Chairman Tierney, Congressman Flake, Members of the Committee:

Thank you for the opportunity to testify before the National Security and Foreign Affairs Subcommittee of the Committee on Oversight and Reform, on the Department’s role in export controls of unmanned aerial vehicles (UAV) and related technology.

The Bureau of Industry and Security (BIS) within the Department of Commerce, administers controls on the export of a range of dual-use items (commodities, software, and technology with civilian and military uses). In doing so, BIS works closely with a number of departments and agencies, including the Departments of Defense, State, and Energy, the Central Intelligence Agency, the Department of Homeland Security’s Bureau of Immigration and Customs Enforcement, and the Department of Justice.

The dual-use export control system is an important tool to protect the national security of the United States against the diverse threats our nation faces. State and non-state actors seek to acquire weapons of mass destruction (WMD) and the means to deliver them, as well as conventional arms and other items that could be used for terrorist purposes. BIS implements the dual-use control system through the Export Administration Regulations (EAR). Under the EAR, BIS regulates the export of certain UAVs and related items based on multilateral control lists and other items that could be used in or for UAVs through unilateral controls on end-uses and end-users.

U.S. Dual-Use Export Controls Relating to UAVs

A. The Missile Technology Control Regime

The United States has a comprehensive export control program, consisting of multilateral commitments and unilateral controls, intended to prevent the proliferation of sensitive items to countries and programs of concern. The Missile Technology Control Regime (MTCR) has 34 member countries, including many of the key manufacturers and exporters of cruise missiles and UAVs. The MTCR has a control list, or “Annex,” of items (goods and technologies) which all members control according to the MTCR guidelines – including certain UAVs. The MTCR Guidelines and Annex serves as the basis for the dual-use missile technology controls set forth in the EAR. The MTCR definition of UAVs includes cruise missiles, target drones, reconnaissance drones, and other forms of UAVs regardless of whether they are military or civilian or armed or
unarmed. UAVs can be as large as a commercial airplane or as small as a model airplane and jet or propeller driven; they can be airplanes, helicopters, or even blimps; they can be guided autonomously or by a remote operator or pilot. But only UAVs meeting certain range/payload criteria are MTCR-controlled.

The MTCR also addresses newly emerging technologies, the application of new uses for old items, and requests for the imposition of additional controls. The Department of Commerce, along with the Departments of State, Defense, and Energy, actively participates in the interagency Missile Annex Review Committee (MARC). The MARC is responsible for reviewing internal and foreign proposals for modifying existing MTCR control parameters or assessing proposals for new MTCR controls.

The MTCR, from its inception in 1987, subjected exports of UAVs capable of delivering a payload of at least 500 kg to a range of at least 300 km (so-called “Category I” or “MTCR-class” UAVs) and their directly associated technology to a “strong presumption of denial.” Exports of complete warhead safing, arming, fuzing, firing subsystems useable in such UAVs, and their directly associated technology, also are subject to a “strong presumption of denial.” In addition, under the MTCR Guidelines, the transfer of MTCR-defined “production facilities” for Category I items and the technology directly associated with these facilities will not be authorized.

Key components and materials useable in producing MTCR-class UAVs -- such as small, fuel-efficient jet engines; structural composites and their production equipment; various types of avionics, guidance, and flight control systems; telemetry and ground support equipment; various test equipment; and stealth technology -- are controlled as MTCR Category II items. MTCR countries review exports of such items on a case-by-case basis against specified nonproliferation criteria, and such exports also are subject to a “strong presumption of denial” if assessed to be intended for use in WMD delivery. In 1994, additional UAVs -- those not captured under Category I, but inherently capable of a 300 km range regardless of payload capability -- were added to Category II MTCR controls.

In addition to MTCR controls, UAVs and their components are controlled under the Wassenaar Arrangement, the multilateral export control regime for conventional arms and associated dual-use items. The Department of Commerce implements Wassenaar-related controls over non-military UAVs having either: a) an autonomous flight control and navigation capability (e.g., an autopilot with an inertial navigation system); or b) the capability of controlled-flight out of direct vision range involving a human operator (e.g., televisual remote control). Wassenaar also requires controls on the export of a wide range of materials and equipment that may be used in the production of UAVs, beyond those controlled by the MTCR.

Moreover, there are a large number of UAV-relevant items that are not controlled under the MTCR or Wassenaar, mostly because of their broad civil uses (e.g., in manned aircraft). On a national basis, the U.S. and most other members of the multilateral export control regimes have enacted “catch-all” controls to cover exports of such items when an exporter knows or is informed by his government that they are intended for use in WMD programs (including WMD delivery).

