

**DCMA INST 8210.1B**  
AFI 10-220  
AR 95-20  
NAVAIRINST 3710.1F  
COMDTINST M13020.3  
DCMA-AO  
1 March 2007

## CONTRACTOR'S FLIGHT AND GROUND OPERATIONS

**PURPOSE.** This Instruction supersedes DCMA INST 8210.1/AFI 10-220/AR 95-20/NAVAIRINST 3710.1E, 13 November, 2002, and all previous versions. It establishes requirements for ground and flight operations involving all contracted work performed on aircraft where this Instruction is incorporated as a contract requirement, as well as procedures to be followed by Government Flight Representatives (GFRs). Chapter 7 establishes policy and procedures to be followed by GFRs and does not establish any additional contractor requirements. In accordance with DFARS requirements, DoD contracting activities shall include this Instruction and applicable supplements in all contracts involving Government aircraft for which the Government is assuming some of the risk of loss or damage. This Instruction describes the content of the contractor's aircraft ground and flight operations procedures (hereafter identified as Procedures) and approval for these Procedures. It provides for the delegation of authority for such approvals, regardless of Service affiliation.

**APPLICABILITY AND SCOPE.** This instruction applies to contractor personnel whose duties include the operation or maintenance of any aircraft under any contract which incorporates by reference or includes this Instruction, and to all GFRs appointed pursuant to those contracts. This instruction has been coordinated with and concurred by the Military Services (hereafter referred to as the Services). References in this instruction to FAA certifications or requirements may be substituted with applicable host nation equivalent certifications or procedures. Recommendations for new policies or procedures should be submitted through channels to HQ DCMA, ATTN: DCMA-AO (the Office of Primary Interest (OPI) for this joint military Regulation/Instruction) for review.

**CHANGES.** Changes shall be coordinated with all Services and DCMA prior to incorporation into this Instruction. For specific guidance from each DoD Component, contact the following:

HQ DCMA: DCMA-AO (703) 428-1313  
6350 Walker Lane, Suite 300  
Alexandria, VA 22310-3241

Army: Commander, U. S. Army Materiel Command (703) 806-9894  
ATTN: AMCOPS-CA, 9301 Chapek Rd.  
Ft. Belvoir, VA 22060-5527

Navy: Commander, Naval Air Systems Command (AIR-09F) (301) 342-7233  
22541 Millstone Road, Unit 10  
Patuxent River, MD 20670-1601

Air Force: HQ AFMC/A3V  
508 W. Choctawhatchee  
Eglin AFB, FL 32542-5713

(850) 882-7890

Coast Guard: Assistant Commandant for Engineering and Logistics  
COMDT CG 4  
2100 2<sup>nd</sup> St. SW  
Washington, DC 20593-0001

(202) 267-0187

GFR RESPONSIBILITIES. GFRs are responsible for ensuring contractors establish and follow written Procedures IAW this Instruction. GFRs are bound by this Instruction for all contractor aircrew and flight approvals IAW the *Ground and Flight Risk Clause (GFRC)*, [DFARS 252.228-7001](#), and/or the *Aircraft Flight Risk Clause (AFRC)*, [DFARS 252.228-7002](#). Further GFR responsibilities are described in Chapter 7. Commanders having the administrative responsibility for any contract or other legal agreement (e.g., Cooperative Research and Development Agreements (CRADAs), special Other Transactions Authority (OTA), or Grants) containing the GFRC/AFRC or this Instruction shall appoint a trained GFR to administer the responsibilities of this Instruction

CONTRACTOR RESPONSIBILITIES. Contractors are responsible for establishing and enforcing safe and effective written Procedures IAW this Instruction.

INFORMATION REQUIREMENTS. The following forms are referenced and/or required in this instruction.

[DD Form 250](#), *Material Inspection and Receiving Report*

[DCMA Form 644](#), *Request for Flight Approval*

[DD Form 1716](#), *Contract Data Package Recommendation/Deficiency Report*

[DD Form 1821](#), *Contractor Crewmember Record*

[DD Form 2627](#), *Request for Government Approval For Aircrew Qualifications and Training*

[DD Form 2628](#), *Request for Approval of Contractor Crewmember*

#### Attachments

[ATT 1](#) Glossary of Acronyms

[ATT 2](#) [DCMA Form 644](#), *Request for Flight Approval*

[ATT 3](#) [DD Form 2627](#), *Request for Government Approval For Aircrew Qualifications and Training*

[ATT 4](#) [DD Form 1821](#), *Contractor Crewmember Record*

[ATT 5](#) [DD Form 2628](#), *Request for Approval of Contractor Flight Crewmember*

[ATT 6](#) *Sample GFR Delegation of Authority Letter*

[ATT 7](#) *Sample Supporting Contract Administration (SCA) Request Format*

[ATT 8](#) *Sample Survey Report*

[ATT 9](#) *Sample Facility Data Sheet*

[ATT 10](#) *Required Procedures Outline*

[ATT 11](#) *Index*

BY ORDER OF THE ACTING DIRECTOR, DEFENSE CONTRACT MANAGEMENT

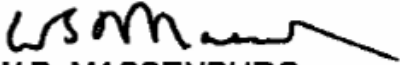
AGENCY, AND THE SECRETARIES OF THE ARMY, THE AIR FORCE, AND THE NAVY



Keith Ernst  
DCMA Acting Director



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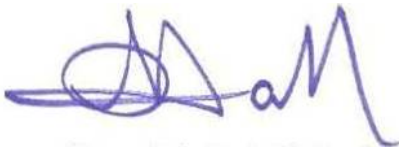
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AMCOPS-CA), Navy (AIR-09F), Air Force (HQ AFMC/A3V), Coast Guard (CG-41)

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## Chapter 1

### DEFINITIONS

1. Definitions as they apply to this Instruction.
  - 1.1. Aircraft. Unless otherwise provided in the contract, means:
    - 1.1.1. aircraft to be delivered under contract (either before or after acceptance), including complete aircraft and aircraft in the process of being manufactured, disassembled, or reassembled; provided that an engine, portion of a wing or a wing is attached to a fuselage of the aircraft;
    - 1.1.2. aircraft that are furnished to the Contractor under contract, whether in a state of disassembly or reassembly, including all property installed, in the process of installation, or temporarily removed;
    - 1.1.3. Unmanned Aerial Vehicles (UAVs), helicopters, vertical take-off aircraft, lighter-than-air airships and other non-conventional aircraft.
  - 1.2. Aircraft Acceptance.
    - 1.2.1. Pre-Accepted Aircraft. Any aircraft for which the final [DD Form 250](#) for a specific contract has not been executed by the Government.
    - 1.2.2. Accepted Aircraft. Any aircraft for which the final [DD Form 250](#) for a specific contract has been fully executed for the Government, after all required contractor actions have been completed, including satisfactory completion of final ground and/or flight acceptance testing.
  - 1.3. Aircraft Identification Conventions.
    - 1.3.1. Aircraft Basic Mission (Class/Type). Identifies the primary function and capability of an aerospace vehicle (e.g., Attack, Fighter, Helicopter, Patrol, Transport, Trainer). Aircraft Basic Mission is represented by a letter of the alphabet (e.g., Fighter (F-16); Transport (C-135); Trainer (T-38); Bomber (B-1)).
    - 1.3.2. Modified Mission. Identifies modifications to the Basic Mission of an aircraft. The modified mission identification appears to the left of the Basic Mission symbol (e.g., reconnaissance (RF-4C); tanker (KC-135R); cargo (CH-47D), anti-submarine (SH-60B)).
    - 1.3.3. Aircraft Design (Model). Identifies major changes within the same Basic Mission. Design numbers appear to the right of the Basic Mission symbol, separated by a dash (e.g. F-18; H-60; C-17).
    - 1.3.4. Aircraft Series. Identifies the production model of a particular design number representing major modifications significantly altering systems components. Consecutive series symbols appear to the immediate right of the design number (e.g., the F-16A and F-16C, the KC-135A and KC-135R, the AH-64A and AH-64D).
  - 1.4. Aircraft Operations. Includes all aircraft flight and ground operations.
  - 1.5. Approving Authority. The commander or designee of one of the following organizations having the administrative responsibility for a particular contractor facility in

accordance with the [Federal Directory of Contract Administration Services \(CAS\) Components](#).

1.5.1. Army - Commander, Procuring Activity MACOM (HCA's). Delegated to other Controlling Custodian Commanders who administer ACO responsibilities for organizational level support and training contracts.

1.5.2. Navy - Commander, Naval Air Systems Command (COMNAVAIRSYSCOM). Delegated to other Controlling Custodian Commanders who administer ACO responsibilities for organizational level support and training contracts.

1.5.3. Air Force - Heads of Contracting Activities (HCA).

1.5.4. DCMA - Commander, Defense Contract Management Agency Contract Management Office (CMO), or Aeronautical Division Director, or the International District Commander (May not be delegated).

1.5.5. Non DoD/Other - Commander of the Procuring Activity

1.6. Army Nonstandard Aircraft. Any aircraft owned but not procured by the Army.

1.7. Aviation Safety Official (ASO). The contractor individual assigned primary responsibility for developing and administering the contractor's aviation safety program. This individual should have aircrew, and aviation safety administration experience.

1.8. Bailed Aircraft. Any Government-owned aircraft provided to a contractor under a Bailment Agreement for use in conjunction with a specific contractual requirement. Aircraft are usually bailed to a contractor to perform Government contract work. Aircraft are usually leased to a contractor for the contractor's use. Bailment agreements are legal contracts between the Government Program Office and the contractor.

1.9. Certificate. Includes documents reflecting successful completion of FAA certification, FAA/Military flight physicals, and training to include: physiological, altitude chamber, centrifuge, qualification, life support, egress, survival, CRM, and other training required by Service guidance.

1.10. Check Flights. Flights to determine compliance with contractual requirements, such as Acceptance Check Flights (ACFs) and Functional Check Flights (FCFs), which include:

1.10.1. Any flight performed to accept or functionally check new aircraft production.

1.10.2. Any flight performed to accept or functionally check accomplishment of depot maintenance, contract maintenance, or modification.

1.10.3. Any flight performed to determine whether an aircraft or its various components are functioning according to predetermined specifications when subjected to the flight environment.

1.11. Crewmember. Any instructor/flight examiner, pilot (including UAV), copilot, flight engineer, navigator, weapons system operator, bombardier navigator, radar intercept operator, boom operator, crew chief, loadmaster, defensive/offensive system operator, and other flight manual or applicable document handbook identified crewmember when

assigned to their respective crew positions to conduct any flight under the contract.  
NOTE: Only the pilots are considered crewmembers for UAVs.

1.12. Component. The Service of the Approving Authority as defined above.

1.13. Contract Administration Services (CAS). Those actions accomplished by the Government including quality assurance (QA), safety, flight operations, and others listed in [Federal Acquisition Regulation \(FAR\) 42.302, Contract Administration Functions](#).

1.14. Contract Administration Services Component (CASC). A Contract Management Office (CMO) of Defense Contract Management Agency (DCMA) or a Service which performs CAS in a designated geographical area or a specific contractor's facility as listed in the [Federal Directory of Contract Administration Services \(CAS\) Components](#).

1.15. Contract Management Office (CMO). The office which performs assigned functions related to the administration of contracts and preaward functions. The focal point is the Administrative Contracting Officer (ACO).

1.16. Contracting Officer (CO/KO).

1.16.1. Administrative Contracting Officer (ACO).

1.16.2. Procuring Contracting Officer (PCO).

1.17. Contractor. Any individual, corporation, or other entity whose personnel may operate aircraft; or perform aircraft maintenance, modification or production.

1.18. Engineering Test Flights.

1.18.1. Subsystem development flights (e.g., autopilot, fire control, bombing/navigation systems).

1.18.2. Flights where the aircraft serves as the vehicle carrying the item to be checked (e.g., electronic countermeasure stores, a radar system, a missile).

1.18.3. Component development and reliability flights not included under paragraph 1.18.2. (above).

1.19. Experimental Test Flights. Flights that are conducted to determine or demonstrate critical operating characteristics of an aircraft. These flights often involve greater than normal risk. These include, but are not limited to:

1.19.1. Initial flights of a new mission, type/design or series aircraft, high angle of attack tests, flutter and loads tests, and critical stores separation tests.

1.19.2. Flights to determine or expand flight or propulsion system envelopes.

1.19.3. Flights to initially determine the performance, flight characteristics, and handling qualities.

1.19.4. Flights of experimental aircraft.

1.19.5. Flights of an aircraft whose flight characteristics may have been altered by configuration changes.

1.19.6. Initial flights of the first production aircraft of a new mission, type/design, or series.

1.19.7. Initial flights of the first of those aircraft which have undergone “major modification” as determined by the Program Manager.

1.19.8. Component development flights where failure of the test component would make the flight hazardous in nature and/or involve greater than normal risk as determined by the Program Manager, with advice from the contractor and GFR.

1.20. FAR and DoD FAR Supplement (DFARS) References. This Instruction is issued under the joint authorities of the Administrator of General Services, and the Secretary of Defense, under the broad policy guidelines of the Administrator for Federal Procurement Policy. It establishes uniform policy and procedures relating to the procurement of supplies and services. The DFARS, issued by the Office of Deputy Assistant Secretary of Defense (Procurement), provides DoD implementation guidance and policies and procedures unique to DoD. The FAR and DFARS are composed of policy guidance for contracting officers and clauses for use in contracts. Policy guidance includes instructions to contracting officers on Government policy and when to use the contract clauses contained in Part 52 of the FAR and Part 252 of the DFARS. Contract clauses set forth agreements between the Government and the contractor. NOTE: Non DoD contracts may follow internal contracting processes or specific contract wording to accomplish the intent of FAR and DFARS clauses. Some of the pertinent clauses that relate to aircraft contracts follow:

1.20.1. [DFARS Part 228.3, Insurance, Subpart 228.370, Additional clauses.](#)

1.20.2. [DFARS 252.228-7001, Ground and Flight Risk.](#)

1.20.3. [DFARS 252.228-7002, Aircraft Flight Risk.](#)

1.20.4. [DFARS 252.228-7005, Accident Reporting and Investigation Involving Aircraft, Missiles, and Space Launch Vehicles.](#)

1.20.5. [FAR Subpart 42.202, Assignment of Contract Administration.](#)

1.20.6. [FAR Subpart 42.302, Contract Administration Functions.](#)

1.21. Flight Crews. Includes crewmembers and non-crewmembers.

1.22. Flight Operations (FO). Those aircraft operations where intent for flight exists. This instruction uses the term "flight" as defined in the [GFRC/AFRC](#). High speed taxi and Helicopter hover taxi are also considered a flight operations activity.

1.23. FOD.

1.23.1. Foreign Object Damage (FOD). Any damage attributed to a foreign object that may be expressed in physical or economic terms, which may or may not degrade the product's required safety and/or performance characteristics. FOD prevention programs are also known as Foreign Object Elimination (FOE) programs.

