Intelligence, surveillance, and reconnaissance (ISR) from the air dates back to the use of balloons to observe adversary positions during the French Revolution. Today’s knowledge-based environment, provides the opportunity to observe and analyze the meaning and impact of a wide variety of events and convey useful, timely intelligence on adversaries’ capabilities and intentions to decision-makers. However, in this “Age of Information,” ISR capabilities have expanded to operate from and through air, land, maritime, space, and cyberspace domains to achieve desired effects across the range of military operations in support of US national security objectives. Air Force ISR provides desired effects to joint force commanders, and allows for dissemination of knowledge to better support decision-makers and shape operations.

ISR has been an integral contributor to both war and peacetime operations for at least 150 years dating back to the American Civil War. It has also been more recently deployed as a demonstration tool of US global power projection. Increasingly in 21st century operations, ISR operations shape and drive decision-making. ISR operations are continuous and in high demand. ISR is normally the first capability a combatant commander requests to increase upon the initiation of military operations, and often increased ISR operations must persist even after major combat operations have ended.

**ISR DEFINED**

ISR is defined as “an activity that synchronizes and integrates the planning and operations of sensors, assets, and processing, exploitation, and dissemination systems in direct support of current and future operations. This is an integrated intelligence and operations function.” ISR consists of separate elements but requires treatment as an integrated whole in order to be optimized.

**Global Integrated ISR Defined**

The Air Force defines global integrated ISR as “cross-domain synchronization and integration of the planning and operation of ISR assets; sensors; processing, exploitation and dissemination systems; and, analysis and production capabilities across the globe to enable current and future operations.”
Global integrated ISR enables use of multiple assets from multiple geographic commands and leverages national capabilities in support of Service-specific requirements to collect data across all domains to satisfy strategic, operational and tactical requirements. The data may be used by national, joint, service specific, coalition, or allied personnel or any combination thereof. Global integrated ISR enables the integration of this collected information to deliver intelligence to the right person at the right time, anywhere on the globe. See figure on Global ISR Enterprise for a depiction the global presence of the ISR Enterprise.

An example of how the ISR enterprise projects global presence and battlespace awareness is through distributed operations. A global integrated Predator mission includes the aircraft, a CONUS-based or forward-deployed pilot and sensor operator team, the datalinks that allow it to be flown remotely from a location outside of theater, and all of the networks that allow its data to be streamed in near real-time to many locations around the world. It also includes the analytic capability being leveraged outside of the area of responsibility, possibly from multiple locations, that allows global collaboration to exploit the collected data, plus the dissemination capability that allows finished intelligence to flow back to multiple end users and be stored for future reference.

The ultimate goal of global integrated ISR operations is to support national security objectives through enhanced understanding of the operating environment and adversary intentions. JP 2-0, *Joint Intelligence*, states that “information is of greatest value when it contributes to the commander’s decision-making process by providing reasoned insight into future conditions or situations.” Global integrated ISR operations provide actionable intelligence to the commander in the fastest way possible.