Thus, continuing to work within the multilateral MTCR framework is essential to the success of our missile and UAV nonproliferation goals.
B. U.S. Implementation of Missile Technology Export Controls

Consistent with its MTCR commitments, the United States implements a comprehensive export control program intended to prevent the proliferation of sensitive items to programs of concern. The Department of State has export licensing jurisdiction for defense articles and services covered by the U.S. Munitions List, including all military UAVs regardless of range or payload, commercial UAVs with a range of at least 300km and a payload capability of 500 kg as well as certain related components and technologies. The Department of Commerce has export licensing jurisdiction for dual-use items (items with civilian and military applications) enumerated on the Commerce Control List (CCL), as well as items not on the CCL but subject to the EAR. The Department of Commerce also has jurisdiction over certain WMD and missile-related activities of U.S. persons.

The Department of Commerce uses a number of tools to prevent the proliferation of items under its jurisdiction related to cruise missiles and UAVs. First, the CCL contains a list of items controlled for Missile Technology (MT) reasons. These MT-controlled items encompass the equipment and technologies that the MTCR has agreed are of proliferation concern and not already controlled as munitions items.

Under the EAR, an exporter must submit a license application to export any item controlled for MT reasons to any country in the world (except Canada). Since January 2003, BIS has issued 96 licenses for items covered by Export Control Classification Number (ECCN) 9A012 on the Commerce Control List which is a part of the EAR. ECCN 9A012 covers certain non-military UAVs, associated systems, equipment, and components. Twenty-five of these licenses have actually been used to export UAV and UAV components totaling just over $4 million dollars. Of the 25 exports the vast majority went to MTCR Partner Countries in Europe, Australia, South America, and South Korea with the remaining going to Mexico, Singapore, Indonesia and Iraq. The Departments of Defense, State, and Energy, as well as Commerce, review all license applications for MT-controlled items. The reviewing departments apply the MTCR Guidelines and additional criteria, consider available intelligence and law enforcement information, and determine if the transaction would pose an unacceptable risk of diversion or provide a material contribution to a missile program of concern.

In addition, the interagency Missile Technology Export Control (MTEC) group meets once a week to review all pending missile technology license applications. The process for interagency review of export license applications submitted to the Department of Commerce established by Executive Order 12981, as amended, ensures the positions of the reviewing departments are fully considered before an export license is approved.

The U.S. controls on exports that could support WMD and missile programs go well beyond the MTCR Annex items. Under our catch-all controls, exporters also are required to obtain a license for the export, reexport, or in-country transfer of any item, even a non-controlled item, if they know or are informed that the item will be used in or for prohibited nuclear activities, chemical or biological weapons programs, or the design, development, or production of missiles, or by facilities engaged in such activities. The definition of missile includes UAVs with a range equal to or greater than 300 kilometers.

These catch-all controls, set forth in Part 744 of the EAR, seek to prevent the export, reexport, or in-country transfer of any item that could be used in a missile program of concern, and thus specifically detail the inclusion of cruise missiles and UAVs capable of performing military
reconnaissance, surveillance, or combat support to ensure there is no “gap” in the application of export controls for proliferation reasons. In calendar year 2009, the department reviewed 77 applications for otherwise non controlled items for missile "catch-all" related concerns. These applications were valued at 23.5 million dollars.

In addition, the EAR contains an Entity List that identifies specific end-users in countries throughout the world that pose a proliferation concern. Many of these end-users have been listed because of missile proliferation concerns. For most listed end-users, a license is required for all exports and reexports of items subject to the EAR.

The catch-all controls also go beyond control of items and extend to the activities of U.S. persons. Under the EAR, U.S. persons may not perform any contract, service, or employment that they know will directly assist in chemical and biological weapons or missile activities in or by certain countries. Our regulations also include prohibitions against exports of dual-use items, software or technology to sanctioned countries as designated by Congress.

Finally, our controls also target non-state actors. The EAR prohibits exports and reexports of any items to persons designated by the Department of the Treasury as Specially Designated Global Terrorists, Specially Designated Terrorists, or Foreign Terrorist Organizations. The Department of Commerce also maintains an extensive system of unilateral anti-terrorism controls, in addition to the controls imposed on items that are controlled for MT and other reasons. These controls are intended to keep even low-level goods and technologies out of the hands of the most dangerous actors.

It is also important to note our outreach program to U.S. industry. The government alone cannot protect our security interests in this globalized world. It is essential that the public and private sector combine their strengths to confront the threats to our economic and national security. The Department of Commerce has an extensive outreach program to inform U.S. industry of their export obligations and explain the scope of export controls to all exporters. Most U.S. companies are strongly committed to protecting our national security and they therefore seek to achieve excellent compliance with our laws. It is therefore imperative that those who could supply sensitive items to end-users of concern understand their obligations and the importance of compliance.

