TESTIMONY OF

RANDOLPH D. ALLES Assistant Commissioner Air and Marine Operations

and

RONALD VITIELLO Acting Chief U.S. Border Patrol

U.S. Customs and Border Protection Department of Homeland Security

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ON

"Transparency, Trust and Verification: Measuring Effectiveness and Situational Awareness along the Border"

March 1, 2016 Washington, DC Chairwoman McSally, Ranking Member Vela, and distinguished Members of the Subcommittee. It is a pleasure to appear before you today on behalf of U.S. Customs and Border Protection (CBP) to discuss measuring effectiveness and situational awareness of the Southwest border.

Along the more than 5,000 miles of land border with Canada and Mexico, and approximately 95,000 miles of shoreline, CBP works with our DHS, interagency, and state and local partners to secure our borders and the associated airspace and maritime approaches to prevent illegal entry of people and goods into the United States, while also facilitating lawful trade and travel.

The border environment in which CBP works is dynamic and requires adaptation to respond to emerging threats and changing conditions. We appreciate the partnership and support we have received from this Subcommittee, whose commitment to the security of the American people has enabled the continued deployment of resources and capabilities we need to secure the border.

The U.S. Border Patrol (USBP) and Air and Marine Operations (AMO), in conjunction with DHS Joint Task Force-West, have primary responsibility for the border security mission between the Nation's ports of entry (POEs) through the coordinated use of integrated assets to detect, interdict, and prevent acts of terrorism and the unlawful movement of people, illegal drugs, and contraband toward or across the borders of the United States. CBP implements intelligence-driven counter network strategies focused on areas of greatest risk, and deploys its capabilities to adapt to emerging threats along the border.

Detecting and interdicting terrorists and their weapons will always be a focused priority. Furthermore, the illegal cross-border activities of transnational criminal organizations (TCOs) and other bad actors pose a growing threat to border security and public safety. TCOs control most cross-border trafficking of guns and illegal drugs, and there is evidence of their increased involvement with human smuggling. Using a risk-informed and intelligence-driven approach, CBP will continue to enhance our efforts to anticipate and respond to threats to our national security, ensure the safety of the U.S. public, and deter, prevent, and disrupt future illegal activities.

As the preeminent law enforcement agency responsible for safeguarding and managing America's borders, CBP develops and sustains situational awareness of current and potential threats and associated risks. Situational awareness forms the cornerstone of our approach to proactively identify and eliminate criminal and illegal activity across the Nation's air, land, and maritime borders. It is derived from CBP's comprehensive understanding of the threat environment and provides an in-depth picture of the current operating conditions within a specific region of the border environment.

Situational awareness, like the border environment, is dynamic and grows through a variety of types of information collection – obtained through intelligence and surveillance technology – and analysis in the context of other regional or national cross-border trends, especially those concerning illicit trafficking and unlawful border crossings. CBP leverages a wide range of tactics, techniques, and sophisticated technologies to enhance situational awareness and increase CBP's ability to prevent and disrupt threats in the border environment.

The border environment in which CBP operates is challenged by continuously evolving tactics of TCOs, terrorists, and other criminals. Detecting changes in threat levels and criminal flows across the border environment requires the use of various tactics to gather information and intelligence in both low and high threat areas. To promote and advance situational awareness, CBP deploys sophisticated surveillance and detection technology and collaborates with domestic and international law enforcement, intelligence, defense, and local community partners.

Advanced Technology and Capabilities

Thanks to the support of this Subcommittee, CBP has deployed capable resources to increase our situational awareness, identify changes in the border environment, and rapidly respond, as appropriate, to areas of increasing risk. The use of technology in the border environment is an invaluable force multiplier to increase situational awareness.

Along U.S. Borders

The information gleaned from fixed and mobile surveillance systems, ground sensors, imaging systems, and other advanced technologies enhances situational awareness and better enables CBP to detect, identify, classify, monitor, and appropriately respond to threats and other challenges along the U.S. borders.

