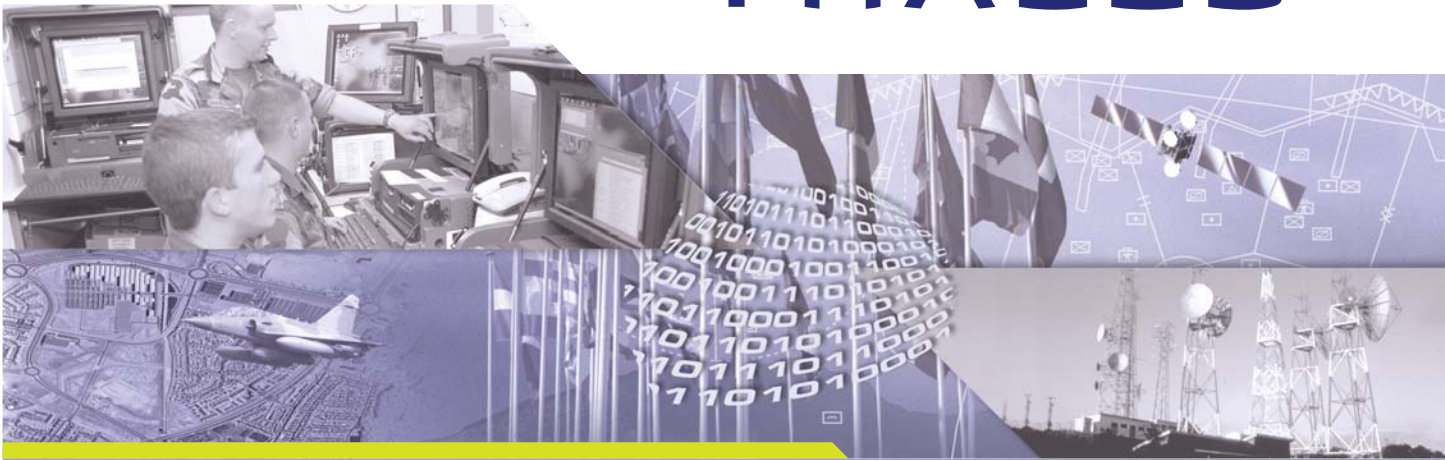


THALES



MINDS

Multi-sensor Image iNterpretation and Dissemination System



**Decide on what
you can see**

**Deployable multi-sensor
IMINT exploitation system
for Intelligence, Surveillance,
Targeting and Reconnaissance
users worldwide**



MINDS

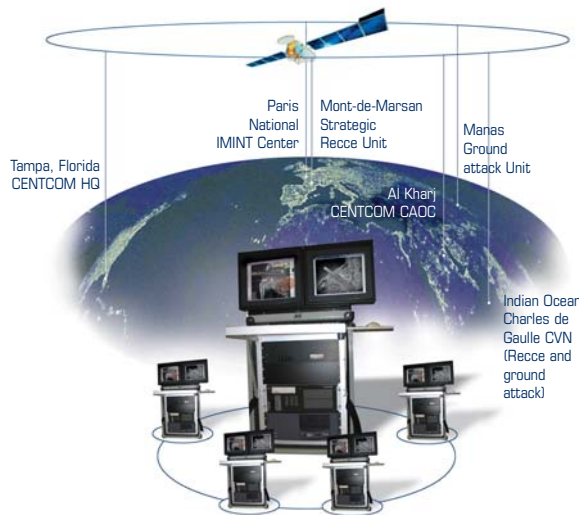
Multi-sensor image - Interpretation and dissemination system

SYSTEM DESCRIPTION

MINDS is the THALES comprehensive solution for a deployable ground image intelligence (IMINT) segment. Acquisition and geo-referencing of raw data from multiple imaging sensors and heterogenous supports (wet films, CCD sensors, video, IRLS, radar data), image interpretation, ground surveillance platform exploitation, mission preparation and precision targeting, all are available in a self-contained, modular environment.

Scanned or digital maps, UAV video feed, Aircraft or satellite imagery are processed, standardized and fused by MINDS to timely deliver accurate IMINT products to the most demanding users over the full operational spectrum.

