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| | | ASN | 2007-AHQ-13-COA |
| | | Case Status | EXPIRED |
| | | Date Created | 02/26/2007 |
| | | Date Submitted | 04/20/2007 |
| Proponent Organization | | Sponsor | NASA ARC |
| | | Attn Of | (b) (6) |
| | | Address | Aviation Management Office |
| | | Address2 | Mail Stop 158-1 |
| | | City | Moffett Field |
| | | State | CA |
| | | Postal Code | 94035 |
| | | Telephone | (b) (6) 3 |
| | | Email | (b) (6) |
| Declaration | | Declaration(a) | Yes |
| | | Declaration(b) | Yes |
| Point of Contact | | Representative | (b) (6) |
| | | Address | NASA Ames Research Center, N260/112 |
| | | Address2 | |
| | | City | Moffett Field |
| | | State | CA |
| | | Postal Code | 94035 |
| | | Telephone | (b) (6) |
| | | Email | (b) (6) |
| Operational Description | Requested Effective Period | Beginning | |
| | | End | |
| | | Light out operation | No |
| | | VFR operation | Yes |
| | | IFR operation | No |
| | | Day operation | Yes |
| | | Night operation | No |
| | | Program Executive Summary | Exploration Aerial Vehicle (EAV) Program provides low-cost low-risk flight test capability for validating flight control technologies in support of the IRAC (Intelligent Resilient Aircraft Controls) project and SFW (subsonic fixed-wing) project, in support of aviation research conducted under funding from the Aerospace Research Mission Directorate (ARMD). |
| | | Operational Summary | The EAV will conduct flights with a frequency as high as twice per week during heavy testing, and as low as once per month during development phases. Flights will be conducted throughout the year and will vary with the given frequency, averaging around 30 flights per year. Each flight test date will consist of two flights. Each flight has a maximum duration of 30 minutes. |
| | Location | State | CA |
| | | County | Santa Clara |
| | | Nearest Airport | MOFFETT FEDERAL AFLD |
| | | AOR | California - Northern |
| | Class Of Airspace | Class-A | |
| | | Class-B | |
| | | Class-C | |
| | | Class-D | |
| | | Class-E | |
| | | Class-G | |
| System Description | | Aircraft Type | |
| | | Aircraft Type And Model Description Attachment | 1 |
| | | Control Station Attachment | 1 |
| | | Communications System Attachment | 1 |
| | | List Certified Components (TSO) Attachment | 1 |
| | | Other Attachment | 0 |
| Performance Characteristics | | Climb Rate (feet/Minute) | 500 |
| | | Descent Rate (feet/Minute) | 500 |
| | | Turn Rate (Degrees/Second) | 45 |
| | Cruise Speed | Maximum | 50 |
| | | Minimum | 20 |
| | | Approach Speed | 30 |
| | Operating Attributes | Maximum MSL | 2500 |
| | | Minimum MSL | 0 |
| | | Gross Takeoff Wt | 23.0 |

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| | | 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 | X |
| | | GPS | Yes |
| | | Moving map indicator (Command Station) | Yes |
| | | Tracking capability | Yes |
| | | TCA/MCAS | No |
| | | ELT | No |
| | Transponder | Transponder | No |
| | | On | |
| | | Off | |
| | | Standby | |
| | | Ident | |
| | | Mode S | |
| | | Mode C | |
| | | Transponder Retuneable in Flight | |
| Lights | | Landing | No |
| | | Position/Navigation | No |
| | | Anti-collision | No |
| | | Infrared (IR) | No |
| Spectrum Analysis Approval | | Data Link | Yes |
| | | Data Link Attachment | 0 |
| | | Control Link(s) | Yes |
| | | Control Link Attachment | 0 |
| | | Operations utilizing Radio Control (R/C) frequencies as described in Title 47 CFR 95 | Yes |
| | | NTIA/FCC Authorization Attachment | 1 |
| ATC Communications | Transmitter VHF Band | VHF Band | Yes |
| | | Quantity | 1 |
| | | In-Flight Retunable | No |
| | Transmitter UHF Band | UHF Band | Yes |
| | | Quantity | 1 |
| | | In-Flight Retunable | No |
| | Transmitter HF band | HF Band | No |
| | | Quantity | |
| | | In-Flight Retunable | No |
| | Receiver VHF Band | VHF Band | Yes |
| | | Quantity | 1 |
| | | In-Flight Retunable | No |
| | Receiver UHF Band | UHF Band | Yes |
| | | Quantity | 1 |
| | | In-Flight Retunable | No |
| | Receiver HF band | HF Band | No |
| | | Quantity | |
| | | In-Flight Retunable | No |
| | Guard (Emergency) Frequencies VHF Band | VHF Band | No |
| | | Quantity | |

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| | Guard (Emergency) Frequencies UHF Band | UHF Band | No |
| | | Quantity | |
| | Instantaneous Two-Way Voice | Direct to pilot | Yes |
| | | SATCOM | No |
| | | Relay via aircraft | No |
| Electronic Surveillance/ Detection Capability | | EO/IR | No |
| | | Terrain detection | No |
| | | Weather/icing detection | No |
| | | Radar | No |
| | | Other Attachment | 0 |
| | | Electronic detection systems | No |
| | | Electronic detection systems attachment | 0 |
| | | Radar observation | No |
| | | NAS Operational Capability Attachment | 0 |
| Visual Surveillance/ Detection Capability | Maximum Distance from UA | Vertical | 2500 Feet |
| | | Horizontal | 1.0 Nautical Miles |
| | | Airborne based (Chase Aircraft) | No |
| | | Ground based | Yes |
| | | Visual observation from one or more ground sites | Yes |
| | | Forward or side looking cameras | No |
| | | Attachment for All | 0 |
| Aircraft Performance Recording | | Flight data recording | Yes |
| | | Control station recording | Yes |
| | | Voice Recording | No |
| Flight Aircrew Qualifications | Pilots | Private (Written) | Yes |
| | | Private (Certified) | No |
| | | Instrument | No |
| | | Commercial | No |
| | | Air Transport | No |
| | | Unique Trained Pilot | No |
| | | Unique Trained Pilot Description | Manual R/C control by pilots. |
| | | DOD certified/trained | No |
| | | Other Certified Training | No |
| | | Trained on FAR Part 91 Requirement | Yes |
| | | Medical Certification Class (FAA or DOD equivalent) | 3 |
| | | Currency Status | Primary pilot current.<br>Research pilot current. |
| | | Duty Time Restrictions | None. |
| | | Single UAS Control | Yes |
| | | UAS Description | |
| | | Total Numbers of UAS Controlled | 1 |
| | Observers | Private (Written) | No |
| | | Private (Certified) | No |
| | | Instrument | No |
| | | Commercial | No |
| | | Air Transport | No |
| | | Unique Trained Pilot | No |
| | | Unique Trained Pilot Description | Ground-based observers. |
| | | DOD certified/trained | No |
| | | Other Certified Training | No |
| | | Trained on FAR Part 91 Requirement | Yes |

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| | | DOD Certified Training Attachment | 0 |
| | | Medical Certification Class (FAA or DOD equivalent) | 3 |
| | | Currency Status | Observers current. |
| | | Duty Time Restrictions | None. |
| | | Single UAS Control | Yes |
| | | UAS Description | |
| | | Total Numbers of UAS Controlled | 1 |
| Special Circumstances | | Special Circumstances | |