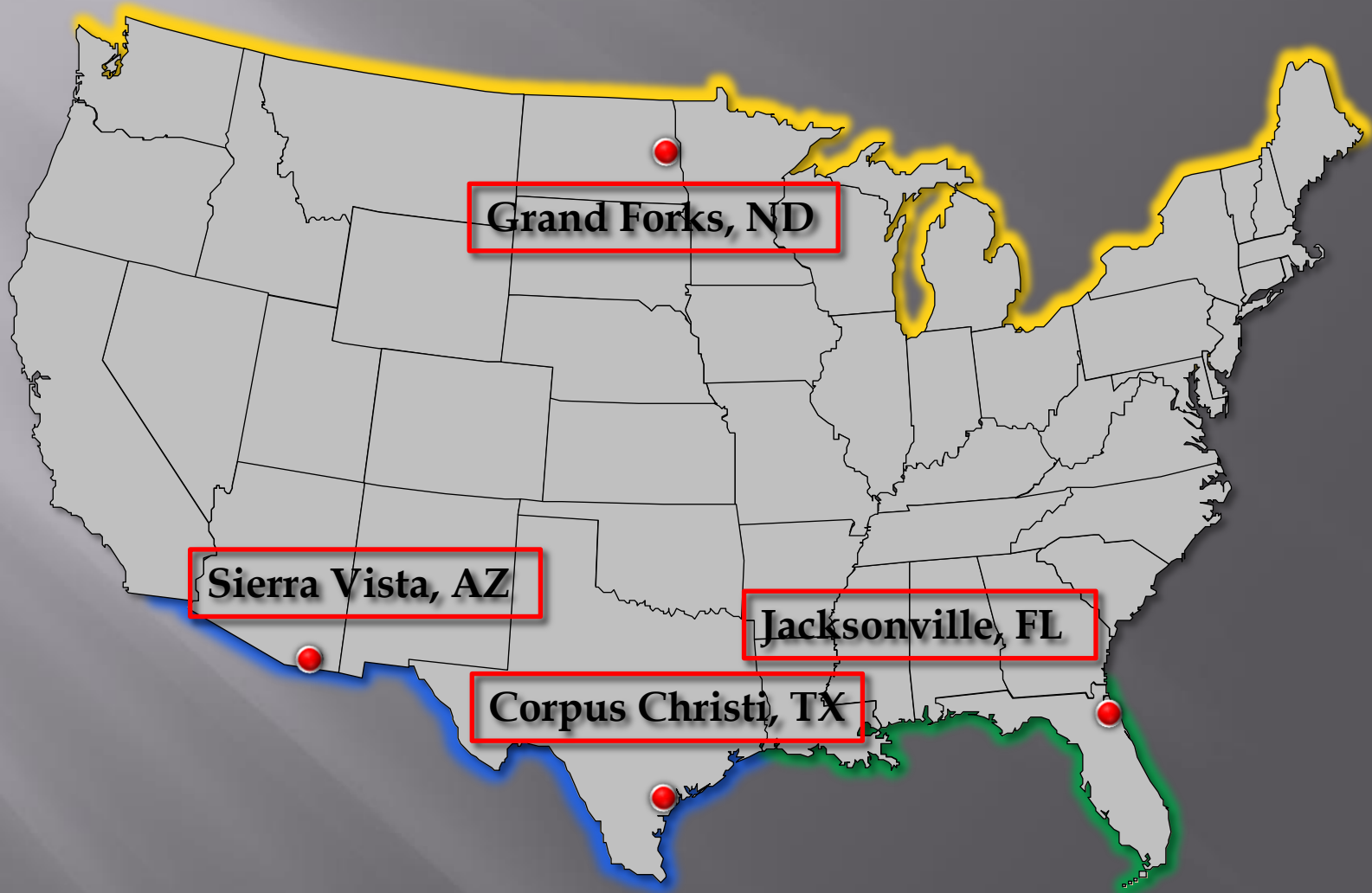




# U.S. Customs and Border Protection's (CBP) Unmanned Aircraft Systems (UAS)

# Area of Responsibility



# CBP's Unmanned Aircraft



AP Photo/Matt York

- ▣ 20 hour flights
- ▣ 276 MPH
- ▣ 50,000 feet
- ▣ 1.9 tons

# Audit Objective

To determine the effectiveness and cost of the Unmanned Aircraft System program.

