

# Applications

## Manned & Unmanned ISR Aircraft

S-PLANE's Aircraft Automation, Communication and Ground Control Solutions, combined with suitable buyer-furnished sensor payloads, are integrated onto rotary-wing and fixed-wing manned and unmanned aircraft in order to create powerful Manned, Unmanned and Optionally Piloted ISR aircraft supported by state-of-the-art Ground Control Stations (GCSs). Integration can be performed for new aircraft or as modernisation and upgrade projects for an existing fleet. Manned ISR aircraft created with S-PLANE technology are easily upgraded to state-of-the-art certification-ready Optionally Piloted or completely Unmanned ISR Platforms. S-PLANE supplies the necessary equipment and provides the system engineering, customisation, integration, testing and certification support you need to make your ISR aircraft integration a success.



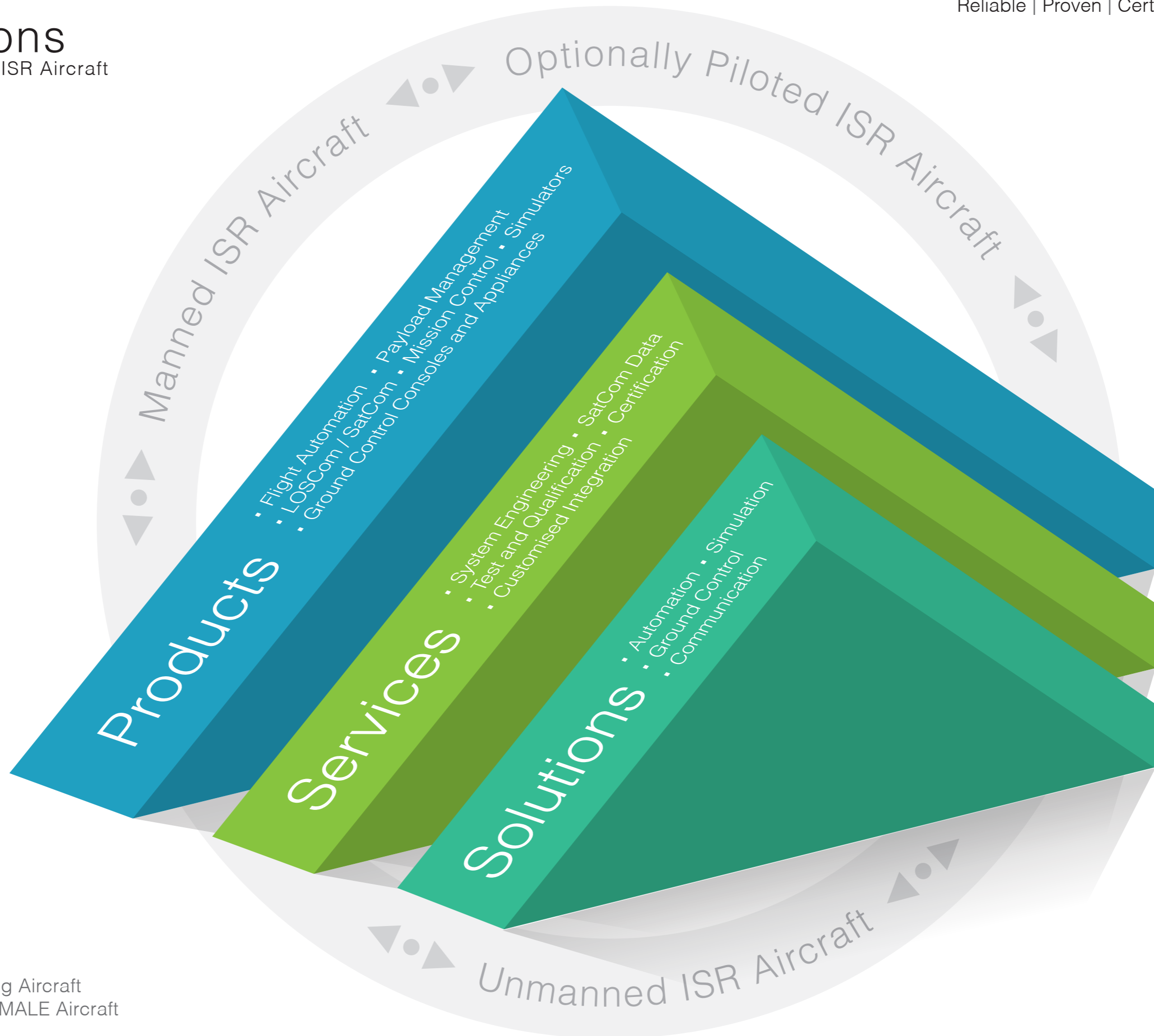
# Applications

Manned & Unmanned ISR Aircraft

- Standards-based
- Redundant
- Flight-critical Design
- Fully Customisable



- Rotary- and Fixed-wing Aircraft
- Tactical mini-UAVs to MALE Aircraft



## Aircraft Automation Solutions

Airframes designed for manned or for unmanned operation are fully automated to become Unmanned or Optionally Piloted Vehicles (UAVs and OPVs). This includes mini-, Tactical, MALE and HALE UAVs and extends to manned aircraft. The primary building blocks of these solutions are S-PLANE's state of the art, reliable and redundant nxFCU and xFCU certification-ready products, combined with system engineering, integration, flight testing and certification support.



## Communication Solutions

Manned and unmanned aircraft enjoy exceptional RF link connectivity in both Line of Sight (LOS) and non-LOS environments. The primary building blocks of these solutions are S-PLANE's TRACKER 100+ LOS tracker and industry-leading Satellite and LOS communication links. S-PLANE provides system engineering, integration, flight testing and certification support in order to realise complete Communication Solutions.



## Ground Control Solutions

Multi-vehicle Ground Control is provided via a rugged and transportable Tactical Deployment Unit (TDU) serving as the heart of any ISR Ground Control Station (GCS). The TDU provides Command and Control (C2) functionality, connectivity with pilots and mission and payload situational awareness to operators via S-PLANE's ParagonC2 and ParagonISR appliances and operator stations.



## Simulation Solutions

S-PLANE's Automation Solutions are supported by Flight and Mission Simulation and Hardware-In-the-Loop Simulation (HILS). Flight and Mission Simulation is integral to S-PLANE's Tactical Deployment Unit (TDU), normally installed within a Ground Control Station (GCS). This type of simulation is used for training purposes and to allow operators to optimise and practice real missions before they are flown. HILS supports automated execution of acceptance tests as part of an efficient system engineering tool chain.



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