MINDS in support of French and US forces in Afghanistan (operation Enduring Freedom, 2002)



The MINDS modular architecture can be tailored to mission requirements :

- Through the selection of context-relevant image processing tools and operational functionalities.
- Through the customization of available functionalities according to user profits.
- Through the capability to operate in a networked configuration to acquire, store, retrieve and disseminate IMINT support data and products among multiple users.

COMPREHENSIVE OPERATION

MULTI-SENSOR FROM MULTIPLE PLATFORMS

- Analog cameras, day and night Electro-optical sensor, video, SAR/MTI

MULTI-ROLE

- Image acquisition, processing, fusion and analysis for navigation, intelligence, surveillance, targeting

MULTI-LEVEL OPERATION

- National Intelligence center
- Theater intelligence support Tactical IMINT production for Army, Navy and Air Force units ISR assets

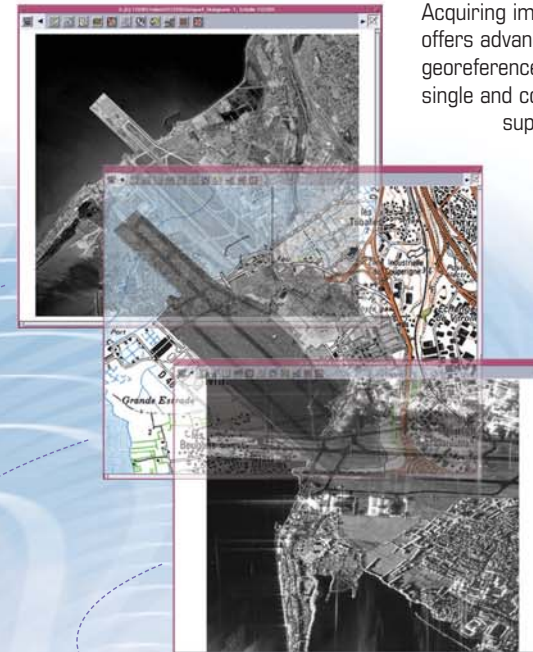
MULTI-MISSION

- Digital map production and update
- Intelligence
- Surveillance
- Target acquisition
- Reconnaissance and Bomb Damage Assessment
- Mission preparation

MINDS is designed around core functionalities packaged in a single light transportable station. Dedicated configurations in clustered workstations can be tailored to function, mission or unit requirements. Networked exploitation is available at local or global levels.