The Integrated Fixed Tower (IFT) systems and Remote Video Surveillance Systems (RVSS) are fixed technology assets used in select areas along the Southwest border. The IFT system is a series of fixed surveillance towers and equipment located in Arizona that provide long-range persistent surveillance. These tower systems automatically detect and track items of interest, and provide centralized operators with video and geospatial location of suspected items of interest for identification and appropriate action. RVSS provide short-, medium-, and long-range persistent surveillance mounted on stand-alone towers or other structures. The RVSS uses cameras, radio, and microwave transmitters to send video to a control room and enable a control room operator to remotely detect, identify, classify, and track targets using a video feed.

In some areas along the Southwest border, CBP also uses Unattended Ground Sensors (UGS) and Imaging Sensors (IS), which contribute to improved situational awareness, agent safety, and rapid response. These sensors support our capability to detect and identify subjects. When a ground sensor is activated, an alarm is communicated to a data decoder that translates the sensor's activation data to a centralized operations center computer system. IS are a specific type of unattended ground sensor with an integrated camera and the ability to transmit images or video back to the operations center.

Fixed system technology increases CBP's situational awareness and the Border Patrol's ability to detect, identify, classify, and track illicit activity by providing line-of-sight surveillance to efficiently detect incursions in varying terrain. CBP integrates mobile and portable systems to address areas where rugged terrain and dense ground cover may allow adversaries to penetrate through blind spots or avoid the coverage areas of fixed systems.

Working in conjunction with fixed surveillance assets, CBP's mobile technology assets provide flexibility and agility to adapt to changing border conditions and threats along the Southwest border. Mobile Surveillance Capability systems provide long-range mobile surveillance with a

suite of radar and camera sensors mounted on USBP vehicles. Mobile Video Surveillance Systems provide short- and medium-range mobile surveillance equipment mounted on telescoping masts via camera sensors mounted on USBP vehicles. Another system, the Agent Portable Surveillance System (APSS), does not need to be mounted to a vehicle. These current generation assets provide medium-range mobile surveillance mounted on a tripod and transported by three or more agents. Two agents remain on-site, one to operate the system, which automatically detects and tracks items of interest and provides the agent/operator with data and video of selected items of interest. Next generation APSS options are being explored.

These technologies not only provide significant security benefits and multiply the capabilities of law enforcement personnel to detect, identify, and respond to suspicious activity, but they also enhance public safety along the border. Mobile surveillance technology systems enable agents to position the technology where it is needed at a specific moment, extend our observational capabilities – in this case, by helping see through the darkness and increasing the accuracy and speed of our response.

CBP's Tactical Aerostats and Re-locatable Towers program, originally part of the Department of Defense (DoD) Reuse program, uses a mix of aerostats, towers, cameras, and radars to provide USBP with increased situational awareness through an advanced surveillance capability over a wide area. This capability has proven to be a vital asset in increasing CBP's ability to detect, identify, classify, and track activity. As of December 2015, USBP agents seized 122 tons of narcotics and conducted over 50,000 apprehensions of illegal border crossers with the assistance of existing aerostats and towers.

Technology is critical to border security operations. Through the deployment of these complementary and effective fixed and mobile systems, CBP gains more coverage and situational awareness of surveillance gaps, and increases its ability to adapt to changing conditions to effectively detect, identify, classify, track, and interdict potential threats along the borders.

From the Air and the Sea

AMO increases CBP's situational awareness, enhances its detection and interdiction capabilities, and extends our border security zones, offering greater capacity to stop threats prior to reaching the Nation's shores. Through the use of coordinated and integrated air and marine capabilities – including fixed and rotary wing aircraft, unmanned aircraft systems (UAS), tethered aerostats and patrol and interdiction vessels – AMO detects, interdicts, and prevents acts of terrorism and the unlawful movement of people, illegal drugs, and other contraband toward or across U.S. borders. AMO conducts critical aerial and maritime surveillance, interdiction, investigation, and multi-domain awareness law enforcement operations, in addition to providing assistance to ground personnel.

