

|                         |                            |                           |   |
|-------------------------|----------------------------|---------------------------|---|
|                         |                            | ASN                       | 2009-WSA-68-COA   |
|                         |                            | Case Status               | (b) (7)(E)  |
|                         |                            | Date Created              | 05/11/2009  |
|                         |                            | Date Submitted            | 05/12/2009  |
| Proponent Organization  |                            | Sponsor                   | Department of Homeland Security   |
|                         |                            | Attn Of                   | (b) (6), (b) (7)(C)   |
|                         |                            | Address                   | 1355 Customs Drive  |
|                         |                            | Address2                  |   |
|                         |                            | City                      | March ARB   |
|                         |                            | State                     | CA  |
|                         |                            | Postal Code               | 92518   |
|                         |                            | Telephone                 | (951) (b) (6), (b) (7)(C)   |
|                         |                            | Email                     | (b) (6), (b) (7)(C) @dhs.gov  |
| Declaration             |                            | Declaration(a)            | (b) (7)(E)  |
|                         |                            | Declaration(b)            |   |
| Point of Contact        |                            | Representative            | (b) (6), (b) (7)(C)   |
|                         |                            | Address                   | 1355 Customs Drive  |
|                         |                            | Address2                  |   |
|                         |                            | City                      | March Air Reserve Base  |
|                         |                            | State                     | CA  |
|                         |                            | Postal Code               | 92518   |
|                         |                            | Telephone                 | (951) (b) (6), (b) (7)(C)   |
|                         |                            | Email                     | (b) (6), (b) (7)(C) dhs.gov   |
| Operational Description | Requested Effective Period | Beginning                 |   |
|                         |                            | End                       |   |
|                         |                            | Light out operation       | (b) (7)(E)  |
|                         |                            | VFR operation             |   |
|                         |                            | IFR operation             |   |
|                         |                            | Day operation             |   |
|                         |                            | Night operation           |   |
|                         |                            | Program Executive Summary | This COA request is for the purposes of transit from (b) (7)(E) (b) (7)(E) Occasionally the reverse route of flight will be required for maintenance (b) (7)(E) (b) (7)(E) (b) (7)(E) |

|                             |                      |   |   |
|-----------------------------|----------------------|---|---|
|                             |                      | Operational Summary                                     | Request the activation of a TFR to transition from (b) (7)(E) |
|                             | Location             | State   | AZ  |
|                             |                      | County  | (b) (7)(E)  |
|                             |                      | Nearest Airport   |   |
|                             |                      | AOR   | Arizona   |
|                             | Class Of Airspace    | Class-A   | (b) (7)(E)  |
|                             |                      | Class-B   |   |
|                             |                      | Class-C   |   |
|                             |                      | Class-D   |   |
|                             |                      | Class-E   |   |
|                             |                      | Class-G   |   |
| System Description          |                      | Aircraft Type   | (b) (7)(E) Predator B   |
|                             |                      | Aircraft Type And Model Description Attachment          | 1   |
|                             |                      | Control Station Attachment                              | 1   |
|                             |                      | Communications System Attachment                        | 3   |
|                             |                      | List Certified Components (TSO) Attachment              | 1   |
|                             |                      | Other Attachment  | (b) (7)(E)  |
| Performance Characteristics |                      | Climb Rate (feet/Minute)                                |   |
|                             |                      | Descent Rate (feet/Minute)                              |   |
|                             |                      | Turn Rate (Degrees/Second)                              |   |
|                             | Cruise Speed         | Maximum   |   |
|                             |                      | Minimum   |   |
|                             |                      | Approach Speed  |   |
|                             | Operating Attributes | Maximum MSL   |   |
|                             |                      | Minimum MSL   |   |
|                             |                      | Gross Takeoff Wt  |   |
|                             |                      | Launch/Recovery Attachment                              | 1   |
| Airworthiness               |                      | FAA Type Certificate                                    |   |
|                             |                      | If No FAA Certificate (Public Aircraft Only) Attachment | 1   |
| Procedures                  |                      | Lost Link/Mission Procedures Attachment                 | 1   |

