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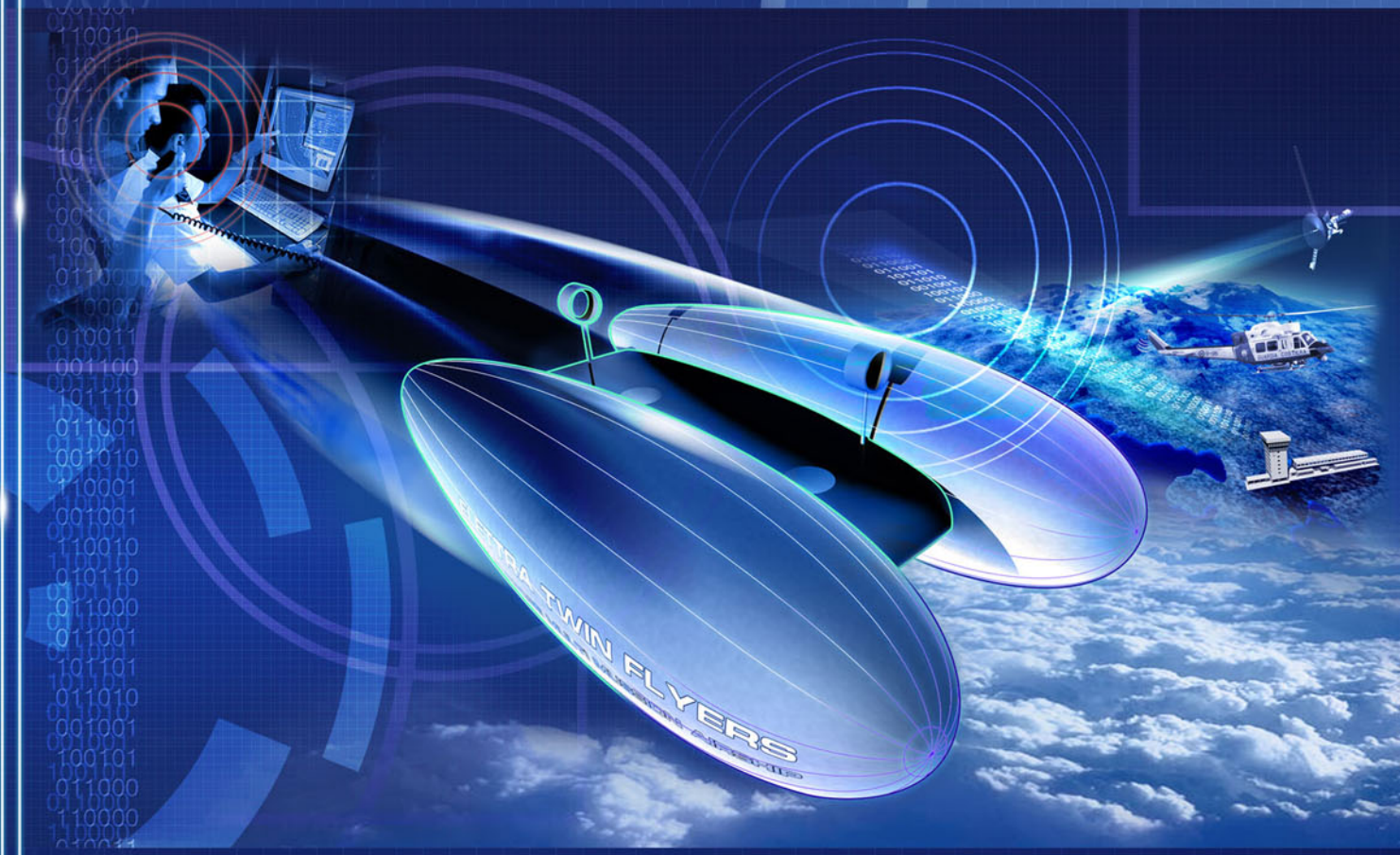
ELETTRA TWIN FLYERS
MULTIPURPOSE MULTIMISSION AIRSHIP