ADVANCED IMINT PRODUCTION

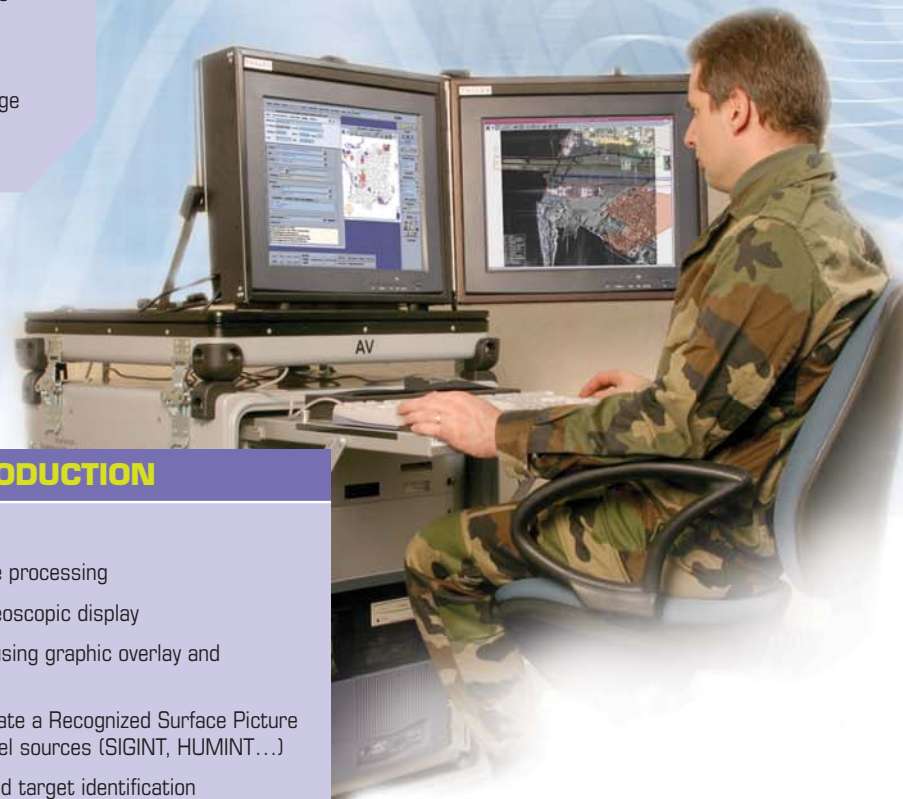
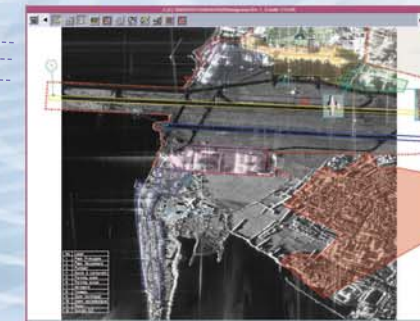
- Automatic geo-referencing
- Radiometric and geometric image processing
- DDD objects reconstruction/stereoscopic display
- Construction of intelligence files using graphic overlay and geo-referenced objects
- Fusion and edition tools to elaborate a Recognized Surface Picture incorporating IMINT and other intel sources (SIGINT, HUMINT...)
- Advanced tools for computer-aided target identification
- Report edition (STANAG 3377) and generation of multimedia intelligence folders



Acquiring image from multiple sources, MINDS offers advanced, user-friendly tools to fuse georeferenced areas and objects of interest on a single and common-format image intelligence support.

POWERFUL CAPABILITY

- Real-time display and analysis of surveillance payload data (image or MTI plots)
- Automatic selection of area of interest on multiple criteria (e.g. geolocation)
- Automatic target detection tools (IR and SAR) to facilitate operator task
- Link 16-capable for short-loop targeting
- Networked exploitation of multiple stations (LAN or WAN clusters), reachback to centralised IMINT files



INTEROPERABILITY

IMAGE ACQUISITION (PRIMARY DISSEMINATION)

- STANAG 7023
- EX, STANAG 4607 (GMTIF)

SECONDARY DISSEMINATION

- STANAG 4545 (NSIF), NTIF 2.1
- STANAG 4559 (NSILI)
- STANAG 3377 (RECCEXP)
- Support data: STANAG 7074 (DIGEST)
- Datalink: STANAG 7085
- Storage: STANAG 4575

Web-based store/retrieve/share/ disseminate of IMINT files in HTML

MINDS

Multi-sensor image - Interpretation and dissemination system

MAIN CHARACTERISTICS

FUNCTIONALITIES

- Acquisition of image and mission auxiliary data
- Image processing (filter, sharpening,...)
- Geometric computing (registration, triangulation, DTM computing, mosaic,...)
- Editing (creation, update, inquiry) of target and intelligence reports
- Tracking
- Situation picture editing
- Features acquisition from images
- Documents production and multiple peripherals (light table, printer...) management
- Data bases administration
- Web-based file exploitation

DEPLOYABILITY

- Physical and functional modularity
- Common modular hardware units allowing different configurations of exploitation systems
- Compact and ruggedised air-transportable containers
- Easy transportation and installation by 2 operators in less than 2 hours
- User-friendly operation
- COTS-based Maintainance
- Full built-in tests

- **Real time and offline exploitation of multiple image feed**
- **Powerful, multi-mission IMINT production**
- **Designed for network-centric overseas operations**
- **Field-proven by Army, Navy, Air Force and Joint services**
- **Fully compliant with the latest NATO ISTAR STANAGs**

Field-proven since 1998, MINDS is also regularly deployed in joint NATO exercises (Strong Resolve 2003) or technical evaluation groups (NC3A, CAESAR).

Thales

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