|                            |                      |  |            |
|----------------------------|----------------------|--|------------|
|                            |                      | Lost Communications Procedures Attachment  | 1          |
|                            |                      | Emergency Procedures Attachment  | 1          |
| Avionics/Equipment         |                      | Equipment Suffix Type  | (b) (7)(E) |
|                            |                      | GPS  |            |
|                            |                      | Moving map indicator (Command Station)   |            |
|                            |                      | Tracking capability  |            |
|                            |                      | TCA/MCAS   |            |
|                            |                      | ELT  |            |
|                            | Transponder          | Transponder  | Yes        |
|                            |                      | On   | (b) (7)(E) |
|                            |                      | Off  |            |
|                            |                      | Standby  |            |
|                            |                      | Ident  |            |
|                            |                      | Mode S   |            |
|                            |                      | Mode C   |            |
|                            |                      | Transponder Retuneable in Flight   |            |
| Lights                     |                      | Landing  |            |
|                            |                      | Position/Navigation  |            |
|                            |                      | Anti-collision   |            |
|                            |                      | Infrared (IR)  |            |
| Spectrum Analysis Approval |                      | Data Link  |            |
|                            |                      | Data Link Attachment   |            |
|                            |                      | Control Link(s)  |            |
|                            |                      | Control Link Attachment  |            |
|                            |                      | Operations utilizing Radio Control (R/C) frequencies as described in Title 47 CFR 95 |            |
|                            |                      | NTIA/FCC Authorization Attachment  |            |
| ATC Communications         | Transmitter VHF Band | VHF Band   |            |
|                            |                      | Quantity   |            |
|                            |                      | In-Flight Retunable  |            |
|                            | Transmitter UHF      | UHF Band   |            |

|  |  |                         |
|--|--|-------------------------|
|  | Band                                   |                         |
|  |  | Quantity                |
|  |  | In-Flight Retunable     |
|  | Transmitter HF band                    | HF Band                 |
|  |  | Quantity                |
|  |  | In-Flight Retunable     |
|  | Receiver VHF Band                      | VHF Band                |
|  |  | Quantity                |
|  |  | In-Flight Retunable     |
|  | Receiver UHF Band                      | UHF Band                |
|  |  | Quantity                |
|  |  | In-Flight Retunable     |
|  | Receiver HF band                       | HF Band                 |
|  |  | Quantity                |
|  |  | In-Flight Retunable     |
|  | Guard (Emergency) Frequencies VHF Band | VHF Band                |
|  |  | Quantity                |
|  | Guard (Emergency) Frequencies UHF Band | UHF Band                |
|  |  | Quantity                |
|  | Instantaneous Two-Way Voice            | Direct to pilot         |
|  |  | SATCOM                  |
|  |  | Relay via aircraft      |
| Electronic Surveillance/Detection Capability |  | EO/IR                   |
|  |  | Terrain detection       |
|  |  | Weather/icing detection |
|  |  | Radar                   |
|  |  | Other Attachment        |

(b) (7)(E)

Yes

(b) (7)(E)

|  |                          |   |   |
|--|--------------------------|---|---|
|  |                          | Electronic detection systems                        | (b) (7)(E)  |
|  |                          | Electronic detection systems attachment             |   |
|  |                          | Radar observation                                   |   |
|  |                          | NAS Operational Capability Attachment               |   |
| Visual Surveillance/Detection Capability | Maximum Distance from UA | Vertical  | 3000 Feet   |
|  |                          | Horizontal  | 2.5 Nautical Miles  |
|  |                          | Airborne based (Chase Aircraft)                     | (b) (7)(E)  |
|  |                          | Ground based  | Yes   |
|  |                          | Visual observation from one or more ground sites    | Yes   |
|  |                          | Forward or side looking cameras                     | Yes   |
|  |                          | Attachment for All                                  | (b) (7)(E)  |
| Aircraft Performance Recording           |                          | Flight data recording                               |   |
|  |                          | Control station recording                           |   |
|  |                          | Voice Recording                                     |   |
| Flight Aircrew Qualifications            | Pilots                   | Private (Written)                                   |   |
|  |                          | Private (Certified)                                 |   |
|  |                          | Instrument  |   |
|  |                          | Commercial  |   |
|  |                          | Air Transport                                       |   |
|  |                          | Unique Trained Pilot                                | Yes   |
|  |                          | Unique Trained Pilot Description                    | Only CBP-approved and designated UAS pilots in compliance with contract provisions and DCMAI 8210.1 are authorized to operate CBP UAS aircraft. |
|  |                          | DOD certified/trained                               | (b) (7)(E)  |
|  |                          | Other Certified Training                            | Yes   |
|  |                          | Trained on FAR Part 91 Requirement                  | Yes   |
|  |                          | Medical Certification Class (FAA or DOD equivalent) | (b) (7)(E)  |
|  |                          | Currency Status                                     | A pilot that acts as a PIC shall have no less than three qualified proficiency events within the preceding 90 days.                             |