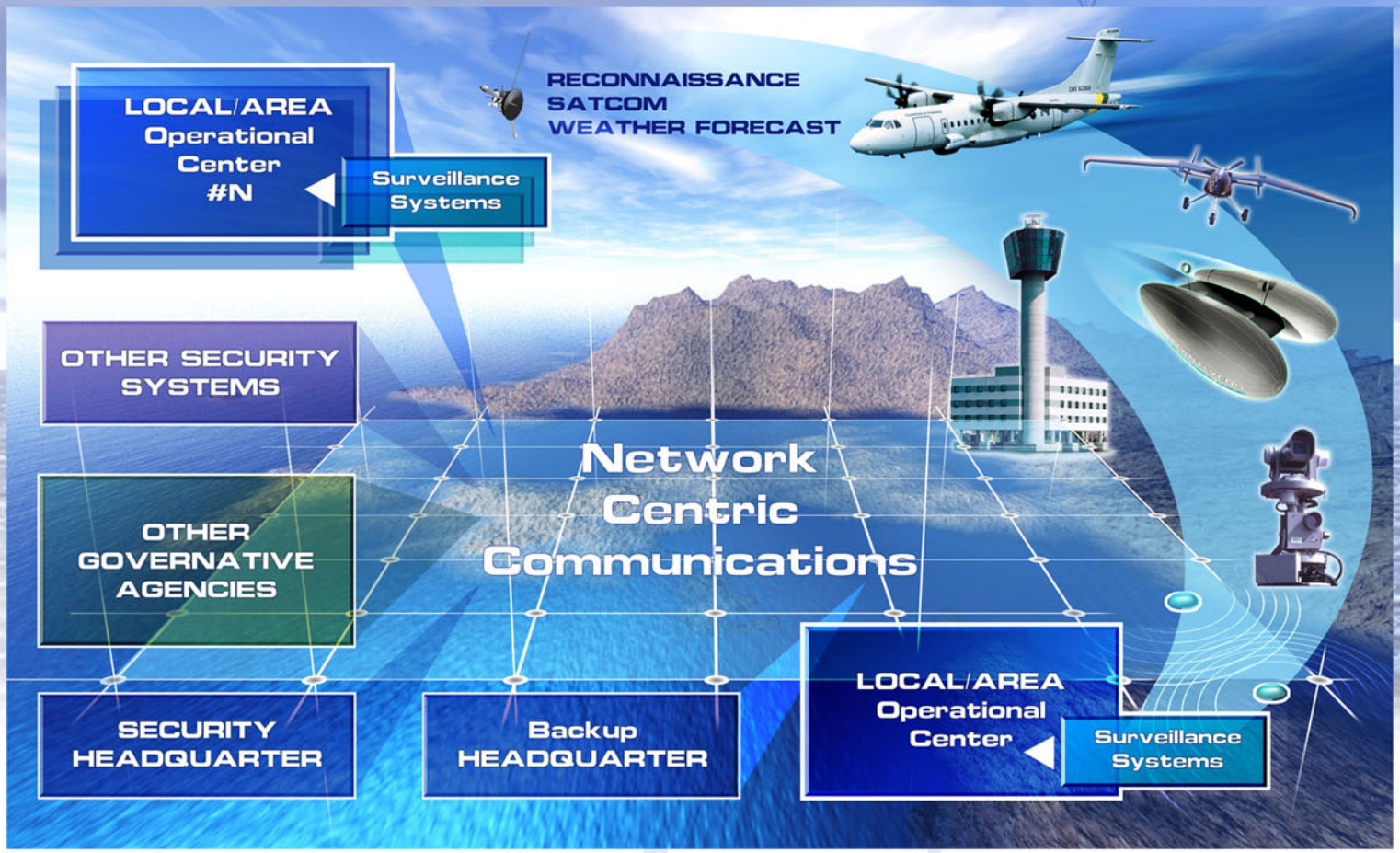
New generation unmanned **Airship**
with **Mission Control** patented solutions

Double-hull Remotely-controlled
with **Hovering** capability

Fully integrated **Communications,**
Surveillance and **Navigation** systems

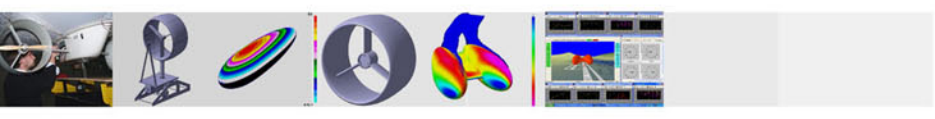
MULTIPURPOSE MULTIMISSION AIR

- Unmanned airship with excellent performance thanks to the innovative geometrical shape and flight control system
- Hovering capability also with adverse meteorological conditions
- Low cost missions



