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DEPARTMENT OF THE AIR FORCE

PRESENTATION TO THE COMMITTEE ON ARMED SERVICES SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES U.S. HOUSE OF REPRESENTATIVES

SUBJECT: Unmanned Aerial Vehicles (UAVs)

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Mr. Chairman and distinguished members of the subcommittee, thank you for the opportunity to appear before you today to discuss Air Force Unmanned Aerial Systems (UAS). Unmanned Aerial Vehicles (UAV) and their associated ground stations and support equipment, collectively called UASs, are a growth industry and will continue to play a prominent role in our future. The Defense Department has embraced the distinctive and unique capabilities that unmanned systems bring to the joint fight, and the Air Force stands firmly behind this endeavor.

Innovative UAV tactics have transformed the battlespace, as witnessed in military operations in both Iraq and Afghanistan. UAVs not only provide persistent intelligence, surveillance, and reconnaissance, but also enable accurate and timely direct and indirect fires. Their success has led Combatant Commanders to request them in even greater numbers, and we are doing our best to support their needs. Our challenge is the rapid and coordinated integration of UAV technologies to support the joint fight. I look forward to discussing our programs with you today.

Unmanned Systems

Although we have a tendency to focus on the air vehicle when we discuss UAVs, it is important we don't lose sight that UAV capabilities encompass far more than just the air vehicle. In order to fully integrate UAVs into the joint force, we must consider the sensors, the control stations, the launch and recovery elements, and their interoperability with other systems.

As part of the joint force, UAVs and unmanned systems are changing the conduct of military operations in the Global War on Terror and are critical to missions

that are dull, dirty, or dangerous. They remain alert for longer periods of time, can operate in contaminated areas, and reduce political and human cost if the aircraft is lost.

MQ-1 Predator A

Leading the way in reconnaissance and imagery is the Air Force MQ-1, or Predator A, which is flying missions around the clock every day. Armed with Hellfire missiles and equipped with electro-optical, infrared, and laser designator sensors, the Predator shortens the sensor-to-shooter timeline because the sensor can also be the shooter. The Predator can also transmit live video pictures to ground-based targeting teams equipped with the Remote Operations Video Enhanced Receiver (ROVER) system. Linking precision engagement and persistent C4ISR capabilities with forces on the ground, ROVER is operational today and has been used repeatedly to detect, target and destroy improvised explosive devices (IEDs) as well as disrupt insurgent activities throughout Iraq and Afghanistan. United States Air Force Predator employment has been a resounding success in the global war on terror. Combatant Commanders unceasing demands for additional Predator orbits should be viewed as a testament to this transformational system's utility and success. To meet increasing demand, we have expanded our mission capability to nine orbits and will grow to twelve total orbits by the end of calendar year 2006.

MQ-9 Predator B

The MQ-9, or Predator B 'Hunter-Killer,' demonstrates the Air Force penchant for innovative applications of technology for fighting the global war on terror. The Predator B is a medium-to-high altitude, long-endurance, unmanned aircraft system. It is primarily a persistent hunter-killer for critical, time-sensitive targets and also has a

secondary role as an intelligence collection asset. As we work through the test program, we expect to field the Predator B as a faster, higher-flying UAV, capable of automatically cueing and prosecuting time sensitive targets with a self-contained hard-kill capability, which includes Joint Direct Attack Munition (JDAM) and Small Diameter Bomb (SDB) GPS precision-guided munitions as well as the capability to self-designate for Hellfire missiles and laser-guided bombs. MQ-9 prototypes are currently engaged in the global war on terror armed with GBU-12 laser-guided bombs.

MQ-1 and MQ-9 are separate weapon systems, have distinct missions, are at different stages of development, and have different procurement strategies. The Air Force is committed to the MQ-9 to meet validated hunter-killer UAV requirements. We are also fully committed to fielding the MQ-9, and we are looking at various options to accelerate development and testing to ensure the warfighter receives an effective and sustainable system as rapidly as possible.

RQ-4 Global Hawk

The Global Hawk is a high altitude, long-endurance UAV. Through the innovative use of synthetic aperture radar, as well as electro-optical and infrared sensors, Global Hawk provides the joint warfighter with persistent surveillance of targets through night, day and adverse weather. Global Hawk collects data from spot targets and surveys large geographic areas with precision, providing Combatant Commanders the most current intelligence concerning enemy location, resources, and personnel. The Air Force is moving forward with Global Hawk development while continuing to deliver capability to the Combatant Commanders. Although Global Hawk has experienced developmental challenges, these challenges are consistent with those

seen of other major weapon system programs. The current program restructure, with an anticipated May approval of the new baseline, is the last major action to confirm its stabilization.

Small UAVs

The Air Force is also pursuing a "family of systems" concept to allow flexibility at all levels for the use of small UAVs. Small UAVs are rapidly growing in type, and offer a versatile family of capabilities supporting all Air Force concepts of operations (CONOPs). Our four classes of small UAVs (Micro, Man Portable, Multi-Mission and Air Launched) provide situational awareness capabilities primarily to Air Force Special Operations missions as well as security for airfields and other forward operating locations. Current aircraft in our inventory include BATCAM, Pointer/Raven, and Desert Hawk.

Conclusion

UAVs are transforming the way Air Force and the joint team fight, and are a critical component of the future joint force. The Air Force is committed to UAV development and employment. UAVs give us operational capability in persistent and precise ways while offering the promise of even more capability in the future. We appreciate your continued support in turning our vision into an operational reality.