Leonardo unveils its largest-ever drone, the Falco Xplorer, opening up new civil and military markets for the Company in the unmanned domain

- The latest addition to the successful Falco family of remotely-piloted air systems has a payload capacity of over 350kg and endurance in excess of 24 hours

- The Falco Xplorer is readily exportable. It is also undergoing certification for flight in non-segregated airspace and will be targeted at civil as well as military customers

- Profumo: “Leonardo invests continuously in new capabilities to ensure we position the right products in the right markets. The Falco Xplorer builds on our experience working with Falco family customers over a number of years. By understanding and being able to meet their needs, we expect to increase our share of the unmanned systems market”

Le Bourget (Paris), 17 June 2019 - Today, at an unveiling event at the Paris Air Show, Leonardo introduced its largest-ever Remotely-Piloted Air System (RPAS), the Falco Xplorer. Building on the success of the Company’s Falco family of tactical-class RPAS, the new drone features a payload capacity of 350kg, more than 24 hours flight time and a satellite communications capability for beyond-radio-line-of-sight operations, all within a 1.3 ton maximum take-off weight (MTOW). Everything is designed in-house by Leonardo, from the aircraft itself to the sensor suite, mission system and ground control station and the Falco Xplorer will be offered as both an integrated platform and as a fully-managed information-superiority service. In the latter model, Leonardo will operate the aircraft and its sensors and manage logistics to provide actionable information directly to the customer.

“Leonardo invests continuously in new capabilities to ensure we position the right products in the right markets”, said Leonardo CEO Alessandro Profumo, who presented the Falco Xplorer at its unveiling. “The Falco Xplorer is designed to be extremely competitive in its category, building on the experience we’ve gained working with Falco family customers over a number of years and our Company’s strengths in the unmanned domain. By understanding and being able to meet our customers’ needs, we expect to increase our share of the unmanned systems market.”

The Falco Xplorer has been designed from the ground-up to access the widest possible market. It is undergoing certification for flight in non-segregated airspace, meaning Leonardo will be able to pitch it to civil customers such as coast guards and emergency responders as well as the military market. Because the Falco Xplorer system is entirely designed and manufactured in Europe, it is not subject to International Traffic in Arms Regulations (ITAR) restrictions and its technical characteristics place it within the Missile Technology Control Regime (MTCR) class II category. Together, these make the Falco Xplorer readily exportable around the world.

Following the unveiling, the new RPAS is expected to embark on its maiden flight in June from Trapani Airport in Italy. A series of trials will then take place throughout the year, capped off by a flight campaign with the platform’s fully-integrated sensor suite on-board. The RPAS could then be delivered to its launch customer as early as 2020. The drone will be certified according to NATO STANAG4671, meaning that it will be readily approved to fly for NATO countries.
Leonardo believes that an unmanned capability goes beyond the aircraft, so the baseline ‘Block 10’ equipment fit for the new RPAS takes advantage of Leonardo’s world-class in-house electronics portfolio to offer a comprehensive Intelligence, Surveillance and Reconnaissance (ISR) capability over land and sea. This high level of integration has a dual benefit for customers who will be able to acquire a highly capable and effective system at a competitive price. The platform will come equipped with a Gabbiano T-80 surveillance radar, LEOSS electro-optical turret, SAGE electronic intelligence (ELINT) system and an automatic identification system (AIS) for maritime use. The sensors will be integrated through Leonardo’s powerful mission management system, which draws on the Company’s experience in both the manned and unmanned domains and includes protection from cyber-attacks as standard under the Company’s ‘secure by design’ philosophy. Leonardo can also flexibly modify the sensor suite in-line with customer requirements, including integrating third-party sensors. The platform’s Ground Control Station (GCS) allows operators to control the aircraft and its sensors and incorporates data exploitation tools, enabling the dissemination of useful information to wider C5I systems. It also provides mission data analysis, mission planning, training and simulation capabilities.

The new platform joins Leonardo’s successful Falco family of tactical RPAS. The original Falco was chosen by five nations, while its successor, the Falco EVO, has been chosen for the United Nations MONUSCO humanitarian mission and has been deployed for the European Union’s Frontex surveillance research programme. Today more than 50 Falco family RPAS are currently engaged on operations around the world, some being operated by customers directly and some being owned and operated by Leonardo on behalf of customers as a managed service.