AMO's fleet of aerial assets provides critical surveillance and situational awareness across the Nation's land borders, in the littoral waters, in the maritime approaches to the United States, and in the international source and transit zones.

AMO P-3 Long Range Trackers and Airborne Early Warning Aircraft provide detection and interdiction capability in both the air and marine environments. Sophisticated sensors and high endurance capability greatly increase CBP's range to counter illicit trafficking. P-3s are an integral part of the successful counter-narcotic missions operating in coordination with Joint Interagency Task Force (JIATF)-South. P-3s patrol in a 42 million square mile area that includes more than 41 nations, the Pacific Ocean, Gulf of Mexico, Caribbean Sea, and maritime approaches to the United States.

Additionally, UAS are increasingly instrumental in CBP's layered and integrated approach to border security. AMO has deployed six UAS along the Southwest Border to detect, identify and classify moving tracks of interest over land and sea. Four of these aircraft have Vehicle and Dismount Exploitation Radar (VADER) capability, which is a side-looking airborne radar that detects illegal border crossers and relays their positions to field agents, while simultaneously capturing terrain change detection information across larger stretches of the border. UAS are also used to meet surveillance and other mission requirements along the Northern borders and in the drug source and transit zones. During FY 2015, CBP's VADER-equipped UAS recorded 9,371 detections of illegal activity.

Multi-Role Enforcement Aircraft (MEA) have a multi-mode radar for use over water and land, an electro-optical/infrared camera system, and a satellite communications system. This highly adaptable and capable aircraft replaces several older, single-mission assets. An equally important and more capable asset is the DHC-8 Maritime Patrol Aircraft (MPA). It bridges the gap between the longer range P-3s and UAS and the smaller MEA. The DHC-8 is an invaluable situational awareness platform for AMO in the Gulf of Mexico and the Caribbean.

AMO uses the Tethered Aerostat Radar System (TARS) to provide land, maritime, and aerial domain awareness, including detection of low-altitude aircraft and other potential threats. CBP assumed responsibility of TARS from the U.S. Air Force in 2013, providing radar detection and monitoring of low-altitude aircraft and surface vessels along the U.S.-Mexico border, the Florida Straits, and a portion of the Caribbean. With eight aerostat sites – six along the Southwest border, one in the Florida Keys, and one in Puerto Rico – the TARS elevated sensor mitigates the effect of the curvature of the earth and terrain-masking limitations associated with ground-based radars, enabling maximum long-range radar detection. In FY 2014 and FY 2015 combined, TARS recorded nearly 1,000 suspected cross-border attempts of non-commercial aircraft, about 50 percent of all border-related radar detections in the air domain.

Some of the most important advancements in increasing CBP's situational awareness are in the area of data integration and exploitation. Downlink technology, paired with the BigPipe system, allows AMO to provide a video feed and situational awareness to its law enforcement partners in real-time. In addition, the Minotaur mission integration system allows multiple aircraft to share information from multiple sources, providing a never before seen level of air, land, and sea domain awareness. As the Minotaur system evolves across the fleet, it will provide increased awareness for a greater number of users as the information is integrated into the Air and Marine Operations Center (AMOC).

A vital component of DHS's domain awareness capabilities, CBP's AMOC integrates the surveillance and law enforcement data capabilities of DHS's federal and international partners. CBP agents assigned to AMOC serve to correlate information from USBP technology with AMOC's systems to close the gaps in situational awareness. This combined effort has contributed to a reduction in the ultra-light aircraft activity on the Southwest border. FY 2015 suspect activity has decreased to 59 events from a high of 332 in FY 2010. Office of Field Operations (OFO) officers from the National Targeting Center imbedded at AMOC use their tools to close the seam between commercial and general aviation suspect activity. Overall, AMOC evaluated almost 500,000 internal air tracks in FY 2015 with a 99.99 percent successful resolution rate. AMOC has integrated DoD and FAA sensors into the CBP network to expand our awareness well beyond the U.S. air and maritime borders. The stemming of the panga-type boat threats on the West Coast is attributed to the whole of DHS (CBP, U.S. Coast Guard, and U.S. Immigration and Customs Enforcement/Homeland Security Investigations) coordinated efforts with Mexican partners facilitated through this integration and collaboration.

