

Gamstat – Journee Armee-Nation 2001

The EuroNav III Task Management System based on an integrated GPS sensor module is a navigation and task management system designed for use by airborne observers to minimize cockpit work. Apart from detailed mapping of the force area the system provides the user with additional functions which have been tailored to the needs of Military Forces, Police and Rescue Systems. By means of several interfaces such as FLIR (Forward Looking Infrared), the EuroNav fulfils the role of a real-time terrain-referenced navigation system to optimize situational awareness and mission success.

Besides other countries, The French Army ALAT is flying Euronav III (on Gazelle), as well as the Swiss Army (on Puma), Swedish Navy (on CH 46), Finnish Border Patrol (on Bell 412), South African Airforce (A 109 LUH). The French Gendarmerie Nationale has ordered Euronav on EC 145.

Maps and Database:

The EuroNav is centred around a sophisticated mapping database which can hold both digital and scanned paper maps of the entire force area and its surroundings. As the moving map is linked to GPS signals it offers very reliable accuracy. The current position is constantly updated and displayed on the map. It is possible to zoom up and down through different map scales and the zoom level generally reflects the visibility appropriate to the altitude actually flown. The system includes a Jeppesen database and can hold up to 3000 user waypoints.

That targets can be defined by names and not by coordinates is tremendous advantage to a normal moving map.

The "Near-To Mode" for example shows not only the position of the helicopter but furthermore as well the exact name of the recently overflown street or town. Long search will be abolished.

For police mission in the air special search systems or distance marks adjusted to the escape speed (by car, by foot) encourage the search. If it is necessary to refuel or stop over for any other reason, the system stores the exit point in mind and provides you that point as Re-Entry point when you come back to this area again.

All flights can be stored in the provided Flight Recorder and can be used as evidence or proof if needed.

During the flight waypoints and areas can be marked and named. They are stored in the memory as well (e.g. start and end of a persecution, finding a person and so on).

In connecting the system to a FLIR camera the diagram of the camera focus point in the map is possible. You can even navigate the FLIR camera if you enter the observed object as target by name. The camera is then automatically adjusted to that target (e.g. street, river, forest, lake or village).

Elevation Model:

Having a world database integrated, the system warns of possible conflicts with the terrain on sight. There are different contour lines shown as overlays. Green lines indicate areas lower than helicopter. Yellow lines indicate areas on same level and red ones indicate areas higher than helicopter.

DVI:

EuroNav can be controlled via direct voice input. That lightens especially single pilot missions. Even a connected FLIR camera can be operated "hands off" in that way. This system is in use by the English police and in the BK 117.

FLIR interface:

FLIR cameras of all common manufacturers can be navigated by the EuroNav by entering a chosen target. If the camera is operated in a free way, the EuroNav points out the name of the observed target automatically.

Because of the internal recording in the own Flight Recorder you can reproduce and show flight course and observed targets on the ground.

Search Rasters:

All common search patterns are stored in the systems as free selectable flight plans.

Obstacle Warning:

The system knows all power lines or cable railways in the chosen operation area. They are shown in different colours and a big warning window turns up if there is a possible conflict within the next flight route. The obstacle warning is for example used in Austria by ÖAMTC on EC 135s.

Ground Station:

The Ground Station is intended for mission support, map conversion, administration work and more. Data can be transferred from Ground Station to Helicopter and vice versa via GSM without problems in an easy and effective way.

Hardware profile:

We offer a wide range of hardware components and interfaces. As soon as we know what a customer wants to connect to the Map Generator we can offer an individual system combination tailored exactly to customer's needs.

The normal way of a basic system consists of a Map Generator plus shock mounting tray, one or more displays, a Switch Box with an integrated PCMCIA slot to simplify data transfer and a NVG compatible Control Unit.

Furthermore there are a lot of different additional components as GPS antenna, Mini Keyboard, NVG filter, GSM modules, compass module or analog converter. Available interfaces are RS 232 / RS 422 and ARINC 429 and MIL-BUS 1553. Video interfaces for PAL, NTSC or STANAG 3350 B can be integrated to the system as well.

Of course this can be just an extract of our supply. Available are a lot of other features like easy usability and

flexibility which are absolutely necessary for the daily use. To find exact details please visit our homepage at www.euroavionics.com.

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