1.23.2. Foreign Object Debris (FOD). A substance, debris or article alien to an aircraft or system which would potentially cause damage.

1.24. Government Flight Representative (GFR). (See Chapter 7, paragraph 7.2, for the GFR selection and assignment process.) GFRs (as defined below) are:

1.24.1. GFR (Aircraft Flight and Ground Operations) . A rated U.S. Military officer, or Government civilian in an aviation position, to whom the Approving Authority has delegated responsibility for approval of contractor flights, Procedures, crewmembers, and engine run certifiers, and ensuring contractor compliance with applicable provisions of this Instruction (see [Attachment 6](#) for sample delegation letter).

1.24.2. Alternate GFR. A rated U.S. Military officer, or Government civilian in an aviation position, to whom the Approving Authority has delegated responsibility to act in the absence of the primary GFR (as defined in paragraph 1.24.1 above) for approval of contractor flights, and ensuring contractor compliance with applicable provisions of this Instruction (see [Attachment 6](#) for sample delegation letter).

1.24.3. Ground GFR. A U.S. Military aircraft maintenance officer or NCO (E-7 or above), or Government civilian equivalent, to whom the Approving Authority has delegated responsibility for approval of Procedures related to aircraft ground operations and ensuring contractor compliance with applicable provisions of this Instruction (see [Attachment 6](#) for sample delegation letter). Ground GFRs (as defined by this paragraph) are not authorized to act as a GFR (Aircraft Flight and Ground Operations (paragraph 1.24.1)) or an alternate GFR (paragraph 1.24.2), approve contractor crewmembers, non-crewmembers, flights, flight related portions of the Procedures, any function/procedure described in this Instruction's Chapter 4 (Flight Operations), or Chapter 5, paragraph 5.3.4.3.2 (engine run qualifiers/certifiers). The Approving Authority may appoint an alternate Ground GFR.

1.25. Government-Furnished Equipment (GFE)/Property (GFP). Any Government-owned equipment, including aircraft, aircraft parts, or Ground Support Equipment (GSE) provided to a contractor for use in conjunction with a specific contractual requirement.

1.26. Ground Operations. Aircraft operations without intent for flight. Specific operations include, but are not limited to, aircraft maintenance/overhaul/modification/repair, towing, subsystem warm-up/checkout, taxiing (other than hover taxiing and high speed taxi operations), engine run or other operation of installed engines, and/or propeller(s) or rotor(s), as appropriate; preflight/postflight and operation of associated aerospace ground support equipment, Aircraft Rescue and Firefighting (ARFF) operations and operation of any Ground Test Vehicle (GTV).

1.27. Ground Personnel. Personnel designated by the contractor to perform ground operations.

1.28. Hardware Control. A method for the control of loose hardware such as nuts, bolts, cotters pins, rivet heads, etc. used to prevent FOD.

1.29. Intent for Flight. For operations under contract use the specific Service definition.

1.30. Leased Aircraft. Any Government-owned aircraft provided to a contractor under a Lease Agreement. Aircraft are usually leased to a contractor for the contractor's use. Aircraft are usually bailed to a contractor to perform Government contract work. [DoD Directive 7230.8, Leases and Demonstrations of DoD Equipment](#), further clarifies leased aircraft procedures and requirements. Lease agreements are legal contracts between the Government Program Office and the contractor.

1.31. Maintenance Test Flight (Army).

- 1.31.1. Any flight performed to accept or check accomplishment of depot maintenance, contract maintenance, or modification.
- 1.31.2. Flights performed to determine whether aircraft and its various components are functioning according to predetermined specifications while subjected to the flight environment.
- 1.32. May. Denotes the permissive. However, the words “no person may...” mean that no person is required, authorized, or permitted to do the act described.
- 1.33. Mixed Crews. Flight crews composed of a mix of Government and contractor personnel, or multiple contractors.
- 1.34. Non-crewmember. Personnel, other than crewmembers, designated by the Contractor’s Requesting Official (CRO) to perform a necessary function while the aircraft is in flight, for example: maintenance personnel observing the performance of malfunctioning equipment to help ascertain the cause of equipment failure, photographers, and systems operators. NOTE: The term non-crewmember does not apply to UAS support personnel, i.e. non-pilots.
- 1.35. Orientation Flight. A flight (usually performed within the local flying area) to familiarize selected personnel with the mission of the aircraft. Orientation flights are always Point A to Point A.
- 1.36. Privileged Safety Information. Statements, reports or testimony given to a safety investigator or board pursuant to a promise of confidentiality, and any direct references to any such statements or testimony elsewhere in a report. The findings, evaluations, analyses, opinions, conclusions, recommendations and other indications of the deliberative processes of a safety investigator, safety investigation boards, endorsers and reviewers are also privileged safety information.
- 1.37. Procedures. Separate and distinct written instructions developed by the contractor and approved by the GFR, which delineate the processes contractor personnel shall follow while conducting operations affecting aircraft subject, by contract, to the requirements of this Instruction. Procedures may be divided into two parts; Flight Operations Procedures (FOPs) and Ground Operations Procedures (GOPs). The terms Procedures and Contractor's Procedures are synonymous.
- 1.38. Program Office (also System Program Office (SPO), Program Management Office (PMO), Program Management Aircraft (PMA)). The office which awards or executes a contract for supplies or services and performs post award functions when these are not assigned to a contract administration office.
- 1.39. Requesting Official. Also known as the Contractor’s Requesting Official (CRO), the member of the contractor’s first level of management (president, vice president) or appointed designee authorized to sign a “Request for Approval for Qualification Training,” “Request for Approval of Contractor Crewmember,” and "Request for Flight Approval" for approval by the GFR.
- 1.40. Service Guidance. Includes the procuring Service’s regulations, instructions, flight manuals, and technical publications which are applicable to the specific flight

and/or ground operations conducted by the contractor, as specified in the contract, and includes:

1.40.1. For USAF aircraft contracts: AFI 11-202, Vol. 1-3 and applicable AFMC supplements; AFI 11-2FT, Vol. 1-3; AFI 11-401 and AFI 11-301 and applicable AFMC supplements.

1.40.2. For USN/USMC aircraft contracts: OPNAV Instruction 3710.7 and applicable aircraft general NATOPS FLIGHT MANUALS.

1.40.3. For USA aircraft contracts: AR 70-62, AR 95 series, AR 40-501, and applicable technical manuals.

1.40.4. For USCG aircraft contracts: COMDTINST M3710.1 series, COMDTINST M13020.1 series.

1.41. Shall. Denotes the imperative.

1.42. Should. Indicates a desired, though not required, outcome.

1.43. Sortie. For record and reporting purposes of this Instruction, a sortie is defined as a flight by one aircraft. A sortie begins when the aircraft begins to move forward on takeoff or takes off vertically from rest at any point of support. It ends after airborne flight when the aircraft returns to the surface and,

1.43.1. The engines are stopped, or

1.43.2. Aircraft has been on the surface for 5 minutes, whichever comes first between 1.43.1 and 1.43.2, or;

1.43.3. Change is made in the pilot in command.

1.44. Support Flights. These include but are not limited to:

1.44.1. Photographic.

1.44.2. Chase.

1.44.3. Rescue and recovery.

1.44.4. Target or target towing.

1.44.5. Aircraft delivery.

1.44.6. Orientation.

1.44.7. Demonstration flights.

1.44.8. Severe weather evacuation flights.

1.44.9. Cargo and/or personnel transport flights. This includes flights of an emergency nature.

1.44.10. Aircrew evaluation, training, and currency.

1.45. Product or Mission Support Flights (including deployments) as directed by the Services.

1.46. Test Aircraft. Any aircraft used for research, development or test and evaluation purposes.

1.47. Tool Control. A method for ensuring accountability of all contractor and or personal tools at the start and finish of each maintenance task.

1.48. Unmanned Aerial Vehicle (UAV). Any aircraft that is operated without the pilot onboard. UAVs are also known as Remotely Operated Aircraft (ROA), Remotely Piloted Aircraft (RPA), and Remotely Piloted Vehicles (RPV).

1.49. Unmanned Aircraft System (UAS). Includes the aircraft (UAV) and ground support elements.



## Chapter 2

### WAIVER PROCEDURES

2. Waivers. A waiver is written relief from a specific contractual requirement. The contractor should request a waiver when specific requirements add cost or complexity to contract accomplishment without increasing safety or reducing Government's risk, or when alternate procedures or requirements can be substituted which provide equivalent levels of safety, proficiency and/or risk mitigation. (NOTE: ACOs and PCOs shall not use the contract modification process for aviation contracts to waive this Instruction or Service Guidance requirements. [DFARS Part 228.3, Insurance, Subpart 228.370 – Additional Clauses](#), describe the limits imposed on the PCO for modifying the [GFRC](#).) When issued, waivers shall be valid no more than the length of the applicable contract and shall be attached to the Procedures. All waivers shall be reviewed at least annually by the GFR to ensure the requirements for the waiver are still valid. There are three types of waivers that affect contractor aircraft operations; waivers to this Instruction; waivers to Service Guidance; and contract waivers.

#### 2.1. Waivers to this Instruction.

2.1.1. Waiver requests to this Instruction are generated by the contractor.

2.1.2. Content. Waiver requests should detail justifications for the waiver and procedures for mitigating the risk to Government aircraft affected by the waiver. Waiver requests must be in written or electronic format.

2.1.3. Routing. Send all requests for waivers to this Instruction to the GFR. The GFR will ensure the ACO receives a copy of the waiver package. DCMA GFRs shall forward waiver requests with recommendations through their chain of command to DCMA-AO. DCMA-AO will endorse the waiver with recommendations, and forward it to the waiver authority of the Instruction. Service GFRs shall forward waiver requests with recommendations directly to the waiver authority. Waiver requests should be processed in a timely manner to ensure minimal disruption of flight operations.

#### 2.2. Service Guidance Waivers.

2.2.1. Purpose. Waivers to Service Guidance are generated by the contractor. Service Guidance includes the procuring Service's regulations, instructions, flight manuals, and technical publications which are applicable to the specific flight and ground operations conducted by the contractor, *and are specified in the contract*. The use of Service Guidance in a contract ensures that contractor's flight and ground operations risk levels parallel the risk accepted by the Services. Though "contractor" operations may not have been considered when Service Guidance was developed, contractors must comply with the Service Guidance as written (when required by this instruction) or seek relief through the waiver process.

2.2.2. Content. Waiver requests should detail justifications for the waiver and procedures for mitigating the risk to Government aircraft affected by the waiver. Waiver requests must be in written or electronic format.

2.2.3. Routing. From the contractor's viewpoint the routing process for Service Guidance is the same as for waivers to this Instruction. Once the waiver package is received by the waiver authority for this Instruction, they will forward it with recommendations to the appropriate Service Guidance waiver authority for final approval or disapproval.

2.3. Contract Waivers or Contract Changes. Requests to modify contract requirements are accomplished through the use of a [DD Form 1716](#). These contract modification requests are routed through the ACO to the PCO for action. If the contract change relates to aircraft operations, route DD Form 1716s generated by contractors through the GFR. The GFR will forward the 1716 with recommendations to the ACO.

2.4. Approved Waivers. If approved, the GFR will discuss the scope of the waiver with the ACO who will determine if any equitable adjustments to the contract are warranted. The specifics of the deviation shall be included in the Procedures.

2.5. Waiver Authorities for this Instruction and Service Guidance:

2.5.1. Army - U. S. Army Materiel Command, ATTN: AMCOPS-CA, 9301 Chapek Rd., Ft. Belvoir, VA 22060-5527.

2.5.2. Air Force - Headquarters Air Force Materiel Command, HQ AFMC/A3. Forward requests to HQ AFMC/A3V, 508 W. Choctawhatchee, Eglin AFB, FL 32542-5713.

2.5.3. Navy - Commander, Naval Air Systems Command, AIR-09F, 22541 Millstone Rd. Unit 10, Patuxent River, MD 20670-1601.

2.5.4. Coast Guard - Assistant Commandant for Engineering and Logistics, COMDT CG 4, 2100 2<sup>nd</sup> St. SW, Washington, DC 20593-0001.

2.5.5. Non-Signatory Waiver Authorities – When a contract that includes this Instruction, is issued by an organization not signatory to this Instruction (NASA, DEA, DHS, foreign governments, etc.), contact the organization issuing the contract for guidance on identifying the appropriate waiver authority.

## Chapter 3

### PROCEDURES

3. Contractor's written Procedures. Contractors shall develop specific written Procedures for all flight and ground operations. Contractors shall not begin flight or ground operations until the Procedures have been approved in writing by the GFR.

3.1. General Guidance. Should a conflict occur between sources of guidance, the following hierarchy shall be used in descending order: the contract, this Instruction, Service Guidance, the Procedures. Procedures shall include all items from [Attachment 10](#), item by item, as applicable. Contractors need not include in their Procedures the definitions from this Instruction except as a reference. **If included, the definitions shall not be changed.** Contractors do not need to include in their Procedures the crewmember qualifications from this Instruction unless they wish to make them more restrictive. Contractors with separate functional organizations responsible for Flight and Ground Operations may divide their Procedures into two parts; Flight Operations Procedures (FOPs) and Ground Operations Procedures (GOPs). However, contractor functional organizations are responsible for compliance with this Instruction and the Procedures as a whole.

3.2. Responsibilities. The contractor is responsible for writing, implementing and enforcing their Procedures, and for identifying and correcting deficiencies.

3.3. Preparation. The contractor shall prepare and maintain specific written Procedures, separate and distinct from industrial or quality procedures, that describe aircraft flight and ground operations at all operating facilities. If the contractor references existing company procedures, operating instructions, etc., in these Procedures, the referenced document(s) shall be made readily available for review and become part of the GFR approval process. The Procedures shall:

3.3.1. Provide specific guidance describing activities and requirements of this Instruction and contractual provisions pertaining to safety, and flight and ground operations applicable to all aircraft for each specific contractor operation and location.

3.3.2. Describe in detail how the contractor ensures that individuals perform only duties they are qualified and authorized to perform.

3.3.3. Adequately explain all aspects of a given operation. (e.g., identify the office/title of individual responsible, steps taken to accomplish activities, verification procedures, training requirements, and records/documentation required).

3.4. Use of Service Guidance. Contractors shall base their Procedures on Procuring Service Guidance as defined in paragraph 1.40 for conducting all aircraft flight and ground operations. For all operations, contractors are bound only by that Service guidance that is applicable to the operations being performed under contract. In the development of Procedures, the contractor, GFR, and Program Office should work together closely to ensure that the correct, applicable Service Guidance is used. If Service guidance is not available for a unique aircraft, test program, or flight/ground operation, then the contractor shall recommend procedures similar to Service guidance for a like aircraft and/or operation for GFR approval.