Coordinating with extensive law enforcement and intelligence databases, including classified systems and communication networks, AMOC enhances our situational awareness and uses its capability to coordinate a law enforcement response to suspect activity in the air, maritime, and land domains. AMOC systems are connected to nearly 150 locations in various agencies to enable collaboration. For example, in FY 15 AMOC coordinated over 400 Mexican responses to illicit air traffic preventing it from crossing our borders.

CBP uses tactics such as periodic reconnaissance patrols, sign-cutting, tracking, and UAS flights to understand the threats faced along the Nation's borders and in the approaches. For example, CBP uses change-detection capabilities in various ways to gather information and intelligence in low-threat areas. Change-detection capabilities increase the level of situational awareness in all areas, including those areas currently assessed as lower risk. This allows CBP to continue focusing resources in areas where the highest risk exists, but to quickly identify any emerging threat adaptation through information and intelligence and take appropriate steps to rapidly minimize any new risk.

CBP's continued deployment of fixed and mobile border surveillance technology, integrated with AMOC's enhanced-domain awareness capabilities, allows CBP the flexibility to shift more officers and agents from detection duties to the interdiction of illegal activities on our borders. Additionally, CBP is looking to the future by working closely with the DHS Science & Technology Directorate to identify and develop additional technologies to improve our situational awareness, surveillance, and detection capabilities along our land and maritime borders.

Intelligence and Information Sharing

Criminal intelligence-sharing is a key component in building situational awareness efforts along the Southwest border. CBP and participating component agencies contribute to several initiatives to improve the combined intelligence capabilities of Federal, state, local, tribal, and international partners along the Southwest border.

CBP hosts a monthly briefing/teleconference with state and local partners in order to monitor emerging trends and threats along the Southwest border and provide a cross-component, multiagency venue for discussing trends and threats. The weekly briefing focuses on narcotics, weapons, currency interdictions and alien apprehensions both at and between the Southwest border. These briefings/teleconferences currently include participants from: DHS Joint Task Force West, ICE; USCG; Drug Enforcement Administration; Federal Bureau of Investigation; U.S. Northern Command; Joint Interagency Task Force-South; Bureau of Alcohol, Tobacco, Firearms, and Explosives; U.S. Attorneys' Offices; Naval Investigative Command; State Fusion Centers; and local law enforcement as appropriate.

Operational Coordination

Secretary Johnson's Unity of Effort initiative has put in place new and strengthened management processes at DHS headquarters to enable more effective DHS component operations. In addition, DHS-wide border security activities are being strategically guided by the Southern Border and Approaches Campaign. Aimed at leveraging the range of unique Department roles, responsibilities, and capabilities, the Campaign enhances our operational approach to working together in a more unified way to address comprehensive threat environments. This cross-Component strategy includes the development of three pilot DHS Joint Task Forces (JTF) – JTF-West, JTF-East, and JTF-Investigations.

The creation of the JTFs, unified joint task forces along the Southwest border and in the approaches to the United States, increases information sharing with Federal, state and local law enforcement agencies; improves situational awareness, border-wide criminal intelligence-led interdiction operations; and addresses transnational threats and associated violence.

Over the last ten years, DHS has significantly increased its border security capabilities by adding thousands of frontline law enforcement personnel, and making substantial investments in infrastructure, situational awareness and surveillance technology, strategically deployed to areas of increasing challenge. This shift in border security resources and overall border security management is responsible for the significant decrease in the illegal flow of people across the Southwest border over the last 10 years.