Thus, in addition to implementing our international commitments under the MTCR, the United States has in place a comprehensive program of additional measures to prevent the proliferation of missile systems capable of delivering WMD to countries of concern or terrorists.

**C. Export Control Enforcement**

BIS’s Export Enforcement team, along with the Department of Homeland Security’s Bureau of Immigration and Customs Enforcement, and the Federal Bureau of Investigation, enforce controls on dual-use exports. These agencies, through investigations of suspected violations of law and regulations, and the interdiction of suspected illicit shipments, have provided the necessary evidence to successfully prosecute both criminal and civil cases on export violations. Our multilateral controls also provide a strong framework for cooperative enforcement efforts overseas when such efforts call for an international approach.

The following highlights recent cases involving UAV’s from the Department of Commerce’s Office of Export Enforcement and the Department of Justice.
**Aviation Services International**

On September 24, 2009, Aviation Services International BV (ASI), an aircraft supply company in the Netherlands, Robert Kraaipoel, Director of ASI, Neils Kraaipoel, sales manager of ASI, and Delta Logistics pled guilty in U.S. District Court in Washington, DC to charges related to a conspiracy to illegally export aircraft components and other U.S.-origin commodities to entities in Iran, via the Netherlands, the United Arab Emirates and Cyprus. Between October 2005 and October 2007, the defendants received orders from customers in Iran for U.S.-origin items, including video recorder units for end use in Unmanned Aerial Vehicles, then contacted companies in the United States and negotiated purchases on behalf of the Iranian customers. The defendants provided false end-user certificates to U.S. companies to conceal the true end-users in Iran. The defendants caused U.S. companies to ship items to ASI in the Netherlands or other locations in the United Arab Emirates and Cyprus which were then repackaged and transshipped to Iran. In a related case, ASI, Robert Kraaipoel and Niels Kraaipoel settled administrative charges with BIS that included, in part, ASI and Robert Kraaipoel being placed on BIS's Denied Persons List for seven years. Niels Kraaipoel agreed to a three year denial of his export privileges that would be suspended pending no future export violations.

**ARC International**

On February 3, 2010, Harold Hanson (Hanson) and Nina Yaming Qi Hanson (Qi) were sentenced in U.S. District Court in the District of Columbia. Qi was sentenced to 105 days in jail with credit for time served, placed on one year of supervised release, ordered to pay a fine of $250 and a $100 special assessment fee and ordered to attend a U.S. Department of Commerce sponsored export education training program. Hanson was sentenced to 24 months probation, required to pay a fine of $250 and a $100 special assessment fee, ordered to perform 120 hours of community service, and also ordered to attend a U.S. Department of Commerce sponsored export training program. On November 13, 2009, Hanson and Qi pleaded guilty to making false statements. On March 12, 2009, a federal grand jury in the District of Columbia returned an indictment charging Qi, her husband Hanson (an employee at Walter Reed Army Medical Center), and a Maryland company, ARC International, LLC, with illegally exporting miniature Unmanned Aerial Vehicle (UAV) Autopilots controlled for national security reasons to a company in the People’s Republic of China.

**Mayrow General Trading**

In September 2008, a federal grand jury in Miami, FL, returned a Superseding Indictment charging eight individuals and eight corporations in connection with their participation in conspiracies to export U.S.-manufactured commodities to prohibited entities and to Iran. They were charged with conspiracy, violations of the International Emergency Economic Powers Act and the United States Iran Embargo, and making false statements to federal agencies in connection with the export of thousands of U.S. goods to Iran. Charges against defendant Majid Seif, also known as Mark Ong, and Vast Solutions alleged that Seif and Vast exported radio control devices and accessories used in Unmanned Aerial Vehicles from a Singapore firm to Malaysia. The radio control devices were then shipped to Iran.
On February 3, 2010, Yi-Lan Chen, also known as Kevin Chen, was arrested on charges of illegally exporting commodities for Iran’s missile program. According to the affidavit filed in support of the criminal complaint, Chen caused dual use goods to be exported from the U.S., including P200 Turbine Engines, which the investigation revealed were for end users in Iran. The P200 Turbine Engines are designed for use as model airplane engines but can also be used to operate Unmanned Aerial Vehicles and military target drones.

**Conclusion**

The Department of Commerce believes the issue of missile proliferation has never been as important to our national security interests as it is now. A comprehensive export control system is already in place to protect our national security. As noted above, the Department of Commerce is committed to enhancements to that system as needed to ensure it continues to protect our national security.

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1 We note that the MTCR is not the only international regime that works to prevent the spread of missile-related technologies. The Wassenaar Arrangement, the multilateral export control regime responsible for controls on conventional weapons and related items with both civilian and military (dual-use) applications, has recently imposed complementary controls on the export of UAVs.