3.4.1. At locations with multiple Service contracts, the GFR and contractor may elect to specify general guidance from a single source for basic flight rules, evaluations etc. The contractor is encouraged to develop a common set of Procedures. This may require the contractor to request common process block changes or waivers.

3.4.2. The GFR, in concert with contractor management personnel, should ensure that existing Procedures are modified, if required, when pertinent Service guidance changes. This may require a contract change.

3.5. Subcontractors. The prime contractor is responsible for all contract requirements subcontracted or delegated to other sources. The prime contractor has the responsibility for ensuring that the subcontractor has procedures in place to implement the requirements of this Instruction. The Government's indemnification of the contractor through the Ground and Flight Risk Clause ([DFARS 252.228-7001](#)) and the Aircraft Flight Risk Clause ([DFARS 252.228-7002](#)) does not automatically flow down to subcontractors unless specifically stated in the contract. The requirements of this Instruction apply even when the Government's assumption of risk through the [GFRC/AFRC](#) does not flow down to a subcontractor.

3.6. Format. Contractors should write their Procedures to follow the order of Attachment 10.

3.7. Approval. The contractor shall:

3.7.1. Forward the completed Procedures for each location to the cognizant GFR for approval.

3.7.2. Identify to the GFR a single point of contact who has cognizance over the functional organizations involved and who can coordinate approval issues.

3.7.3. Maintain current copies of the approved Procedures at each operating location.

3.7.4. GFR's may conditionally approve a contractor's Procedures in cases where the contractor is making progress towards a complete and satisfactory set of Procedures but schedule constraints make the conditional approval of interim GOPs or FOPS acceptable. Contract work may only commence on the areas of the interim Procedures that have been approved. The GFR will provide the conditions of the approval in writing to the contractor.

3.8. Changes. All proposed changes shall be submitted to the GFR in writing. Approved changes shall be incorporated into all copies of the Procedures. Changes are not in effect until the GFR approves them.

3.9. Changes to this Instruction. If a contract modification implements a more recent version of this Instruction, the contractor may operate for three months with existing approved Procedures created using an earlier version of this Instruction, until a revised set of Procedures can be prepared and approved.

3.10. Core Procedures. Some contractors develop overarching "Core" procedures to ensure operations are uniform throughout their multiple locations. Since Core procedures cannot address site/aircraft specific operations, each site using the Core

procedures must also develop a local operating annex to cover those gaps. The Core procedures and annex together comprise the contractor's Procedures.

3.11. Review requirements. Contractors shall conduct a review of their Procedures at least every 12 months. At the completion of the review, recommended changes shall be forwarded to the GFR for approval. The GFR's annual approval shall be attached to the Procedures. A signature page in the front of the Procedures may serve as the GFR's approval/annual review letter.

3.12. Deficiencies. The GFR shall notify the contractor if he/she finds deficiencies or inadequacies in the Procedures. Failure to correct the deficiency within the specified time identified in the GFR's notification, is grounds for withdrawal of the approval of the Procedures, contractor flight operations, and/or crewmembers. Flight or ground operations conducted after such withdrawal are deemed operations without the approvals required by applicable clauses of the contract.

3.13. Noncompliance. Should the GFR discover noncompliance with approved Procedures, or discover use of unsafe practices, the GFR shall notify the contractor and ACO. Oral notification by the GFR shall be followed by a formal written statement fully outlining the deficiencies. Failure to comply with approved Procedures or continuation of a dangerous practice is unacceptable and therefore an unreasonable condition within the meaning of the clauses of the contract. A noncompliance may be considered grounds for withdrawal of the Government's assumption of risk for loss or damage to Government aircraft. Withdrawal of the Government's risk shall be accomplished in accordance with the applicable contract wording. The Government reserves the right to take such other action as may be necessary to preserve the safety and security of the aircraft.

3.14. Questions of Interpretation. A difference of interpretation concerning the Procedures between the contractor and GFR should be raised to the following authorities for resolution: for DCMA activities, DCMA-AO; for Service activities, waiver authority for this Instruction as listed in paragraph 2.5.

3.15. Access to Contractor's Facilities. The Prime contractor shall provide the GFR and APT access to the aircraft and facilities upon request and without delay during work hours. If the contractual work is subcontracted to another company, the Prime is responsible to ensure that the GFR and APT have the same privilege to enter the subcontractor's facilities, and the same access to the aircraft being worked. Access is limited to those areas directly related to operations under this Instruction.

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## Chapter 4

### Flight Operations

4. Flight Operations. This chapter applies to all Contractor Requesting Officials, crewmembers and non-crewmembers. It applies for all flights under contract regardless of who is on board or operating the aircraft.

4.1. Flight Management. This area shall describe:

4.1.1. Contractor flight planning area. The contractor shall establish and maintain a flight planning area and provide access to current and sufficient information, including NOTAMs, weather forecasts and advisories, allowing crewmembers to properly plan and participate in flights.

4.1.2. Flight profiles. Flight profiles shall be prepared for all flights and shall detail planned flight checks and events, to include proficiency training and the specific geographical areas or point-to-point routes to be used. Design flight profiles to allow the maximum possible use of ground radar monitoring / advisories, radio communications (status reports at established intervals) or chase aircraft to monitor aircraft position and status.

4.1.3. Contractor Flight Approval. The GFR approves all contractor flights under this Instruction. The Government does not assume any risk of loss under the [GFRC/AFRC](#) for any flight which has not received prior written approval by the GFR. Procedures shall delineate processes that ensure flight schedules are developed, and Requests for Flight Approvals submitted, with sufficient lead time to preclude interruption to either Government or contractor operations.

4.1.4. Flights with Multiple Contractors/Multiple Contracts. The GFR approving flights involving a mixture of contractors and or contracts shall direct which Procedures the aircrew will follow.

4.1.5. Approved Flights. Flights approved by the GFR must be:

4.1.5.1. Conducted by current and qualified crewmembers and non-crewmembers (except as noted in paragraph 4.5.1, and 4.5.8); in an approved flight area, route, and specified profile.

4.1.5.2. Performed according to an approved mission profile or test plan, and within applicable safety and engineering limitations. Experimental and engineering test flights require a specific test plan.

4.1.5.3. In accordance with approved Procedures.

4.1.6. Flight Supervision. Procedures shall:

4.1.6.1. Allow for communication between the contractor flight operations facility and the crewmembers in flight while flying in the local area (e.g. contractor radio, phone patch through tower, etc.). Whatever system is used must be manned for the duration of the flight.

- 4.1.6.2. As a minimum, identify the check flight area, supersonic corridor, stereo route profiles and any required/desired Federal Aviation Administration (FAA) coordination.
- 4.1.6.3. Identify aircraft maintenance release procedures to include a review of all safety of flight non-conforming repairs, a review of aircraft logs and records for outstanding safety of flight aircraft inspections / bulletins requiring action and expiring components (such as TDs, SBs, TCTOs, ADs, etc).
- 4.1.6.4. Include record keeping requirements for supersonic flights, if applicable.
- 4.1.7. Documentation of Certificates, Licenses, and Permits. Procedures shall identify the office/title of the individual(s) responsible for ensuring the currency of these documents. A method shall be established to inform the GFR when these documents are renewed or expire or are withdrawn or canceled. Contractors should not submit, and GFRs shall not approve, crewmembers with non-current certificates, licenses, or permits.
- 4.1.8. Mixed Crew Flights. Procedures must address designation of pilot in command and crew positions for dual piloted and/or multi place aircraft and flight lead for formation flights. With dual contractors with no prime-sub relationship flying on the same flight, dual flight authorization requests are required. Mixed crews performing crewmember or maintenance tasks shall use identical checklists.
- 4.1.9. Minimum Crew Requirements. Minimum crew requirements for the various types of flight activities shall be addressed by the contractor.
- 4.1.10. Aircrew Duty and Rest Limitations. The crew rest period is the non work period immediately preceding the crew duty period. This period shall be a minimum of 12 hours with at least 8 uninterrupted hours allowed for sleep. The following crew duty period restrictions apply to all contractor crewmembers/non-crewmembers:
- 4.1.10.1. The crew duty period begins when an individual reports for work (either flight or administrative duties) and ends when the engines are stopped at the end of a mission or series of missions.
- 4.1.10.2. 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.
- 4.1.10.3. When flying support flights (or engineering test flights IAW paragraph 1.18.2) in dual-piloted aircraft with an operative autopilot installed and used, the maximum crew duty period may be 16 consecutive hours.
- 4.1.10.4. Pilots in single-piloted helicopters are limited to a maximum of 6 flying hours in a 12-hour crew duty period.
- 4.1.10.5. Use of augmented crews per procuring Service guidance is allowed.
- 4.1.10.6. Procedures shall address chronic fatigue issues.
- 4.1.11. Other Aircrew Restrictions. The contractor shall establish flight restrictions for contractor flight personnel recovering from the effects of alcohol consumption, medications, diving, etc.



4.1.12. Publications. This area shall include:

4.1.12.1. Flight Crew Information File (FCIF). Each flight operations facility shall maintain an FCIF at a location readily available to crewmembers. Procedures shall require crewmembers to read and certify knowledge of the contents of the FCIF initially, and whenever there are new entries. Additionally, an annual review of the FCIF is required. The FCIF should contain information which affects the safety of aircraft operations and information of a transitory nature that concerns flight operations. When collocated with a Government flight operations activity, the contractor may use the Government FCIF, provided both organizations concur and standardized procedures for use are established. Approved revisions to the Procedures shall be included in this file until republished.

4.1.12.2. Only current, up-to-date publications shall be used. Procedures shall identify the method and the office/title of the individual responsible for receiving, distributing, and maintaining the currency of flight manuals and checklists. Contractor personnel shall use Government flight manuals and checklists in all flight operations where applicable technical data has been published. The contractor shall obtain military flight manuals, changes, and supplements through Government channels. Where only commercial manuals are available, the contractor is responsible for obtaining them and ensuring that changes and supplements are promptly posted in the basic technical publications. Locally devised checklists may be used only when such deviation is authorized by the appropriate Procuring Service.

4.2. Crewmember/Non-Crewmember Approval.

4.2.1. Requesting Officials (or Contractor's Requesting Official (CRO)). Procedures shall identify the office/title of individual(s) authorized to request crewmember approval and qualification training and the process for requesting approval. Only contractor designated requesting officials shall submit requests to the GFR for crewmember approval or for qualification training. The contractor shall identify by name (in writing) these officials to the GFR, and shall revise the list, as necessary, to ensure currency.

4.2.2. Government Approval for Qualification or Upgrade Training. The contractor's requesting official will forward the [DD Form 2627, Request for Government Approval for Aircrew Qualification and Training \(Attachment 3\)](#), a résumé, and [DD Form 1821, Contractor Crewmember Record, \(Attachment 4\)](#), for approval of training to the GFR. At the contractor's request and with GFR approval, the [DD Form 1821](#) can be substituted by Service forms. Include a copy of contractor crewmember's proposed qualification training plan/program per paragraph 4.3. The GFR approves/disapproves the [DD Form 2627](#), files the original and returns a copy to the contractor. The contractor shall ensure that crewmembers do not fly or initiate qualification training before receipt of Government approval. Following approval, training must be initiated and completed without delay. Formal training courses offered by the Services may be requested by the contractor and may require reimbursement according to the given contractual agreement. The GFR will then make the request for training to the appropriate Service.

4.2.3. Government Approval for Crewmember Status. The contractor and the GFR shall ensure that only the required number of crewmembers are authorized and that

programs include sufficient flying time for currency in accordance with this Instruction. The GFR shall not approve any crewmember until the Procedures have been approved. On completion of qualification training, the contractor's requesting official forwards two copies of [DD Forms 2628, Request for Approval of Contractor Crewmember \(Attachment 5\)](#), and [DD Form 1821, Contractor Crewmember Record \(Attachment 4\)](#) (or GFR approved Service form), to the GFR. The GFR indicates action taken and returns a signed copy to the contractor within ten workdays. Contractor crewmembers shall not perform in their aircrew specialties until receipt of Government approval.

4.2.4. Contractor Approval for Non-crewmember Status. The contractor's requesting official must issue a list semi-annually of each contractor and subcontractor non-crewmember required to fly in Government aircraft, to the GFR. The contractor's requesting official shall ensure that each non-crewmember is required and qualified for a specific mission.

4.2.5. Termination of Approvals. Approvals of crewmembers are automatically canceled upon termination of employment, physical disqualification, or suspension/revocation of FAA rating.

4.2.5.1. The contractor shall have procedures for identifying and addressing human factors issues such as substance abuse, personal and family problems, etc., which would preclude flight duties. The contractor shall notify the GFR of crewmember status changes by the most expeditious means and then immediately follow up in writing.

4.2.5.2. After completion of an appropriate investigation, the GFR shall withdraw the approvals of crewmembers who have:

4.2.5.2.1. Failed to meet the general requirements of basic airmanship or who fail to exercise sound judgment during ground or flight operations.

4.2.5.2.2. Exhibited evidence of personal instability or similar undesirable tendencies or have conducted themselves contrary to the Government's interests in promoting safety.

4.2.5.3. The GFR shall promptly notify ACO when an approval is withdrawn.

4.3. Crewmember Qualification Requirements.

4.3.1. General Qualifications. Minimum qualifications for approval of contractor crewmember, for test and other flight categories, are listed below. Factors such as total experience, currency of experience, experience in similar aircraft, type of flying experience, and other related factors shall be evaluated by the GFR before approving a contractor crewmember. All pilots (*except those described in paragraph 4.3.6 below*) shall have an FAA Commercial Pilot or Airline Transport Pilot rating and the appropriate category endorsements. Flight engineers shall have an FAA Flight Engineer Certificate and appropriate category endorsement. Contractors may use Service forms/directives to record individual crewmember records when performing ground and flight operations as approved by the GFR. For non-crewmember requirements see paragraphs 4.2.4 and 4.6.1. The qualification requirements for UAV pilots/operators are found in paragraph 4.3.6. The qualification requirements listed in paragraphs 4.3.2 and 4.3.3 (below) do not apply to UAV operations.

#### 4.3.2. Experimental Test Flights and Associated Experimental Ground Operations.

4.3.2.1. Pilot. Not less than 1,500 hours first-pilot time, to include 100 hours as first-pilot during engineering and/or acceptance flights listed under the functional flight category. Graduation from a military test pilot school (TPS) is required.

4.3.2.2. TPS Waiver. When the contractor pilot is not a graduate of a military TPS, the education and experience requirements listed below must be met as a basis of consideration for TPS waiver.

4.3.2.2.1. Pilots must have at least 2,000 hours first-pilot time in comparable aircraft (e.g., helicopter, fighter/attack, cargo, or other). Additionally, 200 hours of first-pilot time during engineering flight test and 10 hours during experimental flight test are required.