USBP and AMO use a risk-based strategy to deploy resources and address emerging threats. In coordination with the new DHS joint requirements process, USBP uses the Capability Gap Analysis Process (CGAP) to conduct mission analysis and identify capability gaps. From this analysis, USBP performs follow-on planning to identify operational requirements over the short, mid, and long-term and to identify potential solutions, which may (or may not) include technology, tactical infrastructure, or other solutions depending on the nature, scope, severity, and geographic location of a given capability gap. Terrain, threat, and other considerations vary greatly across sectors and regions, making a "one size fits all" approach ineffective. The AMO CGAP process is in the developmental stage at this time. Once completed, it will interface with USBP processes to further identify aviation technology solutions targeting border security initiatives.

As conditions on the ground or in the approaches change, CBP will adjust its operational posture and will continue to invest and focus border security resources in the most effective and efficient way possible to meet the Nation's border security needs.

Indicators of Success

Thanks to this Subcommittee's support, the Nation's long-term investment in border security continues to produce significant and positive results. Border Patrol apprehensions – an indicator of illegal entries – totaled 337,117 nationwide in FY 2015, compared to 486,651 in FY 2014. This represents a 30 percent decline in the last year and almost 80 percent below its most recent peak in FY 2000. CBP officers and agents also played a critical counter-narcotics role, resulting in the seizure or disruption of more than 3.3 million pounds of narcotics in FY 2015. In addition, the agency seized more than \$129 million in unreported currency through integrated counter network operations. In FY 2015, AMO contributed to the arrest of 4,485 suspects, the apprehension of more than 51,130 individuals, and the interdiction of more than 213,000 pounds of cocaine.

USBP uses the Consequence Delivery System (CDS) on the Southwest border as a means to standardize decision making in the application of consequences and examines the efficiency and effectiveness of individual consequences on various types of deportable aliens. Recidivism and the average number of apprehensions per recidivist are the strongest indicators of CDS effectiveness. Since CDS implementation in FY 2011, the annually reported recidivism rate has decreased from an average of 27 percent to 14 percent in FY 2015 and average apprehensions per recidivist decreased from 2.71 to 2.38 in FY 2015. Contributing factors to the reduction included reducing the percent of apprehensions resulting in a Voluntary Return, the least effective and efficient consequence, from 59 percent in FY 2010 to 4 percent in FY 2015; and applying more effective and efficient consequences to illegal aliens with a higher probability of making subsequent illegal entries.

CBP reports on several performance measures, in accordance with the Government Performance and Results (GRPA) Act of 1993 and the 2010 GPRA Modernization Act, and we are committed to the ongoing monitoring and reporting of program accomplishments and progress toward meeting mission goals. AMO reports annually on a GPRA metric that tracks the percent of detected conventional aircraft incursions resolved along all borders of the United States. In FY 2015, AMO reported a 99.3 percent border security success rate for this metric.

CBP recognizes the need for relevant performance measures to verify the effectiveness of our operations and assets. However, due to the sheer size of the air, land, and sea borders, and the motivation of individuals to illegally enter the United States, challenges still exist to measure our success. Furthermore, as border security operations become increasingly integrated, the ability to quantify individual contributions to shared outcomes becomes increasingly complex. AMO and USBP will continue to collaborate with internal and external partners to enhance current metrics, and develop new metrics, that provide meaningful outcome-focused measurements of illegal activity, trends, and effectiveness. We look forward to sharing these efforts with this Subcommittee in the future.

Conclusion

To fully implement the risk-informed, counter network/intelligence-driven operations that focus our capabilities against the highest threats, CBP continually evaluates its effectiveness and enhances situational awareness and adjusts its resources as required.

The continued deployment of sophisticated fixed and mobile surveillance systems, in conjunction with intelligence and operational integration, enhances situational awareness and better enables CBP to plan effectively, enhance its agility, and appropriately respond to threats in the Nation's border regions and approaches to secure the homeland.

Chairwoman McSally, Ranking Member Vela, thank you for the opportunity to testify today. We look forward to your questions.