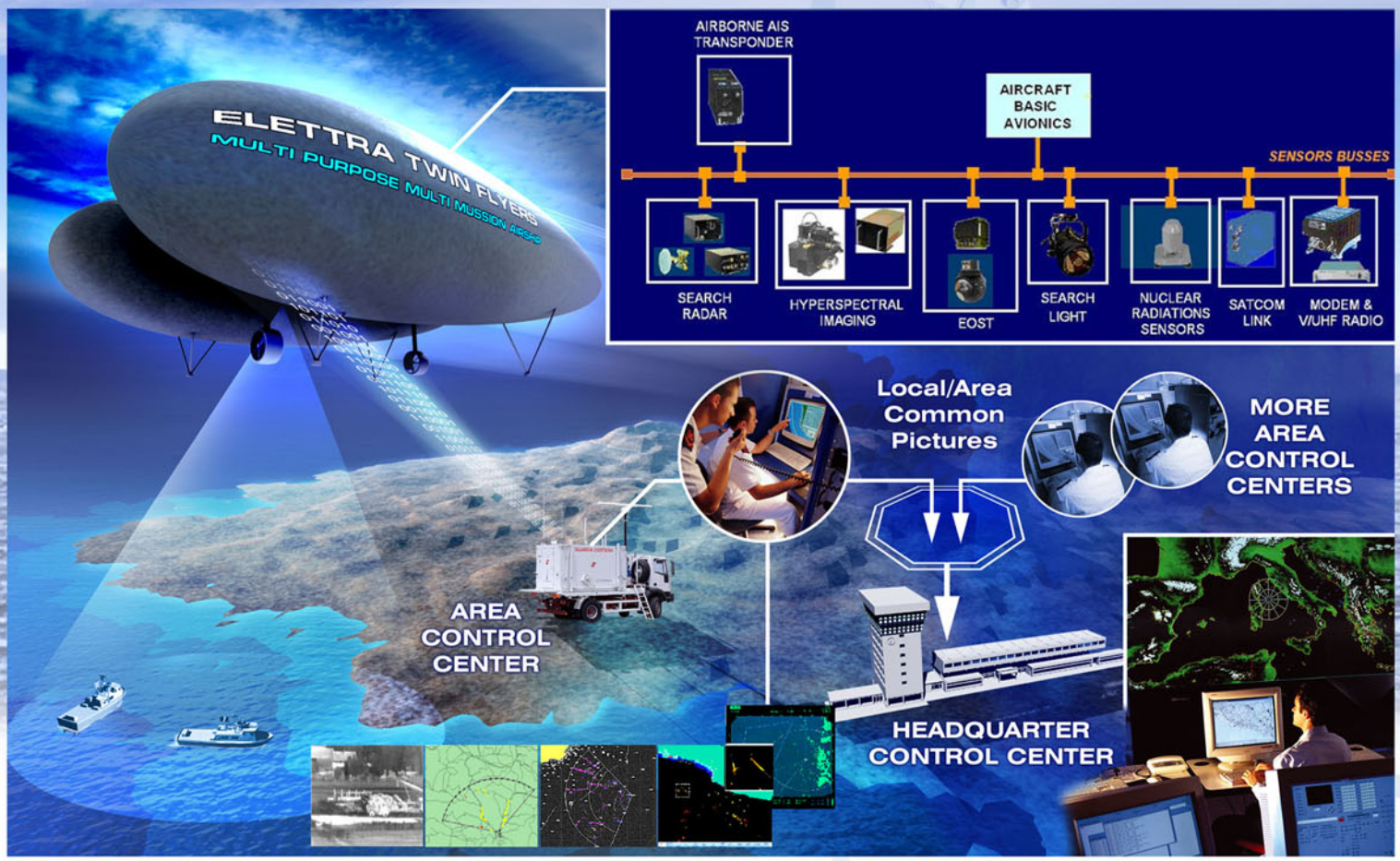
By being an unmanned platform, able to stand with the adverse weather conditions and to operate with low cost, makes the ELETTRA Twin Flyers a very versatile product suitable for border and maritime surveillance missions. To cope with this activity the platform is provided with the appropriate sensors (electro-optics, radars and hyperspectrals) according to the mission's requirements.
Another possible application for the platform is the communication's coverage extension whenever it is not feasible to rely upon a fixed installation (catastrophic events, peace-keeping, military operations). In this case the platform is provided with the appropriate communication's means, such as a radio base station and radio links.
Furthermore, both the applications above can be performed concurrently by the platform.