4.3.2.2.2. Education and experience requirements are as follows:

4.3.2.2.2.1. An undergraduate or higher degree in an aerospace related engineering or aerospace related scientific discipline plus 1 year of applicable engineering test flight experience, or,

4.3.2.2.2.2. An undergraduate or higher degree in any other engineering or scientific discipline plus 2 years of applicable engineering test flight experience, or,

4.3.2.2.2.3. Any non-engineering undergraduate or higher degree plus 3 years of applicable engineering test flight experience, or,

4.3.2.2.2.4. No degree, 4 years of applicable engineering test flight experience.

4.3.2.3. Flight Engineer. Not less than 1000 flight engineer time to include 500 hours of engineering or experimental flight test in comparable aircraft.

4.3.2.4. Other crewmembers. All other crewmembers must have 1000 hours in the position they are qualifying in, of which 300 hours must be in the same aircraft category (rotary-wing, glider, etc.).

#### 4.3.3. Engineering Test, Check Flights, and all other flights.

4.3.3.1. Pilot. The pilot must be qualified in mission, type, design, and if appropriate, series of aircraft. The pilot must have not less than 1,000 hours first-pilot time. In addition,

4.3.3.1.1. For fighter, attack, and trainer aircraft, the first-pilot time must include 100 hours in the same aircraft type and design.

4.3.3.1.2. The first-pilot time for other aircraft must include 300 hours in similar aircraft type.

4.3.3.2. Copilot. The copilot must have not less than 500 hours first-pilot time and be qualified in mission, type, design, and if appropriate, series aircraft.

4.3.3.3. Flight Engineer. Not less than 500 hours of flight engineer time of which 100 hours must be in the same aircraft category and shall be qualified in the mission, type, design and series of aircraft.

4.3.3.4. Flight Mechanics/Crew chiefs. Contractor crewmembers must have a minimum of 150 hours experience as a flight mechanic/crew chief, have previously

qualified and served in such capacity during military service or have been trained using the applicable Service training program modified to the contract requirements.

4.3.3.5. Other crewmembers. All other crewmembers must have 500 hours in the position they are qualifying in, of which 100 hours must be in the same aircraft category.

4.3.3.6. Maintenance Test Pilot (MTP) (Army).

4.3.3.6.1. Standard Army Aircraft. Contractor pilots who perform Maintenance Test Flights (MTFs) on Army Standard Aircraft, which have undergone maintenance, modification, or overhaul, or on new production aircraft, where a follow-up/acceptance MTF is not performed by the Government, shall be a graduate of the Army Maintenance Test Pilot Course or complete an equivalency evaluation conducted by the Directorate of Evaluation and Standardization (DES), U.S. Army Aviation Warfighting Center, Ft. Rucker, AL 36362-5000. All requests for equivalency evaluations shall be forwarded through the GFR to the procuring MACOM. The MACOM will coordinate all equivalency evaluations with DES.

4.3.3.6.2. Nonstandard Army Aircraft. Contractor pilots performing MTF or Functional Check Flights (FCFs) shall be qualified per procuring MACOM Aircrew Training Program for the specific aircraft. Request for nonstandard aircraft qualification shall be submitted through the GFR to the procuring MACOM.

4.3.4. Contractor Flight Instructor and Flight Examiner Qualifications.

4.3.4.1. Flight Instructors may be designated by the contractor to provide instruction to contractor crewmembers. Only highly qualified, proficient, and experienced personnel may be selected and trained as instructor crewmembers. These candidates shall meet the evaluation requirements provided by the Services prior to GFR approval on DD form 2628.

4.3.4.2. Flight Examiners may be designated by the contractor to administer recurring flight evaluations when authorized by the GFR. Only highly qualified instructor personnel may be selected and trained as Flight Examiners. These candidates shall meet the evaluation requirements provided by the Services prior to GFR approval on DD form 2628.

4.3.4.3. Instrument Flight Examiners (IE), Standardization Instructor Pilots (SP), Instructor Pilots (IP), and Maintenance Evaluators (ME) designations apply only to contractor pilots (Army) contracted for the sole purpose of conducting aircraft qualification training and administration of the Aircrew Training Program (ATP). Contractor pilots in these designated positions shall meet all Army initial aircraft qualifications and recurrent training requirements per AR 95-1 and the applicable aircraft Aircrew Training Manual.

4.3.5. Medical Qualification Requirements.

4.3.5.1. Except as described in paragraphs 4.3.5.1.1 and 4.3.5.1.2 Contractor pilots need an annual FAA class II flight physical, [either from an FAA certified military flight surgeon or an FAA certified civilian physician]. Unless an FAA class II physical is required for their FAA flight certificate, non-pilot crewmembers may receive either an

FAA Class II or military flight physical annually. (Exception: crew chiefs and loadmasters will meet the medical requirements of paragraph 4.3.5.2 below.).

4.3.5.1.1. Army Contractor pilots will have the option of maintaining either a current (annual) Federal Aviation Administration (FAA) Class 2 Medical Certificate or an Army Class 2 FDME. Army Aeromedical Surveillance is an integral part of Army Aviation Risk Management. Therefore, contractor aircrew who opt for the FAA certificates must submit a copy of the FAA certificate, with any applicable Statement of Demonstrated Ability (SODA) or FAA waiver, to AAMA and give permission to the FAA to provide their medical information to the U.S. Army Aeromedical Activity in order to continue population based medical surveillance and ensure risks to flight safety are minimized. The aforementioned information will be mailed to USAAMA, ATTN: MCXY-AER, Building 301, Andrews Avenue, Fort Rucker, AL 36362; or faxed to commercial 334-255-7030 or x 7060 (DSN 558); or scanned and emailed to [aama@amedd.army.mil](mailto:aama@amedd.army.mil).

4.3.5.1.2. UAV pilots need (as a minimum) a current annual military or FAA Class III flight physical (administered annually). Army UAV pilots (operators) need a current annual Army Class III flight physical administered per AR 40-501.

4.3.5.2. Non-crewmembers need an annual flight physical, either from a military flight surgeon or a civilian physician conducting an FAA class III flight physical. This Instruction levies no requirements for medical examinations on UAV systems operators (non pilot); Exception: Air Force contractor UAV systems operators shall comply with the medical requirements of paragraph 5.2. Contractor non-crewmembers who perform functions as flight mechanics, engineers or serving as technical observers on acceptance, maintenance, experimental, developmental or functional test flights, will have the option of maintaining either a FAA Class III Medical Certificate (administered annually) or an Army Class III certification on a DA Form 4186.

4.3.6. UAV Pilot Qualifications. All UAV pilots must be approved in writing by the GFR prior to operating any aircraft under the [GFRC/AFRC](#), and shall be sufficiently qualified to make certain he/she can operate the UAV in a safe and effective manner. The GFR shall not allow UAV pilots to serve as pilot/pilot-in-command for two or more UAVs simultaneously unless approved to do so by the waiver authority for this Instruction (see paragraph 2.5).

4.3.6.1. UAV pilots operating *exclusively* in Restricted or Warning airspace, as designated in DoD Flight Information Publications and DOT/FAA aeronautical charts, shall hold ratings and qualifications consistent with specific contractual wording, or Service requirements for UAVs/ROAs. If Service/contractual guidance does not exist, then the GFR shall approve/disapprove UAV pilots/operators based upon the requirements of paragraph 4.3.6.2 below.

4.3.6.2. UAVs operating outside of Restricted or Warning airspace shall do so only under an FAA Certificate of Authorization (COA) or similar document. UAV pilots operating UAVs outside of Restricted or Warning airspace shall: hold at least a private pilot's certification; an instrument rating; pass an annual instrument review; and have a total of 300 flight hours as pilot-in-command or Mission Commander (UAVs or aircraft) - 100 of which must be in a manned aircraft; hold a current FAA UAV pilot certification

(when such a certification exists); and comply with Service Guidance concerning pilot qualifications/currencies if more restrictive than either of the above requirements.

4.4. General Procedures. The following minimum areas shall be addressed:

4.4.1. Airfield Operations.

4.4.1.1. The Procedures shall address local airfield operations. If the contractor flight activity is physically located at an operational civil or military airfield, the contractor shall comply with local directives and execute any agreements with the airfield authority required to ensure full compliance with the contract and this Instruction.

4.4.1.2. Procedures shall address qualification and certification requirements for radio operators or tower controllers in accordance with FAA/FCC regulations when these services are provided by the contractor.

4.4.2. Weather Requirements. Contractors shall use Service guidance for ceiling/visibility minimums and alternate weather requirements. FCF/ACF flights shall be accomplished during day visual meteorological conditions. In no instance shall the takeoff/landing minimums be less than the following:

4.4.2.1. All initial FCF/ACFs and subsequent FCF/ACFs involving discrepancies for engine, flight controls, landing gear, or instruments affecting IFR capability:

4.4.2.1.1. Bomber, cargo, tanker, patrol, and trainer aircraft: 1,500 feet and 3 miles.

4.4.2.1.2. Fighter, attack, and reconnaissance aircraft: 3,000 feet and 3 miles.

4.4.2.1.3. Helicopters: 700 feet and 1 mile.

4.4.2.1.4. UAVs: As written in the contract. If not specified in the contract, Service minimums for specific UAV model will apply. If Service guidance does not exist, then the contractor shall establish minimums commensurate with safe operation of the aircraft in concurrence with the Program Office.

4.4.2.2. Subsequent FCF/ACF flights not falling under 4.4.2.1.

4.4.2.2.1. Bomber, cargo, tanker, patrol, and trainer aircraft: 1,000 feet and 3 miles.

4.4.2.2.2. Fighter, attack, and reconnaissance aircraft: 1,000 feet and 3 miles.

4.4.2.2.3. Helicopters: 500 feet and 1 mile. Helicopter FCF/ACF flights may be conducted under Special VFR conditions, but in no case with weather less than 500 feet and 1 mile. FCF/ACF hover checks may be performed when weather is less than the above, provided visual reference to the ground and obstruction clearance is maintained.

4.4.2.3. All other flights:

4.4.2.3.1. Fixed Wing. In no instance shall a take off be attempted if the departure field's observed weather is lower than 300 feet and 1 mile, or the minimums for the expected approach to be flown in the event of an immediate landing at that field, whichever is higher. In no instance shall an approach be commenced if the observed weather at the destination airfield is lower than 300 feet and 1 mile, or the minimums for the approach to be flown, whichever is higher. If, after commencing, the weather drops below this minimum, the approach may be continued but under no circumstances shall

the aircraft penetrate below minimums for that approach or 300 feet whichever is higher unless sufficient visual reference with the runway environment has been established.

4.4.2.3.2. Rotary Wing: In no instance shall a take off be attempted if the departure field's observed weather is lower than the minimums for the expected approach to be flown in the event of an immediate landing at that field. In no instance shall an approach be commenced if the observed weather at the destination airfield is lower than the minimums for the approach to be flown. If, after commencing, the weather drops below this minimum, the approach may be continued but under no circumstances shall the aircraft penetrate below minimums for that approach unless sufficient visual reference with the runway environment has been established.

4.4.3. Required daylight operations.

4.4.3.1. All check flights shall commence no earlier than official sunrise and terminate no later than official sunset.

4.4.3.2. Experimental/Engineering flights shall be conducted between official sunrise and sunset unless night operations are specifically required by the test plan/mission.

4.4.4. Flight operating limits. Service guidance shall be used for all operating limits. In the absence of Service guidance, maneuvering parameters such as minimum altitudes and operating limits similar to Service requirements for like aircraft missions and events shall be included in the Procedures.

4.4.5. Filing of flight plans. Local procedures for filing of flight plans shall be addressed. Flight plans shall be filled out and filed in accordance with FAA/Service/host nation regulations.

4.4.6. Arming and disarming (if applicable). The Procedures shall mirror Service, Tech Order, Tech Manual, and any applicable local procedures for arming and disarming procedures.

4.4.7. Live fire, laser, and gunnery operations. If conducted, the Procedures shall mirror Service, Tech Order, Tech Manual, and any applicable local procedures.

4.4.8. Night Vision/low light operations. If conducted, the Procedures shall mirror Service, Tech Order, Tech Manual, and any applicable local procedures.

4.4.9. Life Support Equipment. Provide procedures to identify the process and the office/title of the responsible individual(s) and methods to issue, care, inspect, clean, and store equipment.

4.4.10. Experimental and Engineering Test Operations. This area shall address the contractor's specific procedures for experimental tests, engineering tests, and associated ground operations of Government aircraft as separate sections within the Procedures.

4.4.11. Emergency Operating Procedures. Provide detailed procedures addressing the appropriate *minimum* items below:

4.4.11.1. Radio failure.

4.4.11.2. Landing gear malfunctions.



- 4.4.11.3. In-flight fire.
  - 4.4.11.4. Barrier and arresting gear engagement.
  - 4.4.11.5. Controlled bailout/ejection.
  - 4.4.11.6. Jettisoning (fuel, armament, cargo).
  - 4.4.11.7. Minimum and emergency fuel procedures.
  - 4.4.11.8. Emergency aircraft evacuation.
  - 4.4.11.9. Emergency aircraft extraction (hanger/flightline fire).
  - 4.4.11.10. Hot brakes.
  - 4.4.11.11. Hazardous material.
  - 4.4.11.12. Any other aircraft specific emergency procedures (e.g. autorotation).
- 4.4.12. Orientation Flights. This area includes procedures for submitting orientation flights on Government aircraft through the GFR and the appropriate Military Command, to the waiver authority for this Instruction (see paragraph 2.5) for approval. The GFR shall consult with the ACO to ensure that such requests are within scope of the contract. Passengers are restricted from the following types of flights: experimental test flights; initial acceptance, functional check flights, maintenance test, or production check flights.
- 4.4.13. Aircrew and Flight Briefings. Mission/aircraft specific Service briefing guides shall be used for conducting these briefings. In the absence of such briefing guides, the contractor shall develop briefing guides similar to what the Service uses for like aircraft and missions. Maintain a copy of the flight brief paperwork IAW Service Guidance.
- 4.4.14. Determining Weight and Balance. Procedures shall indicate the office/title of the individual(s) responsible for determining aircraft weight and balance or for providing the information required to compute it.
- 4.5. Crewmember Training Requirements.
- 4.5.1. Initial Qualification Training. For qualification in mission/type/design and series of aircraft, GFR approval depends on crewmember experience and proficiency equal to the type of flying contemplated or conducted. Initial qualification training shall be per Service guidance in the specific mission, type, design, and if appropriate, series aircraft. Differences in series aircraft and any special equipment or systems should also be addressed during initial training. If provided, the contractor's in-house training program shall be equivalent to the Services'. When aircraft flight simulators exist for the type aircraft being flown, crewmembers shall complete emergency procedures simulator training. The duration of the training session shall be commensurate with Service requirements. When no simulator exists, emergency procedures training shall be accomplished in an actual or mockup cockpit by an instructor. A comprehensive written examination on the applicable mission, type, design, and if appropriate, series of aircraft must be completed. Knowledge of all the aircraft systems, including normal and emergency procedures, must be demonstrated to an instructor pilot. In the absence of a Service defined program or when limited by the contract, the contractor shall



recommend an initial qualification program which is similar to programs the Services use for like aircraft to the GFR for approval.

