Remotely Piloted Aircraft Systems

In 2012, ICAO finalized its first amendments regarding the operation and categorization of remotely piloted aircraft systems (RPAS), marking an important milestone in their incorporation into the comprehensive international aviation regulatory framework.

RPAS civilian and scientific applications continue to expand rapidly and States from every ICAO region have begun developing and employing these systems in a variety of domains. ICAO is well into the exhaustive process of reviewing every Annex to the Chicago Convention in order to discern how the introduction of RPAS into the regulatory framework is going to impact existing Standards.

RPAS and the ASBU Framework

One of the operational needs noted in ICAO’s Aviation System Block Upgrade (ASBU) strategy is the introduction of RPAS. As with any other improvement aviation seeks to realize, a key component of successful RPAS integration will be ensuring that their potential economic and social benefits are not realized at the expense of general system safety or efficiency.

ICAO has also clearly acknowledged, however, that many of the technological improvements derived from the introduction of RPAS have the potential to bring further benefits to manned aviation operations, resulting in an overall system improvement.
The Global Air Navigation Plan therefore recognizes remotely piloted aircraft (RPA) as a legitimate user of the airspace and the performance capability Modules required for safe, successful RPAS integration have been defined under the ASBU framework. Block Module B2-RPAS currently identifies the general parameters supporting effective RPAS integration into the global Standards framework as well as specific goals toward standardizing the command and control (C2) link requirements.

Individual States or regions which identify a pressing need to integrate RPA within their airspace can therefore follow the path set forth in the ASBUs, ensuring that their support and management of this new class of airspace user is fully-harmonized with the global ATM system.

Next Steps
ICAO continues to cooperate and consult with States and industry stakeholders on the adoption of RPAS operations into pertinent regulatory frameworks and the First Edition of the ICAO RPAS Manual planned for 2014.