



THE AIR DRONE – MARINE A NEW CREW MEMBER?

The integration work of French Navy Air Drone System (SDAM) continues at a swift pace. The challenges are great, but justified by the advantage provided by the characteristics of the drone to fulfil current and future missions.

SDAM'S MISSIONS AND BENEFITS

SDAM's missions are as varied - detection, classification, identification, action and evaluation - as its focal areas - maritime security, search and rescue, fight against submarines, mine clearance or amphibious operations. Future developments could also see the integration of weapons payload.

The SDAM is tough, discreet (with regards to visual, infrared, acoustic and radar detection) and, last but not least, affordable. Being pilotless by nature, it is a device that can be exposed to more risk: its replacement cost remains below that of an aircraft and its crew, and the media coverage and political consequences of an interception carry fewer consequences. Moreover, the operating cost is lower, in flight time as well as per square nautical mile under surveillance.

A YET COMPLEX IMPLEMENTATION

The implementation of the SDAM varies according to the ships on which it is deployed. If a drone with a mass over 25 kg can be used on ships with a classic flight deck (aircraft carriers, projection and command vessels) or on helicopter carriers (FREMM, FDA), smaller devices can be used on ships devoid of dedicated take-off area.

The integration of SDAM goes far beyond simple aeronautical consideration. In addition to dedicated hangar space, spare parts and specific means (workshop and control stations), data transmission systems such as antennas and transmitters must take into account the movements as well as potential EMI related to all of the ship's capabilities.

Finally, like any aircraft, the SDAM must obey aviation regulations: Today and even more in the future, its pilots will have to be specifically trained specialists, of recognized standing, integrated with the crew or the onboard air units.



AN ASSET FOR NAVY MISSIONS

The drone is now a necessity for France and its 11 million square kilometres of exclusive economic zone. Only such a system will allow maintaining sovereignty over such a surface, multiplying the potential for surveillance and response of ships. The fight against illegal fishing, smuggling, pollution and illegal exploitation of our resources will be more efficient, improving in conjunction the knowledge of these areas.

The Navy SDAM becomes an indispensable tactical asset to ensure the success of its missions, whether in the context of the protection of property and individuals or high intensity combat. A drone allows any ship, even without aircraft capability, to increase its volume of detection and transmission, to better understand its environment and to maximize the potential of its combat system. This multitasking and multi-role aircraft is truly a "force multiplier."

It is no coincidence therefore that all Navies - from Spain to Malaysia through Latvia and Vietnam - are looking forward to acquiring them. In a context of budget reductions for the armies, a tool that increases effectiveness while reducing the human and financial costs of operations can only seduce.

The Navy is at the forefront of this revolution with its experimental SERVAL system (Embedded System Recognition, Light Air Vector). It acquires a unique experience in Europe while preparing the integration of these drones on its ships.