#### 4.5.2. Crewmember Currency Requirements.

4.5.2.1. General Requirements. Currency applies to minimum hour/sortie/event requirements necessary to maintain qualification in a particular type/design aircraft. Contractor crewmembers shall maintain all applicable currencies required by the procuring Service for each flight operation/event (in which qualification is maintained), in the designated aircraft and crew position. If this guidance doesn't exist, the contractor shall develop and submit a recommended currency program (similar to Service requirements for like aircraft, missions and events) to the GFR for approval. Contractor training procedures shall be sufficient to ensure that the aircrew are proficient for the mission to be flown before assigning that crewmember to the flight schedule. The Procedures shall:

4.5.2.1.1. Describe the methods used to ensure that aircrews maintain required currencies, and don't perform tasks for which they are not current and qualified.

4.5.2.1.2. Identify the office/title of the individual responsible for overseeing 4.5.2.1.1. (above).

4.5.2.1.3. Publish a table of the specific Service guidance used for currency, and recurrency/proficiency requirements.

4.5.2.1.4. Proration. A crewmember performing on a contract for less than a semiannual training period shall accomplish a prorated share of the minimum requirements based on the percentage of the remaining training period. Accomplishment of these currency requirements should be distributed evenly throughout the calendar period to enhance aircrew skill levels.

4.5.3. Using Civil Aircraft to Maintain Currency on Contract Aircraft. Generally, the operation of civil aircraft does not contribute to currency and proficiency requirements for the operation of Government aircraft unless the civil and Government aircraft are similar in handling qualities and have basically the same aircraft systems (fuel, electrical, hydraulic, cockpit layout, etc.), as determined by the GFR. When the GFR allows the use of civil aircraft to count for requirements, the records of the contractor crewmember will be annotated to indicate the specific civil aircraft used.

4.5.3.1. Contractor pilots (Army) contracted to conduct initial aircraft qualification, initial Maintenance Test Pilot qualification or administration of the Army Aircrew Training Program shall be qualified and maintain currency per AR 95-1 and the applicable Aircrew Training Manual (ATM). Such designated pilot positions include; IP, SP, IE, and ME.

4.5.4. Multiple Aircraft Qualification Currency Requirements. Contractor crewmembers maintaining qualifications in multiple aircraft under contract shall accomplish a minimum of 50 percent of the Service currency requirements in each aircraft. Contractor crewmembers qualified in other than Government aircraft shall have their records so noted, but approval for such additional qualification shall not be the responsibility of the GFR.

4.5.4.1. GFRs may authorize contractor crewmembers to maintain qualification in two different series of the same aircraft design (model).

4.5.4.2. Authority to approve multiple qualifications in two or more different design (model) aircraft, three or more series of the same aircraft design (model), or any other combination of mission/design/series, rests with the Service waiver authority for this Instruction.

4.5.5. Night and IMC. There is no requirement for contractor pilots and copilots to fulfill night or instrument requirements, except in those cases where night or instrument flying by contractor personnel is required by contract. Pilots maintaining night flying currency must also maintain instrument currency except in aircraft not certified for instrument flight. Training and currency requirements for night currency and other events shall be accomplished in the contractor's flying program under the provisions of the contract.

4.5.6. Special Flight Events. The contractor shall ensure that crewmembers are properly trained in flight operations which require special maneuvers or qualifications; e.g., formation, air refueling, BFM, ACBT, low level, night vision devices, weapons delivery etc. Currency requirements for these operationally oriented flight events shall be Per Service guidance.

4.5.7. Periods of Reduced Flight Time Availability. When contractor crewmembers cannot meet training requirements because of low density production or developmental aircraft, the contractor shall develop and submit a recommended alternative training plan for category/design aircraft through the GFR and ACO to the appropriate waiver authority. An example of such a training plan would be to substitute 50 percent of the Service requirements in a similar aircraft or compatible simulator. Such approvals must be obtained for each applicable semiannual period.

4.5.8. Recurrency/Requalification. When crewmembers fail to maintain basic aircraft qualification currency they shall not be permitted to fly as crewmembers on Government aircraft except for appropriate recurrency/requalification training. The contractor shall develop and submit a recommended recurrency program (similar to Service requirements for like aircraft, missions and events) to the GFR for approval.

4.6. Crewmember Ground Training Requirements. The contractor shall develop a ground training program which includes (as a minimum) the requirements of this section. The Procedures must assure that aircrews do not fly if training requirements have not been meet.

4.6.1. Crewmember and non-crewmember requirements (*Paragraph 4.6.1 and its subparagraphs do not apply to UAV operators*).

4.6.1.1. Physiological training. All crewmembers and non-crewmembers shall receive the appropriate physiological training identical to the analogous Service crew position and mission parameters. Physiological training for pilots and copilots shall include vertigo simulator and/or other disorientation training to the maximum extent possible. Refresher training shall be accomplished per Service guidance. This training may be waived by the GFR for non-crewmembers required to fly no more than once in a 12 month period.

4.6.1.2. Aircraft Egress/Evacuation Training. This training shall cover a review of aircraft emergency equipment and escape procedures. Training shall be tailored to the type(s) of aircraft and crew position in which the individual maintains qualification. The contractor shall ensure that all crewmembers and non-crewmembers receive annual egress training. As appropriate, egress/evacuation training shall address a minimum of the following:

4.6.1.2.1. Egress methods (ground and flight).

4.6.1.2.2. Ejection seat normal and emergency procedures to include automatic modes.

4.6.1.2.3. Seat kit modes of operation and deployment.

4.6.1.2.4. Post ejection checklist items.

4.6.1.2.5. Parachute operation to include malfunctions and landing techniques.

4.6.1.2.6. Fire extinguisher training/refresher.

4.6.1.2.7. Use of smoke masks.

4.6.1.3. Life Support equipment training. The frequency and content of training shall be tailored to meet minimum requirements of the Procuring Service.

4.6.1.4. Water Survival Training. Currency is required prior to operating any Government aircraft over open water beyond the gliding distance to land. The frequency and content of training shall be tailored to meet minimum requirements of the Procuring Service. Training shall be given by a qualified life support/survival equipment instructor or by attending a military water survival refresher course. Water survival training shall be tailored to the type(s) of aircraft and crew position(s) for which the individual maintains qualification. This training may be waived by the GFR for non-crewmembers required to fly no more than once in a 12 month period.

4.6.1.5. Land Survival Training. The frequency and content of training shall be tailored to meet minimum requirements of the Procuring Service.

4.6.2. Additional Requirements for Crewmember. The frequency and content of training shall be tailored to meet minimum requirements of the procuring Service.

4.6.2.1. Academic Training. Aircrew members shall complete academic refresher training to include self-instruction. As a minimum, this training shall address the following topics (as appropriate): FCF/ACF procedures; aircraft normal and emergency systems/operations; Tech Manual notes, warnings and cautions; flight test areas and procedures; local airfield and ATC procedures; review of the Procedures and Service guidance used. This training may be conducted during monthly flying safety meetings.

4.6.2.2. Emergency Procedures Training. This training may include the use of simulators belonging to either the contractor or the Government. A qualified simulator instructor or IP is required to supervise this training. If a compatible simulator does not exist, an IP may provide this training in a crew station mockup or cockpit.

4.6.2.3. Crew/Cockpit Resource Management Training (CRM)/Aircrew Coordination Training (ACT). The contractor shall ensure that all crewmembers receive the CRM/ACT required by Service guidance.

4.6.2.4. Initial Centrifuge Training (Air Force). All crewmembers who fly fighter “type” aircraft must receive G-centrifuge training in accordance with Service guidance.

#### 4.7. Crewmember Evaluations.

4.7.1. Evaluations. Approved contractor crewmembers must be evaluated on their ability to perform assigned duties and designated flight tasks, including operating all the aircraft systems related to their crew position. They must perform assigned aircrew functions safely and effectively. The flight and ground evaluations shall be accomplished in accordance with Service guidance for standardization/evaluation of aircrew members. All evaluations conducted by the Government shall be coordinated with and approved by the GFR. If a pilot exceeds the currency period for the instrument check, he/she shall not fly IFR unsupervised by an IP until the evaluation is satisfactorily completed. Evaluations may be conducted as an integral part of the regularly scheduled flights. The Procedures shall:

4.7.1.1. Describe the methods used to ensure that aircrew evaluations do not lapse.

4.7.1.2. Identify office/title of individual(s) responsible for monitoring expiration of flight evaluations, performing flight evaluations, and maintaining examinations.

4.7.1.3. Reference applicable specific Service guidance used for the evaluation program.

4.7.2. No-Notice Evaluations. Contractor crewmembers are subject to no-notice flight evaluations. No-notice evaluations may be administered by a Government instructor/evaluator with coordination and approval of the GFR.

4.7.3. Flight Evaluations. Flight evaluations shall be administered to the contractor crewmember either by an approved contractor flight evaluator/instructor or by a qualified Government evaluator/instructor, at the direction of the GFR. The senior contractor examiner pilot shall receive initial/recurring evaluations by a Government pilot authorized to administer that evaluation to Service aircrews.

4.7.4. Contractor pilots designated as IE, SP, IP, or ME for the administration of the Army ATP shall be evaluated annually by a Government pilot authorized to administer that evaluation to Service aircrews.

#### 4.8. Forms and Records.

4.8.1. The Procedures shall identify the office/title of individual(s) responsible for monitoring and reviewing all crew/non-crewmembers records.

4.8.2. Requests For Flight Approval. GFR written approval is required for all flights under this Instruction.

4.8.2.1. Procedures shall outline requirements for completion and submission of [DCMA Form 644, Request For Flight Approval \(Attachment 2\)](#), or GFR approved equivalent form. GFR approved alternate forms shall contain the same required information depicted on the [DCMA Form 644](#).

- 4.8.2.2. The Government's assumption of risk of loss under the [GFRC](#) or [AFRC](#) does not extend to flights not previously approved in writing by the GFR, or to flights which the corresponding flight approvals have been altered following the GFR's signature and without the GFR's approval (documented in writing or via email).
- 4.8.2.3. The names of all crewmembers, non-crewmembers, and passengers (Government or contractor) flying on aircraft in accordance with this Instruction, must be depicted, or attached to, the [Flight Approval Request](#).
- 4.8.2.4. The flight approval request must be completed through block 8 for approval. Specifically, the following items must be completed in detail:
- 4.8.2.4.1. Blocks 2 & 3 - A by-name listing of all crewmember and non-crewmember personnel, by position, authorized to participate in the flight.
- 4.8.2.4.2. Block 7 - Type of flight, profile, governing directives, test plan, flight release, etc. Include flight area, route of flight, stops, and destination.
- 4.8.2.4.3. Block 8 - Signature and contact information of contractor's requesting official who certifies that the flight is in accordance with the flight program authorized by the contract and shall be conducted in accordance with the approved flight operations procedures.
- 4.8.2.4.4. Additionally, the information required in blocks 10-13 shall recorded upon completion of the flight, including number of sorties/flights, hours flown and significant remarks, for example: if flight was postponed, curtailed, adversely affected, etc. This information, will be provided to the GFR using the [DCMA Form 644](#) or may be consolidated in a weekly or monthly report.
- 4.8.2.4.5. Once the flight approval is signed, contractors shall not deviate from the authorized profile without advance approval (in writing) from the GFR.
- 4.8.3. Contractor Crewmember Record. Use [DD Form 1821](#) or Service forms and directives, to record individual crewmember training, qualifications, flight time and approval to operate Government aircraft.
- 4.8.4. Training Folder. Maintain a training folder on each crew/non-crewmember in training status. This folder serves as a management tool to record training progress and assist in the orderly progression of training. The folder shall contain:
- 4.8.4.1. A "Training Recap Table" listing all training required by the upgrade program. This table should fully identify prerequisite events and should allow the instructor to document the date an event was completed.
- 4.8.4.2. A record of the grade and date of the current aircraft and aircrew examinations.
- 4.8.4.3. Hours, types, and dates of ground schools completed.
- 4.8.4.4. Each training and checkout flight numbered with a résumé as to the areas covered, including how the trainee performed during that training period.
- 4.8.5. Records (Crewmember). Maintain a record folder for each crewmember after the completion of training and qualification. Include in the record folder:

- 4.8.5.1. Training records as required in paragraph 4.8.4, above, for at least 1 year or per Service guidance, whichever is longer.
- 4.8.5.2. Copies of GFR crewmember approvals. Include documented records of any completed special training which is needed to perform all maneuvers required to conduct the test, functional/acceptance check flights, and mission profile; e.g., formation, refueling, instrument, night, low level, etc.
- 4.8.5.3. Current medical certificate.
- 4.8.5.4. Certification of physiological training, altitude chamber, and centrifuge training, when required.
- 4.8.5.5. Certification of Life Support, egress and survival training.
- 4.8.5.6. A copy of all applicable FAA certificates and records of other qualifications.
- 4.8.5.7. Certification of recurring flight evaluations and prerequisite written and oral examinations. A copy of all flight evaluations shall be maintained per Service guidance.
- 4.8.5.8. Certification of CRM training.
- 4.8.6. Records (non-crewmember). Maintain a records folder for each non-crewmember that shall include as a minimum:
  - 4.8.6.1. A completed copy of non-crewmember's authorization to fly or a copy of the contractor's Requesting Official's non-crewmember list per paragraph 4.2.4.
  - 4.8.6.2. Military or FAA medical certification.
  - 4.8.6.3. Certification of training and qualification.
  - 4.8.6.4. Certification of physiological training and altitude chamber, when required.
  - 4.8.6.5. Certification of applicable Life Support, egress and survival training.
- 4.8.7. Flight Time Records. Maintain a record of each crewmember's flights to include:
  - 4.8.7.1. Date and time.
  - 4.8.7.2. Type mission.
  - 4.8.7.3. Aircraft type/design/series.
  - 4.8.7.4. Instrument time (actual, simulated).
  - 4.8.7.5. Night hours.
  - 4.8.7.6. First-pilot, co-pilot, instructor pilot, etc. hours.
- 4.8.8. Access to Records. Crewmember/non-crewmember training folders, flight time records, and record folders shall be available to the GFR and other appropriate Government personnel at the request of the GFR.

## Chapter 5

### Ground Operations

5. Ground Operations. This section applies to contractor personnel who perform ground operations on aircraft and those personnel who operate and maintain ground support equipment used in support of aircraft.