ELETTRA Twin Flyers System includes the unmanned airship, the Control Station and the Mission Station. The airship and ground stations are connected by means of redundant radio communications with secure capabilities; intercom system with wireless extension integrated with a multiservices network give the fully interoperability between the operators including also the operative staff on the field.



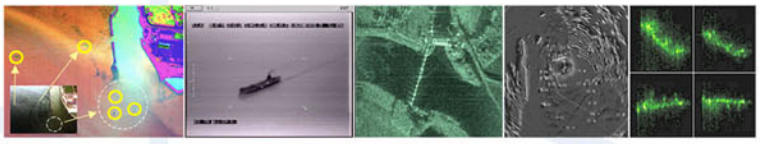
The Control Station is provided with a easy-to-use man machine interface to allow the management of the airship made by low skilled staff. The intrinsic safety strictly related to the airship mechanical structure has been integrated and enhanced by means of automatic flight system and redundancy of the critical parts.

The Mission Station is different according to the nature of the mission the airship is undertaking and, therefore, to the relevant equipping. Anyhow, the station encompasses data fusion tools and is provided with a simplified GUI (Graphical User Interface) in order to help the operator in the analysis of the received data and in the management of the on-board equipment.

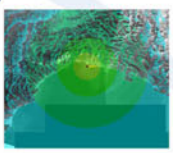


Several configurations are available for different missions:

Sensors carrier missions:
- Homeland Security
- Border and Maritime Surveillance
- Airborne Early Warning



Communications carrier missions:
- Communication's coverage extension after catastrophic events (flood, earthquakes, etc.)
- Communications without the needed infrastructures (peace-keeping operations)
- Communications in a hostile environment (military operations)
- Over the Horizon Communications

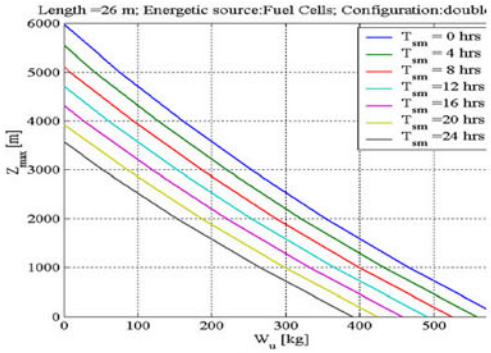


Multi carrier missions:
- All the applications listed above for the different type of missions can be mixed in any possible way by providing the platform with the relevant equipment. This makes the ELETTRA Twin Flyers a very versatile system.

Main Characteristics

Airship:

Dimension (LxWxH)	26x16x9 meters
Propulsion	4 horizontal + 2 vertical electrical engines
Energy Supply	Li-pol battery + H2 Fuel cell
Altitude	
Payload	
Endurance	



Maximum speed	25 m/s
Cruise speed	20 m/s
Maximum vertical speed	3,5 m/s
Max adverce Hovering weather conditions	
Max frontal wind	45,8 knots
Max side wind	18,7 knots
Transportability	2+1 Euro6 containers for airship and ancillaries

Mission Equipment:

Surveillance sensors	Search radar Electro-optic AIS Hyperspectral Search light Nuclear radiation
Communications equipment	Radio base station Radio link

Ground Stations:

Available in different configuration according to the mission and the number of airships managed

Layout	Shelterized or Network Centric versions
Remote Operators (typical)	2
Radio Communications	HF/VHF/UHF Satellite Secure Communications
Interphone	Noise suppression Wireless extension
Network Centric Services	High capacity voice and data network Fully integrated radio communication and sensors Interfaces with Public and Customer Network High resilience network Secure Network

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