## Identifying Audit Criteria:

6.37. Auditors should identify criteria. Criteria represent the laws, regulations, contracts, grant agreements, standards, specific requirements, measures, **expected performance**, defined business practices, and benchmarks against which performance is compared or evaluated.

**Criteria identify the required or desired state or expectation with respect to the program or operation.**

Criteria provide a context for evaluating evidence and understanding the findings, conclusions, and recommendations included in the report. Auditors should use criteria that are relevant to the audit objectives and permit consistent assessment of the subject matter.

GAO

United States Government  
By the Comptroller  
United States

August 2011

Government  
Auditing  
Standards

2011 International



# Program Expectations (FY2013)

## ❖ Flight Hours

## ❖ Arrests

State	Total UAS	Total	Percent
Arizona	2,161	120,939	1.8%
Texas	111	154,543	.07%

## ❖ Drug Seizures (Pounds of Marijuana)

State	Total UAS	Total	Percent
Arizona	16,345	1,193,083	1.4%
Texas	33,103	797,249	4.2%

# Program Expectations (cont.)

- ❖ Border Surveillance Costs
- ❖ Sensor Alerts
- ❖ Arizona Operations

March 2013	Average Length (Miles)	Detections	# of Flights
Before	100	12,968	83
After	44	5,456	93



## ❖ Border Coverage (Southwest Border: 1,933 miles)



# UAS Program Cost

## CBP Reported Cost

Cost Type	Amount
Maintenance/Support	\$9,458,567
Satellite	\$1,952,000
Fuel	\$632,941
Total	\$12,044,508
<b>Cost-per-flight hour</b>	<b>\$2,468</b>

## OIG Estimated Cost

Cost Type	Amount
Maintenance/Support	\$24,543,564
Satellite	\$2,986,077
Fuel	\$643,651
Operational Support	\$5,541,227
Engineering Services	\$188,450
Base Overhead	\$2,146,569
AZ Sensor/Radar	\$1,700,000
Personnel	\$17,125,546
Depreciation	\$7,650,000
Total	\$62,525,084
<b>Cost-per-flight hour</b>	<b>\$12,255</b>



# UAS Program Cost (cont.)

## OIG Estimated Cost – CBP Response

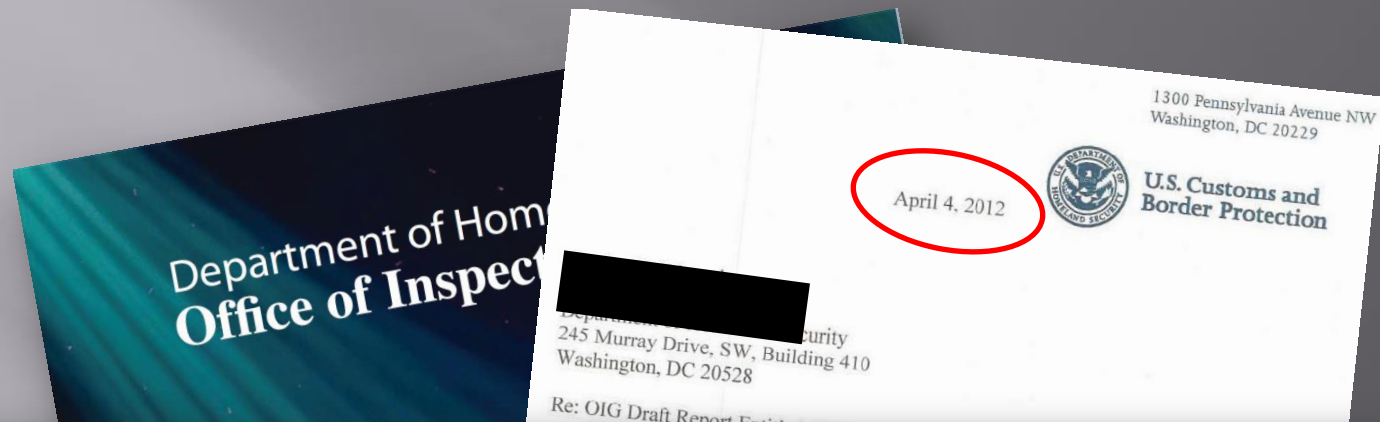
Cost Type	Amount
Maintenance/Support	\$24,543,564
Satellite	\$2,986,077
Fuel	\$643,651
<del>Operational Support</del>	<del>\$5,541,227</del>
<del>Engineering Services</del>	<del>\$188,450</del>
<del>Base Overhead</del>	<del>\$2,146,569</del>
<del>AZ Sensor/Radar</del>	<del>\$1,700,000</del>
<del>Personnel</del>	<del>\$17,125,546</del>
<del>Depreciation</del>	<del>\$7,650,000</del>