5.1. Ground Operations Procedures (GOPs).

5.1.1. The contractor shall develop and use written Ground Operations Procedures (GOPs) (the aircraft ground operations portion of the Procedures) to ensure that only trained, qualified, and or certified personnel perform all aircraft ground operations. Include procedures for housekeeping, flightline vehicle operation, and selecting, training, testing and certification, of personnel in all normal and emergency operations (e.g. fire, explosions, severe weather, etc.). Contractors perform many ground operations related to aircraft not specifically mentioned in this Instruction, however, all hazardous ground operations performed in, on, and around aircraft must be addressed in the Procedures.

5.1.2. As a minimum, develop GOPs to address the following specific ground operations (if performed).

5.1.2.1. The contractor shall develop a Foreign Object Damage Prevention Program and procedures, which are planned, integrated, and developed in conjunction with Safety, Test, Quality, Maintenance, and Manufacturing offices. The program shall identify program goals and individuals/offices responsible for achieving them. It should address operations such as sweeping of runways, taxiways, and run-up areas; and the process for prevention of FOD during engine test cell activities, flight line maintenance, launch, and recovery. It should stipulate the method of hardware and Tool Control and accountability, and include a requirement to report and investigate FOD incidents. Include a process to identify types of FOD and problem areas, develop and utilize trend data and provide corrective action to prevent recurrence. The contractor shall review the FOD Prevention Program at least semiannually to assure adequacy and compliance. (NOTE: A good source of guidance for developing safe and effective FOD and Tool Control procedures is National Aerospace Standard (NAS) 412, which describes recommended FOD and Tool Control industry standards.) Examples of Tool Control processes are: use of shadow boards, canvas layouts with pockets, tool counters, or composite tool kits. The method selected shall be effective in timely identification of lost or missing items. Specific FOD/Tool Control procedures shall address:

5.1.2.1.1. Control of hardware, expendable tools and supplies used in, on, and around the aircraft.

5.1.2.1.2. Control debris created during maintenance/manufacturing operations (AKA clean as you go).

5.1.2.1.3. Control of personal items.

5.1.2.1.4. Positive control of all tools taken onboard or used around the aircraft.

- 5.1.2.1.5. Methods for establishing tool ownership.
- 5.1.2.1.6. Lost tool procedures.
- 5.1.2.1.7. FOD Prevention Training.
- 5.1.2.2. Powered and non powered aerospace ground equipment (AGE) operations (e.g., powered: external Auxiliary Power Units (APUs), hydraulic test stands, etc.; non powered: nitrogen/oxygen servicing carts, lifting devices, aircraft work stands, tow bars, etc.). Procedures shall include AGE maintenance/inspection methods and standards (Service/commercial technical data should be referenced).
- 5.1.2.3. Aircraft weapons, munitions, cartridge activated devices, laser, explosives, and hazardous materials (HAZMAT).
- 5.1.2.4. Aircraft refuel/defuel operations, fuel storage, dispensing equipment (truck/pit), fuel system purging, fuel system maintenance (including confined space procedures), aircraft hanging procedures/rules for full, partially full, or empty fuel tanks, and lower explosive level (LEL) procedures.
- 5.1.2.5. Aircraft towing procedures including: identification of towing supervisor, pre-briefing, tow crew complement, towing speeds, obstacles, towing in congested areas, signaling, tow vehicle operation, tow bar installation and removal.
- 5.1.2.6. Aircraft marshaling including aircraft taxi clearance distances.
- 5.1.2.7. Aircraft jacking to include identification of jacking supervisor, required personnel, and any other aircraft specific requirements.
- 5.1.2.8. Egress system maintenance of ejection, extraction and explosively operated canopy removal systems.
- 5.1.2.9. Aircraft engine and aircraft APU operation.
- 5.1.2.10. Aircraft taxiing by ground personnel (if permitted) .
- 5.1.2.11. Aircraft servicing (other than fuel) including: hydraulic, engine, gearbox, propellers, landing gear struts, accumulators, oxygen (liquid and gaseous), and aircraft tires.
- 5.1.2.12. Storage of oil and lubricants and hazardous materials.
- 5.1.2.13. Storage and transportation of oxygen, nitrogen and other compressed gases.
- 5.1.2.14. Hydraulic fluid contamination surveillance program for both aircraft and AGE. This shall include hydraulic test equipment used for operational checks of removed components.
- 5.1.2.15. Mooring and tie down procedures.
- 5.1.2.16. Oil analysis program (if applicable) .
- 5.1.2.17. Calibration procedures addressing:
  - 5.1.2.17.1. Tools.
  - 5.1.2.17.2. Gauges.



- 5.1.2.17.3. Instruments.
- 5.1.2.17.4. Test equipment.
- 5.1.2.18. Weight and balance.
- 5.1.2.19. Tire and wheel maintenance.
- 5.1.2.20. Aircraft cleaning, corrosion prevention/control, paint removal, and painting.
- 5.1.2.21. Welding.
- 5.1.2.22. Battery handling, recharging, and storage.
- 5.1.2.23. Non destructive inspection (NDI) .
- 5.1.2.24. Prevention of Unauthorized Access or Operation of Government Aircraft. The Procedures shall include a method for early detection and prevention of unauthorized engine run, taxi or flight operations, promote security awareness in flight-line supervisors and employees, and identify responsibilities for preventing unauthorized aircraft movement and preventing access to aircraft by unauthorized personnel.
- 5.1.2.25. Severe weather plan. The Procedures shall:
  - 5.1.2.25.1. Define conditions which constitute severe weather.
  - 5.1.2.25.2. Address provisions for obtaining forecasts and disseminating weather information to affected personnel and flight crews.
  - 5.1.2.25.3. Detail specific responsibilities for hangaring, mooring, or evacuation of aircraft as appropriate.
  - 5.1.2.25.4. Include an off duty hours notification process in the event that a recall of personnel is required to hanger, tie down or evacuate aircraft.
  - 5.1.2.25.5. When necessary, negotiate formal agreements with appropriate military or civil installations (for example, information, services, evacuations, medical response, debris removal, etc.). Annual review and verification of these agreements shall be accomplished.
  - 5.1.2.25.6. Include criteria and procedures for termination of operations such as fueling and liquid oxygen (LOX) servicing.
- 5.1.2.26. Only current, up-to-date technical publications and Service Guidance shall be used for the servicing and maintenance of the aircraft. Procedures shall identify the method and the office/title of the individual responsible for receiving, distributing, and maintaining the currency of technical publications. Where only commercial manuals are available, the contractor is responsible for obtaining them and ensuring that changes and supplements are promptly posted in the basic technical publications. For Federal Aviation Administration (FAA) certified aircraft, the contractor shall maintain all applicable Airworthiness Directives and Service Bulletins for review. Locally devised checklists may be used only when such deviation is authorized by the appropriate Procuring Service.
- 5.1.3. GOPs will include procedures for aircraft records management. This includes documents, work cards, and maintenance records.

5.2. Medical (Physical) Requirements for Ground Personnel. All personnel performing engine runs, ground taxi, towing, and operation of self-propelled support equipment shall receive a physical examination from a licensed physician prior to conducting these operations, and subsequently on a specified periodic basis (not to exceed 5 years). The physician shall determine, based on job requirements, that the individual can safely perform the specific operations for which they are certified.

5.3. Training Requirements for Ground Personnel.

5.3.1. The contractor shall provide each employee, including subcontractors, comprehensive initial indoctrination training and recurring continuation training sufficient to enable him/her to perform authorized ground operations in a safe and effective manner. Initial and continuation training shall include written and practical exams as applicable.

5.3.2. Personnel authorized to operate aircraft systems (pneumatics, hydraulics, electrical, etc.) shall receive training and be certified in each system they shall operate.

5.3.3. Ejection or extraction systems. Personnel authorized access to cockpits equipped with ejection or extraction systems and/or explosive operating canopy removal systems shall complete a general familiarization course annually on cockpit safety and the hazards of these installed systems.

5.3.4. Engine Operations. Pilot checklists may differ from ground maintenance engine run checklists and procedures. The contractor shall ensure that the correct checklist and procedures are used. Helicopter and tilt-rotor ground engine operations shall only be performed by pilots current and qualified in the aircraft. The restriction does not apply to helicopter APU operation.

5.3.4.1. Ground personnel who operate aircraft engines, APUs, or taxi aircraft shall be evaluated semiannually, and shall receive practical instructions annually in:

5.3.4.1.1. Engine/APU start, normal and emergency operations to include all operations limits.

5.3.4.1.2. Aircraft radio operations to include requesting assistance in emergencies.

5.3.4.1.3. Normal and emergency aircraft brake and steering systems.

5.3.4.1.4. Any other applicable emergency procedures for the given aircraft.

5.3.4.1.5. Receive ground egress/evacuation training as appropriate.

5.3.4.1.6. Pass a written examination, to include applicable bold face/critical action procedures.

5.3.4.2. Currency. To be current, operators must perform an engine run at least every 45 days for the engine/type aircraft for which they are certified. Operators may maintain qualifications in several engines, aircraft types or platforms (i.e. test cell vs. cockpit). If the operator has the basic 45 day currency but has not operated from the same platform, engine, or aircraft within the last 45 days, then prior to conducting the engine run the operator shall:

5.3.4.2.1. Review the engine controls unique to the platform or aircraft, as applicable.

- 5.3.4.2.2. Review the normal operating limits and emergency shut down procedures.
- 5.3.4.2.3. Document this review in the currency record.
- 5.3.4.3. Evaluations.
  - 5.3.4.3.1. Ground personnel certified to operate aircraft engines, APUs or taxi aircraft shall semi-annually be evaluated by an examiner (certifying personnel). These personnel shall demonstrate proficiency, including knowledge of Tech Manual warnings, cautions and notes, and emergency procedures.
  - 5.3.4.3.2. Personnel authorized to qualify/certify engine run operators must be approved in writing. They shall be current and qualified in the operation and shall receive their annual exam from a Government or contractor engine run qualifier/certifier. The GFR may restrict qualifier/certifier status and or require use of military qualifiers/certifiers.
- 5.4. Ground Operations Certification Requirements.
  - 5.4.1. Certification. Documentation in the employee's training record of successful completion of required initial or recurring continuation training and testing for a specific GOP is the process by which the employee is considered certified.
  - 5.4.2. Re-certification. If an employee's certification expires, (failure to maintain the recurring training requirements) completion of a re-certification course with a qualified instructor shall be completed. If an employee remains uncertified for a six (6) month period, the employee must complete initial certification training.
- 5.5. Records.
  - 5.5.1. The contractor shall maintain a training/certification record for each employee authorized to perform GOPs. These records shall document the following:
    - 5.5.1.1. Initial, recurring continuation, and re-certification training.
    - 5.5.1.2. Recurring written examination results.
    - 5.5.1.3. Certification status for each GOP the employee is certified to perform.
    - 5.5.1.4. Certification of medical examination type and currency as required.
    - 5.5.1.5. Certification of engine run 45 day currency and reviews for the appropriate personnel.
    - 5.5.1.6. Taxi qualifications, if applicable.
    - 5.5.1.7. Certification of evaluations required in section 5.3.4.3., above.
    - 5.5.1.8. Other certifications as appropriate.
  - 5.5.2. The contractor shall make these records available to the GFR and other appropriate Government personnel at the request of the GFR.

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## Chapter 6

### SAFETY

#### 6. Aviation Safety Program Elements.

6.1. Mishap Prevention Program. The contractor shall establish a written mishap prevention program for its flight and/or ground operations which includes the following applicable elements:

6.1.1. Designate an Aviation Safety Official and identify specific duties and responsibilities of the position.

6.1.2. Establish a contractor aviation safety council (AKA consolidated safety council) to promote a program of accident prevention in flight, ground, industrial, and explosive activities as they apply to flight and ground operations. The aviation safety council shall accept action items, provide safety expertise, implement changes as required, and operate as a focal point for safety within the company. The council shall address company mishaps for trend analysis and recommendations. Airfield hazards to include obstructions, ATC facilities and procedures, Hazardous Air Traffic Reports (HATRs), and Bird-Aircraft Strike Hazard (BASH), will also be addressed. Members of the council individually shall provide a method to interface with their respective company organization/department. These meetings should be held on a regular basis (at least quarterly). Document and distribute minutes of the meetings to appropriate offices and the GFR. The aviation safety council members individually shall provide a method to interface with their respective company organization/ department. The aviation safety council members should include (but are not limited to):

6.1.2.1. Safety Manager

6.1.2.2. Director of Flight Operations/Chief Pilot

6.1.2.3. Quality Assurance (contractor and Government)

6.1.2.4. Aviation Safety Official

6.1.2.5. Department Heads

6.1.2.6. FOD Manager

6.1.2.7. Chief of Aircraft Rescue and Fire Fighting

6.1.2.8. Environmental/Hazardous Materials Manager

6.1.2.9. Aviation Maintenance Manager (contractor)

6.1.2.10. GFRs

6.1.2.11. Aviation Maintenance Manager (Government)

6.1.2.12. Safety Specialist (Government)

6.1.2.13. Airfield Manager

6.1.2.14. ATC liaison

6.1.3. Conduct regular safety audits or assessments (at least semiannually) which incorporate all aspects of the contractor's flight and ground operations to include flight, ground, maintenance, industrial, and explosive activities. Forward copies of the report, findings and corrective actions to appropriate offices and the GFR. The following references may be used as guidelines:

6.1.3.1. Army - AR 385 Series publications;

6.1.3.2. Navy - the Naval Safety Center (NAVSAFCECEN) 3750 P1 *Safety Review Checklist* or [The NAVAIR IG Safety Checklist](#);

6.1.3.3. Air Force - AFI 91-202, *The US Air Force Mishap Prevention Program*, including Major Command (MAJCOM) supplements.

6.1.3.4. Coast Guard - COMDTINST M5100.47 series.

6.1.4. Make safety publications readily available to all aircrew members.

6.1.5. Conduct monthly safety meetings encompassing all functional areas. The intent of these meetings is to provide a forum for sharing contractor and government information on safety items or issues. Maintain attendance records, a summary of subject matter presented at meetings, and a method to brief absentees on the subject matter. In cases where the number of contractor flight personnel (i.e. four or less) makes a monthly meeting less effective, with GFR approval, a safety folder, updated monthly, meets this requirement. The contractor shall forward minutes of meetings to the GFR and maintain on file for a minimum of one year.

6.1.6. Establish hazard identification and elimination procedures. As a minimum, the system/methodology should allow any contractor personnel to identify a potential hazard; provide an avenue to communicate this concern to the contractor's safety department for validation and corrective action; and document resolution of the identified hazard.

6.1.7. Establish mishap reporting procedures. The contractor must notify the GFR and program office of any damage to Government aircraft in a timely manner. The contractor shall provide a detailed narrative of the mishap, to include findings, causes, and recommendations/corrective actions. When requested by the Service (via contractual wording), the mishap investigation report should be submitted in the format set forth by the Service Safety Program.