|                       |           |   |  |
|-----------------------|-----------|---|--|
|                       |           | Duty Time Restrictions                              | <p>IAW DCMAI 8210.1, para 1.9.2., the basic crew duty period shall not exceed 12 consecutive hours. The GFR is authorized to grant extensions to the basic crew duty period of not more than two hours on a case-by-case basis. The CDO and the assigned PIC(s) must assess each crewmember's fitness for flight duty prior to launch/shift change. Additionally, any assigned crewmember may effect termination or non-acceptance of flight duty without prejudice based on his/her personal assessment.</p> <p>UAS crewmembers may fly no more than 8 hours in any 24-hour period; unless consecutive hours of off-duty time (3.7.1A) have been met. Additionally, without GFR approval, crewmembers may fly no more than 4 consecutive hours without at least a 30-minute rest break. IAW ASI-0009 para 1.9.3.1, it is highly recommended that crewmembers swap out every 2 hours to minimize the effects of fatigue.</p> |
|                       |           | Single UAS Control                                  | Yes  |
|                       |           | UAS Description                                     |  |
|                       |           | Total Numbers of UAS Controlled                     | (b) (7)(E)   |
|                       | Observers | Private (Written)                                   |  |
|                       |           | Private (Certified)                                 |  |
|                       |           | Instrument  |  |
|                       |           | Commercial  |  |
|                       |           | Air Transport                                       |  |
|                       |           | Unique Trained Pilot                                |  |
|                       |           | Unique Trained Pilot Description                    | Observers receive training on the unique characteristics of the Predator B aircraft as well as FAR Part 91 training.   |
|                       |           | DOD certified/trained                               | (b) (7)(E)   |
|                       |           | Other Certified Training                            | Yes  |
|                       |           | Trained on FAR Part 91 Requirement                  | Yes  |
|                       |           | DOD Certified Training Attachment                   | (b) (7)(E)   |
|                       |           | Medical Certification Class (FAA or DOD equivalent) |  |
|                       |           | Currency Status                                     | An individual that acts as a visual observer shall have at least one qualified proficiency event within the preceding 90 days, or refresher training will be required.   |
|                       |           | Duty Time Restrictions                              | The visual observer is part of the aircrew and as such meets the same duty restrictions as a PIC.  |
|                       |           | Single UAS Control                                  | Yes  |
|                       |           | UAS Description                                     | One Visual Observer per UAS.   |
|                       |           | Total Numbers of UAS Controlled                     | (b) (7)(E)   |
| Special Circumstances |           | Special Circumstances                               | Lost Link Procedures updated from previous COA to reflect pen & ink change to last years COA   |

Flight Operations Area/Plan

| Type      | User Define Area ID | Point      | Loc ID | Degree | Distance   | Latitude | Longitude | MSL Ceiling | MSL Floor | Maximum Speed | Minimum Speed | Radius | SUA Description |
|-----------|---------------------|------------|--------|--------|------------|----------|-----------|-------------|-----------|---------------|---------------|--------|-----------------|
| DEPARTURE |                     | (b) (7)(E) |        |        | (b) (7)(E) |          |           |             |           |               |               |        |                 |
| WAYPOINT  |                     |            |        |        |            |          |           |             |           |               |               |        |                 |
| WAYPOINT  |                     |            |        |        |            |          |           |             |           |               |               |        |                 |
| WAYPOINT  |                     |            |        |        |            |          |           |             |           |               |               |        |                 |
| WAYPOINT  |                     |            |        |        |            |          |           |             |           |               |               |        |                 |
| WAYPOINT  |                     |            |        |        |            |          |           |             |           |               |               |        |                 |
| WAYPOINT  |                     |            |        |        |            |          |           |             |           |               |               |        |                 |
| WAYPOINT  |                     |            |        |        |            |          |           |             |           |               |               |        |                 |
| WAYPOINT  |                     |            |        |        |            |          |           |             |           |               |               |        |                 |
| ARRIVAL   |                     |            |        |        |            |          |           |             |           |               |               |        |                 |