# UAS Program Cost (cont.)

## OIG Estimated Cost – CBP Response (cont.)

Contracts	Amount	Amount Paid	Percent
Maintenance/Support	\$24,543,564	\$23,079,992	94
Satellite	\$2,986,077	\$2,338,768	78
Operational Support	\$5,541,227	\$5,076,266	92
<b>Total</b>	<b>\$33,070,868</b>	<b>\$30,495,026</b>	<b>92</b>

# Future Program Costs



**Recommendation 4:** Postpone additional UAS purchases until recommendation #1 has been implemented.

**CBP Response:** In alignment with Federal Acquisition Regulations and Department requirements, CBP concurs that appropriate plans are necessary prior to acquisitions. Per the response to Recommendation 1, CBP has completed appropriate planning and mission definition to justify the strategic future state for the UAS Program. Changing threats will require that the planning and assessments continue. **CBP currently has no plan to expand the UAS fleet beyond the 10 systems already in operation or on order, unless directed to do so by higher authority.**

crafted by operations personnel and are based on known and projected requirements. Each aircraft element of the StAMP is supported by an Operations Requirements Document (ORD) that defines the specific capabilities needed to achieve assigned homeland security missions. From these requirements, mission support personnel establish the infrastructure that will be needed to allow CBP agents to accomplish their mission. These documents are evaluated and revised as needed to reflect changing roles, resources, and missions.

# Future Program Costs (Cont.)

**U.S. Department of Homeland Security**  
**U.S. Customs and Border Protection**  
**Office of Air and Marine**



**Acquisition Plan Annex**

**for the**  
**U. S. Customs and Border Protection**  
**Strategic Air and Marine Plan**

**Unmanned Aircraft System**

**Acquisition Plan Number: HSBP12-015**

Submitted: February 2012

Contracting Officer concurred:  
April 6, 2012

Approved: October 2012



# Future Program Costs (Cont.)

## DEPARTMENT OF HOMELAND SECURITY U.S. Customs and Border Protection

### JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION

#### 3. Description of Supplies/Services.

The requirements associated with this CJ&A are for the procurement of up to fourteen (14) MQ-9 UAS, associated equipment, and operational and maintenance support services. This includes air vehicle pilots and mission payload operators; systems, airframe, and equipment repairs/modifications; system upgrades or engineering changes, software support services; air vehicle and mission equipment systems integration, training, material and support issues resolution and technical support services; maintaining support of ground station facilities, material and equipment procurement services, and data development and documentation. This CJ&A will not procure any services that are inherently governmental or personal in nature. The Estimated Total Value (Including Options) is \$443,090,000.00 in Tables 1 and 2 as follows:



# Future Program Costs (Cont.)

On October 19, 2007, the DHS Chief Procurement Officer approved a Justification for Other than Full and Open Competition (JOFOC) for the procurement of additional UAS. OAM had assembled a fleet of four (4) Predator B aircraft with a strategic plan to procure a total of eighteen (18) UAS. Since the October 2007 JOFOC, OAM's requirement increased to 24 UAS, including a requirement for a maritime-capable UAS. To meet this maritime requirement, CBP OAM developed, in collaboration with GA-ASI and other sub-system vendors, the maritime-capable Guardian UAS that became operational in May 2010.

CBP OAM's intent is to field a fleet of 24 standardized UA with common GCSs, provide common support to minimize total life-cycle costs, provide equivalent capabilities regardless

This requirement does not result from a lack of planning or the expiration of funds; rather, it is in support of the CBP Commissioner's Acquisition Decision Memorandum signed June 17, 2008, and the CBP Strategic Air and Marine Plan (STAMP) update submitted July 1, 2010, both of which document OAM's plans for a fleet of 24 UA and supporting systems.

# Recommendations

- ▣ Conduct an independent study
- ▣ Lift limitations on AZ sensor/radar
- ▣ Develop performance measures/goals

$$\text{ROI: } \frac{(\text{Gain/Profit} - \text{Cost})}{\text{Cost}}$$

$$\text{ROI: } \frac{(\$66,651 - \$12,255)}{\$12,255} = 444\%$$

- ▣ Accumulate/report costs



## Questions/Comments

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