6.1.8. Establish procedures for the handling of "privileged" data. In the performance of the contract the contractor may request and receive from the Service's safety center, access to "privileged" information as defined in [DoDI 6055.7, Accident Investigation, Reporting, and Record Keeping](#), and the Services' safety regulations. If mishap related privileged data is to be requested and obtained, handling procedures for the privileged data must be in place. Handling procedures must address the following safeguards:

6.1.8.1. Limitations of company internal distribution to the minimum number of directly concerned safety or operator personnel.

6.1.8.2. No release of privileged data to third parties.

6.1.8.3. Training to ensure employee awareness of the sensitivity of privileged information and its restrictions for purposes of exclusive Government benefit only.

6.1.9. Premishap Plan (Mishap Response Plan). The contractor shall develop a premishap plan which establishes the policies, responsibilities, and actions to be initiated should any aircraft in the custody of the contractor become overdue, or involved in an mishap. The contractor shall exercise the premishap plan on an annual basis. As a minimum, this plan shall include the following:

6.1.9.1. Immediate action checklist to ensure command, control and coordination of the rescue/recovery effort.

6.1.9.2. A notification plan which includes a current roster of contractor and Government personnel (including duty and non-duty phone numbers) to be notified in the event of an aircraft mishap.

6.1.9.3. Procedures for contractor and subcontractor cooperation and participation in mishap investigations conducted by the Government. Procedures must clearly define the differences between a Government Legal investigation (used to satisfy claims) and a Government Safety investigation (used for mishap prevention). The procedures must clearly state the contractual obligation of contractor personnel to provide information and interviews to the Government Safety investigation immediately upon request. The results of medical and toxicological testing per paragraph 6.1.9.7 shall be provided to the Government Safety investigation board immediately upon request. The toxicological samples shall be provided to the Government legal investigation board immediately upon request.

6.1.9.4. Provisions for search and rescue procedures.

6.1.9.5. Procedures for site security and public affairs.

6.1.9.6. Procedures for the preservation of evidence to include:

6.1.9.6.1. Training records.

6.1.9.6.2. Aircraft log books, maintenance and servicing records.

6.1.9.6.3. Impounding all of the mishap aircraft's fluid servicing equipment and contents.

6.1.9.6.4. Collection and impoundment of fluid samples from the mishap aircraft.

6.1.9.7. Medical Procedures.

6.1.9.7.1. Toxicological Testing.

6.1.9.7.1.1. Crewmembers involved in mishaps in which there is a loss of life, an aircraft is destroyed, property damage is expected to exceed \$200,000; three or more personnel are inpatient hospitalized; or any permanent total or partial disability is sustained shall receive toxicological testing at least equal to procuring Service requirements. Those contractor individuals identified by the GFR whose actions or inactions may have been factors in the mishap sequence shall also be tested (provided SOFA permits in foreign countries). The contractor shall ensure that the requirement for toxicological testing is flowed down to through its subcontracts.

6.1.9.7.1.2. Contractor Personnel Refusing to be Tested IAW paragraph 6.1.9.7.1.1. The GFR has no role in the hiring or firing of contractor personnel. In addition, the GFR cannot force compliance with any portion of this Instruction. However, the GFR has complete authority over access to all aircraft covered by this instruction. Any contractor crewmember refusing timely toxicological testing following a mishap shall be permanently removed as a Government approved crewmember. Any contractor non-crewmember refusing timely toxicological testing following a mishap shall be permanently removed from the contractor's non-crewmember list. Ground personnel refusing timely testing following a mishap will not be permitted to work on USG aircraft under this Instruction for 3 years. Contractors may request relief from these risk control measures directly to the appropriate waiver authority for this instruction. Requests should include sufficient evidence that the Government's risk has been adequately mitigated. Contractors will annotate any refusals to comply with toxicological testing in the individual's personnel files.

6.1.9.7.2. Establish procedures for medical examination of crewmembers, non-crewmembers, and passengers involved in an aircraft mishap, and those ground personnel whose actions or inaction may have been factors in the mishap sequence.

6.1.9.7.3. An examination by a military flight surgeon or an FAA approved medical examiner is required for those involved in a physiological incident.

6.1.9.7.4. A comprehensive Flying Duty Medical Examination (FDME) is required during a post-mishap investigation for all Army contracts. In all events, the Army requires the examination by military flight surgeons. If a military flight surgeon is not available, Army aeromedical personnel may approve the examination to be performed by a Department of the Army Civilian or Department of the Army Contract Civilian physician.

## 6.2. Aircraft Rescue and Fire Fighting (ARFF) Procedures.

6.2.1. Basic ARFF requirement. Contractors shall have sufficient ARFF capability to approach a burning contract aircraft in a reasonable time period to suppress the fire long enough to rescue any incapacitated crewmembers and non-crewmembers.

6.2.2. Basic ARFF requirement for UAV operations. UAV Contractors shall have sufficient ARFF capability to approach a burning contract aircraft in a reasonable time period to sufficiently combat the fire and minimize further damage to the aircraft and equipment.

6.2.3. Use of outside agencies for ARFF. Contractors may establish agreements with local civil fire departments and ambulance services. Training of personnel from these units may be required. If ARFF is provided by a third party, a written agreement must be in place that includes all necessary procedures, training, exercises, response time requirements and inspections.

6.2.4. Specific minimum ARFF requirements. The contractor's ARFF program shall be aligned with the minimum standard industry practices delineated in National Aerospace Standard (NAS) 3306, *Facility Requirements for Aircraft Operations*. NOTE: Alternate means of providing adequate ARFF in accordance with NAS 3306 may only be approved by the Waiver Authority for this Instruction (see paragraph 2.5).



6.2.5. ARFF Chief Responsibilities.

6.2.5.1. Conduct and document regular monthly communication checks with the appropriate local agencies (local police, fire department, ambulance authorities, and the State Police) to assure that the emergency communication links are current and in working order.

6.2.5.2. Act as focal point for Fire Protection and Prevention, and ARFF at the contractor's facility.

6.2.5.3. Ensure ARFF vehicles are maintained and checked on a daily basis.

6.2.6. ARFF Vehicles. Shall be sufficient in number, design, and capacity to effectively conduct aircrew rescue operations commensurate with the type aircraft at the facility and level of flight and ground operations. Should conflicts arise concerning ARFF vehicle design/capacity/manning, the procuring Service's safety office shall determine if the contractor's ARFF capability meets the intent of this Instruction.

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## Chapter 7

### Government Flight Representatives

#### 7. GFR Procedures.

7.1. GFR Designation. The Approving Authority designates a GFR for contractor operation locations where the Government has assumed some of the risk of loss for aircraft. Prior to performing GFR duties, the GFR appointee shall complete the DCMA administered GFR Certification Course. GFRs who have not been involved in contractor aircraft operations for a period of three years shall re-attend the GFR course prior to being appointed as a GFR. The Approving Authority should also designate an alternate GFR (paragraph 1.24.2). The contractor shall be provided, and should maintain, an informational copy of applicable GFR letters of appointment. Attachment 6, shows an example format for a GFR Delegation of Authority letter.

#### 7.2. GFR Selection and Assignment.

7.2.1. Units with contractor flight operations. To administer contracts which include both flight and ground operations, the approving authority shall select an individual in accordance with this Instruction, paragraph 1.24.1/1.24.2. In those cases where the commander elects to appoint both a flight operations GFR (IAW 1.24.1/1.24.2) and a ground operations GFR (IAW 1.24.3, the flight operations GFR shall act as primary GFR responsible for approval of both FOPs and GOPs, crewmembers, and flights. The Ground GFR shall be responsible for reviewing the GOPs and overseeing their implementation, but not their actual approval. This eliminates the need for the contractor to seek approval of their entire set of Procedures from more than one GFR.

7.2.2. Units with contractor aircraft ground operations only. To administer contracts which include contractor aircraft ground operations only, the approving authority may select an individual in accordance with this Instruction, paragraph 1.24.3.

7.2.3. When this Instruction is incorporated by reference or included in the contract, the ACO shall ensure the contract is not executed without the assignment of a GFR. The Services normally fill GFR billets in accordance with Table 7.1 below.

**Table 7.1**

The Aircraft are located	Service performs aircraft acceptance mission with resident aircrew(s)	The GFR position/billet provided by
On Post, Base, Camp	N/A	The owning Service
Off Post, Base, Camp	Yes	The owning Service
	No	DCMA

7.3. Contractor Field Team (CFT), Contractor Logistics Support (CLS) Operations. Locations where operational control and CAS oversight are split between the local unit and an outside agency shall require special attention from the approving authority and GFR. In these situations, the GFR shall be selected from within the organization maintaining operational control of the aircraft.

7.4. GFR General Responsibilities.

7.4.1. Contractor's Procedures. The GFR is responsible for surveillance of those contractor aircraft flight and ground operations involving Government aircraft and other aircraft for which the Government assumes at least some of the risk of loss or damage. All flights and procedures for ground operations of installed engines and/or propeller(s), engaging of rotors, taxi, and towing of Government aircraft conducted by the contractor are subject to final approval by the GFR. The GFR shall ensure the contractor does not conduct any operation without approved Procedures. Procedures shall be reviewed by the GFR at least every 12 months and within 90 days of a change of the primary GFR. The contractor shall be notified in writing when the review is complete. Deficiencies shall be reported to the contractor and ACO. The GFR shall maintain a record of approval of the Procedures and send a copy of the approval letter to the ACO. When the contractor is not acting in accordance with Procedures, the contract, test plans, this Instruction, other applicable directives, or if safety is jeopardized, the GFR shall take prompt actions to rectify the issue. In these situations the GFR may elect to withdraw approval of the flights, crewmembers, and/or Procedures. If the contractor fails to take prompt corrective action on noncompliance, the GFR may recommend revocation of the GFRC/AFRC to the ACO.

7.4.2. Contract Administration. Contract administration is performed to assure mission effectiveness, flight safety, and contractor compliance with FAR and DFARS clauses and other specific clauses which are cited in the contract. General procedures regarding contract administration for GFRs are contained in this Instruction. In order to effectively perform their delegated duties and determine the scope of their responsibility, the GFR must achieve a thorough working knowledge of this Instruction and the regulations, manuals, technical publications, and documents referenced in the contract. They must also become thoroughly familiar with the requirements of the contract including annexes and appendices. The GFR, in the role as functional expert, must evaluate contracts and changes to contracts and participate in preaward surveys to ensure that contracts contain appropriate vehicles for adequately performing contractor surveillance, and contain referenced standards which protect Government resources while in the custody of the contractor. In the performance of this and other GFR responsibilities, the GFR shall maintain a record of noteworthy observations, discrepancies, recommendations, and contractor corrective actions.

7.4.3. Aircraft Risk Clauses/Deficiencies. Some contracts still reference old versions of the Ground and Flight Risk Clause/Aircraft Flight Risk Clause (GFRC/AFRC) which do not call out this Instruction or have the Instruction intentionally deleted. These situations shall require special attention from the GFR. GFRs should work with ACOs and PCOs to ensure that contracts contain the current version of the Risk clauses and this Instruction. If these efforts are unsuccessful, the GFR shall inform the Procuring Services waiver approval authority of the contract and issues involved. In addition to

the Risk Clauses, the GFR must be alert during the contract review to detect deficient procedures/omissions which could affect the safety, both ground and flight, of the aircraft. Examples include: fire protection, special flight test programs, waivers, foreign object damage (FOD) programs, towing procedures, unique aerodrome requirements, tool control programs, engine run procedures, etc.).

7.4.4. Temporary Duty (TDY) Support. The GFR shall ensure that TDY military aircrews are briefed on facility aerodrome procedures and applicable Procedures and local flight rules. The GFR should also ensure that TDY crews have access to contractor flight planning and briefing facilities. See 7.4.9., below, for more information on TDY crew flight approval.

7.4.5. Experimental Flight Operations. The GFR may need to discuss the flight program and flight profiles with contractor flight operations personnel or a procurement office flight program test officer to clarify the need for flight for certain experimental programs. Such experimental test profiles require a Government approved test plan. Other sources of information, education, and advice on these and other flight test profiles include the flight safety personnel at the U.S. Army Materiel Command (AMCPE-SF), Naval Air Systems Command (AIR-9.0F), and Air Force Materiel Command (AFMC/A3V).

7.4.6. Teaming. In DCMA the GFR along with the Aviation Maintenance Manager (or Ground GFR), the Contract Safety Specialist, the Quality Assurance Representative (QAR) and the Property Administrator (PA) make up the Aviation Program Team (APT). The GFR heads the APT. Its purpose is to ensure all aspects of aircraft safety (flight, ground, & industrial) are adequately addressed. In performing their duties, the APT should maintain a close liaison with the other CAS and contractor organization functional offices. If surveillance of a contract reveals problem areas outside the scope of flight operations, ground operations or industrial safety, the GFR should advise the responsible CAS personnel or ACO, as appropriate. Conversely, GFRs should not hesitate to seek advice on matters of safety (ground/explosive) or QA from functional specialists. As team leader, the GFR should coordinate survey findings and observations regarding procedures, and conditions with the QAR, maintenance personnel, and the rest of the APT. Such findings can then be presented to the contractor and ACO through the GFR. Service GFRs are strongly encouraged to use available personnel to form their own APTs.

7.4.7. Crewmember Approval. One of the most important duties performed by GFRs involves approval of contractor crewmembers. Careers are involved in this process. To avoid serious problems now and in the future it is vital that GFRs follow the instructions governing these processes to the letter. All contractor crewmembers must be approved as a requisite step for contractor indemnification under the [GFRC/AFRC](#).

7.4.7.1. GFRs shall base their crewmember training/ qualification/ termination decisions primarily on the requirements of the contract, this Instruction, and the current/projected operations tempo of the contractor. GFRs shall also consider the same factors described in paragraph 4.2.5, *Termination of Approvals*, prior to approving a crewmember in the first place.

7.4.7.2. The contractor and the GFR shall ensure that the appropriate number of crewmembers are authorized and that programs include sufficient flying time for currency in accordance with this Instruction. The GFR shall not approve any crewmember until the Procedures have been approved.

7.4.8. Non-Crewmember Approval. GFRs do not approve non-crewmembers per se. However, GFRs shall only approve flights that include non-crewmembers when the non-crewmembers are on the contractor Requesting Official's authorized list.

7.4.9. Flight Approval. The GFR shall not approve any flight until the Procedures have been approved.

7.4.9.1. GFR approval is required for all flights under this instruction. Flight approvals are requested through the use of [DCMA Form 644](#), or an alternate form approved by the GFR. Managing the Government's assumption of risk under the [GFR](#) or [AFRC](#) is an enormous responsibility with serious monetary consequences. These responsibilities cannot be performed in a casual or capricious manner. Ideally, the GFR approves flight requests on the work day prior to the scheduled flight. This allows the GFR to evaluate the effects of all the factors (such as aircraft condition, weather, aircrew life stressors, etc.) which influence flight effectiveness and safety. GFRs shall not authorize operations that are outside the scope of the contract. GFR approval of operations not allowed by the contract could create serious liability issues for both the Government and the contractor. If the GFR believes the scope of the contract should be changed, he or she should consult with the contracting officer.

7.4.9.2. GFR approved equivalent forms must contain the same requisite information found in [DCMA Form 644](#), including the contractor certification statement, "*I CERTIFY that this flight is in accordance with the flight program authorized by the contract and will be conducted in accordance with the approved flight operations Procedures.*"

7.4.9.3. GFRs shall confirm that each contractor crewmember on the flight approval request form is current, qualified, or in an approved training status. When a GFR is approving a flight with crewmembers provided under a separate contract having a different GFR, the approving GFR shall ensure the guest crewmembers are current and qualified IAW the contract they are now flying under.

7.4.9.4. When Government crews fly aircraft under this Instruction, the GFR shall verify Government personnel are properly qualified, current, authorized, and required to participate. Valid aircrew travel orders stating in essence, "*The purpose of the travel is to perform the specific flight operations activity listed on the [DCMA Form 644](#) (e.g. FCF, ACF, Test Flight, etc.).*", is considered sufficient validation for the purposes of this paragraph. A letter from the home unit commander, though not required in and by itself, is also considered sufficient validation. Government flights shall be performed according to the guidelines and procedures of the CASC component responsible for contract administration of flight operations.

7.4.9.5. Multiple Flight Approvals. Highly repetitive flights (such as flight instruction or a repeated flight involving the same aircrew, mission, and flight profile, including flights defined under para. 1.19.3) may be authorized 7 days in advance. GFRs should know the profile and objectives for each contractor flight as well as the currency and

qualifications of the flight/ground crews involved for the duration of the approval period. GFRs should avoid multiple flight approvals unless facing *extraordinary circumstances*. If resident GFRs are not physically available, the alternate GFR should approve flights in lieu of having the primary GFR sign an extended approval. Multiple flight approvals shall only be for the minimum time period consistent with mission requirements. When the GFR is not collocated with the flight operations, either as a non-resident GFR or because of off station operations, the GFR may authorize the proposed flights up to one month in advance. In no case shall flight approvals be issued for more than one month.

7.5. Subcontractor Flight Operations. Prime contractors are responsible for ensuring their subcontractors' aircraft operations are safe and effective even in those cases where the Government's assumption of risk does not flow down to the subcontractor. In all cases GFRs retain responsibility to approve all crewmembers and all flights on Government aircraft. When subcontractor operations affect the safety of Government aircraft, the Prime contractor shall provide the GFR sufficient information concerning said operations to ensure they may be conducted in a safe and effective manner. Correcting deficiencies in subcontractor operations is the responsibility of the Prime contractor.

7.6. CAS Safety Responsibilities.

7.6.1. Delegating Administration Responsibility/Authority. Assignment of a contract to a CAS component listed in the Federal Directory of Contract Administration Services (CAS) Components, for administration automatically carries with it the authority to perform all of the normal functions listed in [FAR 42.302\(a\)](#) to the extent that those functions apply to the contract, including surveillance of flight and ground operations and safety requirements. The procuring activity may elect to withhold the assignment of specific CAS functions IAW [DFARS 242.202](#), or via [FAR 42.202](#), assign additional functions. In these cases, the procuring activity notifies the CMO of the functions withheld or added.

7.6.2. Supporting Contract Administration (SCA). When a CAS component requires support from another CAS component in administering a portion of the contract, the CAS component commander having cognizance over the contract must request SCA services [FAR 42.202\(e\)](#), through the ACO, from a suitable CAS organization. This is done when, for example, contract work is performed at geographically separated locations. The applicable services to be performed shall be stated in the request. Copies of necessary contractual documents are provided from the requesting CAS component. When the SCA delegation includes flight and ground operations, the GFRs from the two CAS components should keep each other informed of important activity concerning the contractor. An example SCA delegation format is found in [Attachment 7](#).

7.6.3. Preaward Survey (PAS). The PAS is an evaluation of a prospective contractor's ability to perform under the specified terms of a contract proposal. It differs in scope from a regular survey in that the determination is whether the contractor "can" comply with the safety requirements of the contract, not "is" the contractor in compliance. The Preaward monitor will provide the GFR with the solicitation, date, time, and location of the survey as well as the reporting requirements. Written reports should

include a clear statement that the contractor is/is not capable of performing work in compliance with contract flight operations and safety requirements. Also include a specific recommendation for award or no award. When an existing contractor is bidding on a new contract and their capabilities are already known, the Preaward monitor may request a desk audit in lieu of a survey. GFRs should still recommend award/no award.

7.7. Contractor Flight And Ground Operations Surveys. The flight and ground operations/flight safety survey is an onsite evaluation of the effectiveness of the contractor flight and ground operations programs and Procedures for protecting Government resources while under the cognizance of the CASC at contractor facilities. Observations determine the adequacy of written Procedures, compliance with those procedures, and their effectiveness in protecting Government resources. The intent of the survey is to indicate what management attention is necessary to prevent occurrence/recurrences of injury to personnel or damage to Government assets. (Note: DCMA GFRs may fulfill the requirements of 7.7 using the procedures in DCMA INST 8210.2.)

7.7.1. The GFR shall conduct surveys of each designated contractor's flight and ground operations. The survey is conducted to:

7.7.1.1. Verify contractor conformance with contractual flight and ground operations and flight safety requirements.

7.7.2. Verify the qualification of contractor crewmembers, non-crewmembers, and ground personnel. When circumstances (e.g., aircraft type, flying schedule, etc.) permit, an in-flight evaluation of contractor crewmembers should be accomplished. Flight examiners who are current, qualified, and designated in writing by their flying unit to perform flight evaluations may perform flight evaluations. As an alternative, the GFR may perform an in-flight supervisory flight evaluation of the performance of contractor flight crew members. Flight evaluation findings shall be debriefed to the GFR prior to the formal out briefing. A formal flight evaluation report shall be entered into the tested individual's flight records. For no-notice evaluations, the GFR should notify the Chief Pilot prior to brief time.

7.7.3. Frequency of Surveys. The frequency of the surveys must be based upon the degree of risk and magnitude of potential Government loss associated with the types of aircraft flight and ground operations. In addition, the individual contractor's safety history, current level of performance, and complexity of operations must also be considered. The designated GFR is the most knowledgeable judge of these factors and therefore is charged with the responsibility of determining the frequency of the surveys.

7.7.3.1. Resident GFRs shall perform a minimum of one survey every 12 months in addition to their daily surveillance of the contractor.

7.7.3.2. Nonresident GFRs shall determine the survey frequencies after initial fact finding visits to the contractor's facility. Nonresident GFRs shall perform an annual survey IAW paragraph 7.7 and at least one mid cycle survey 6 months later. These mid cycle surveys need not be as comprehensive as the annual survey. At a minimum, mid cycle surveys should still include an analysis of the current state of the contractor's aircraft safety program, the status of corrective actions from previous surveys, and a



review of any high interest items. Findings and observations for mid cycle surveys may be described in a trip report.

7.7.4. Preparation for Flight and Ground Operations Survey. GFRs should review the following items before beginning the survey:

7.7.4.1. Procedures for currency and validity.

7.7.4.2. Historical data, including past surveys (e.g., preaward, postaward), Inspector General (IG) reports, and mishap reports. Make a list of follow up items. Note the nature of any problems, the proposed corrective action and responsible office and the anticipated “get well” date. Attempt to identify trends and root causes which may be contributing to the symptoms. Don't overlook findings from other locations which may have application.

7.7.4.3. Waivers. Review all waivers to ensure the requirements for the waiver are still valid.

7.7.4.4. The contract, including enclosures and appendices. Verify the inclusion of the appropriate FAR and DFARS clauses and status of any [DD Form 1716, Contract Data Package Recommendation/Deficiency Report](#), related to flight operations.

7.7.5. Notification. Notify the contractor in writing at least 30 days prior and request that the contractor provide a safety manager to accompany the Government team during the survey. GFRs may wish to include a copy of the survey process to the contractor. Send a copy of notification letter to the ACO. (NOTE: When mishap reports, deficiency reports, etc., demonstrate the need for additional evaluations of the contractor's operations, unannounced surveys may be performed.)

7.7.6. Team Composition. Prior to the survey, the GFR forms a team including applicable aircraft operations, quality, safety and other appropriate technical personnel to effectively evaluate contractor performance. Letters of invitations to participate shall be sent to the procuring Service safety and operations offices as appropriate. Procuring activities' flight safety, Stan Eval, or aircraft maintenance representatives are always invited and encouraged to visit contractor sites in conjunction with GFR surveys.

7.7.7. Conducting the Survey. To ensure the Government team is integrated and areas of responsibility are established a Government-only meeting should be conducted prior to the in brief and out brief with the contractor.

7.7.7.1. Conduct a formal in brief. A formal in brief with the contractor and Government team provides the setting for the conduct of the survey.

7.7.7.2. Visit, review, interview, and observe, as necessary. Compare the observations with contract requirements and written Procedures. Make notes of outstanding/exemplary processes and discrepancies for use in the formal report. Cite a specific contract reference for each discrepancy.

7.7.7.3. Minor observations or deficiencies may be discussed directly during the progress of the survey or retained as notes for final out briefing. If sufficient confidence is established with contractor's supervisory personnel, these items need not appear in the final report. Caution should be exercised to avoid any constructive change allegation. If doubt exists, items should be included in the written report for review by

the ACO and formally forwarded to the contractor. Upon discovering a deficiency which is an obvious serious hazard (e.g., smoking while performing fueling operations), immediately notify appropriate contractor supervisory personnel so they can direct immediate hazard correction.

7.7.7.4. Exit Briefing. Conduct a Government only out-brief to coordinate findings and prepare for the contractor out-briefing. Conduct a final out-brief with the contractor with those who attended the in-briefing.

7.7.7.5. Reports. Prepare and distribute a written report as follows:

7.7.7.5.1. Prepare the survey report using the format at [Attachment 8](#), or any appropriate substitute format. Describe the program elements and sub-elements which were observed during the survey. Observations requiring written corrective action and those related to critical safety of flight items should include documentation of facts, reference(s) to the written requirement (i.e., the contract, the Procedures, and applicable Tech Orders), and sufficient discussion to convey why the discrepancy must be corrected. Coordinate the final report with the survey team participants.

7.7.7.5.2. Attach a facility and flight and ground operations/flight safety program data sheet to the report. This data sheet is a concise summary of the contractor facility and its level of activity. [Attachment 9](#), contains an *example* format. It should include the following items of information:

7.7.7.5.2.1. Contractor name and address.

7.7.7.5.2.2. Primary Government and contractor personnel and phone numbers.

7.7.7.5.2.3. Number of Government and contractor crewmembers assigned.

7.7.7.5.2.4. Current contract number(s) that contain the Ground and Flight Risk/Flight Risk Clause.

7.7.7.5.2.5. Contract flight and ground operations clause/ requirement reference(s) and safety clause/requirement reference(s).

7.7.7.5.2.6. Type/Design/Series of aircraft.

7.7.7.5.2.7. Procuring Service, PCO, ACO.

7.7.7.5.2.8. Quantity of aircraft scheduled by year.

7.7.7.5.2.9. Current issues.

7.7.7.5.3. To ensure proper interpretation of contractual requirements, written reports involving contractor operations must be addressed to the ACO for endorsement and prompt forwarding to the contractor. The GFR shall not send the report directly to the contractor. Information copies should be forwarded to the buying Service Aviation Safety Office by the GFR.

7.7.7.5.4. The survey report distribution schedule for contractor operations is as follows:

7.7.7.5.4.1. The GFR provides a report to the CASC Commander and ACO within 10 working days after completion of the survey.

7.7.7.5.4.2. The ACO makes comments and endorses the report to the contractor within 5 working days.

7.7.7.5.4.3. The contractor replies to survey observations within 30 days, unless a specific case warrants other action.

7.7.7.5.4.4. Follow up. Establish a follow up system to monitor the contractor's corrective actions. Provide status report as necessary to the ACO and the CASC commander. When conditions warrant, a follow up survey shall be performed, as determined by the GFR.

7.8. Other GFR Responsibilities. The GFR shall:

7.8.1. Coordinate in advance with the ACO to ensure full contractor participation in interviews required by the safety investigators. Some contractors may not wish to participate when a safety investigator needs to interview their personnel. If necessary the GFR should bring the ACO into the discussion to stress to the contractor that failure to cooperate will be viewed as a contract violation IAW [DFARS 252.228-7005, Accident Reporting and Investigation Involving Aircraft, Missiles, and Space Launch Vehicles](#).

7.8.2. Review special interest items (i.e. Quality Deficiency Reports, Corrective Action Requests (CARs), Air Traffic Control (ATC) facilities, maintenance facilities) to identify conditions or trends which have potential impact on flight operations or safety.

7.8.3. Participate with Government QA personnel in the review of safety-of-flight related customer complaints (Maintenance Deficiency Report (MDR), etc.). This review shall be of sufficient depth to ensure that both contractor and Government surveillance corrective actions (revisions of procedures, work cards, etc.) resulting from the analysis of these reports are adequate to prevent recurrence of the deficiency.

7.8.4. Perform surveillance of the contractor's mishap investigation effort when an aircraft/aircraft ground mishap occurs, with the assistance of the Contract Safety Manager or a CAS flight safety officer, as required.

7.8.5. Maintain records of contractor flight/ground operations. This file shall include, as a minimum:

7.8.5.1. The Procedures.

7.8.5.2. Procedures approval letters (retain for 3 years).

7.8.5.3. Approval of contractor flights and flight profiles (retain 1 year).

7.8.5.4. Current listings of contractor crewmembers.

7.8.5.5. Flight operations/safety evaluation reports, follow up results, and contractor related correspondence (retain 3 years).

**Attachment 1 – Glossary of Acronyms**

AAMA	Army Aeromedical Activity
ACBT	Air Combat Training
ACO	Administrative Contracting Officer
ACF	Acceptance Check Flight
ACT	Aircrew Coordination Training
AD	Airworthiness Directive
AFI	Air Force Instruction – what
AFMC	Air Force Materiel Command
AFRC	Aircraft Flight Risk Clause
AGE	Aerospace Ground Equipment
AMC	U.S. Army Materiel Command
AMM	Aviation Maintenance Manager
APT	Aviation Program Team
APU	Auxiliary Power Unit
AR	Army Regulation
ARFF	Aircraft Rescue and Fire Fighting
ASO	Aviation Safety Officer/Official
ATC	Air Traffic Control
ATM	Aircrew Training Manual
ATP	Aircrew Training Program (Army)
BASH	Bird-Aircraft Strike Hazard
BFM	Basic Fighter Maneuvers
CAR	Corrective Action Request
CAS	Contract Administration Services
CASC	Contract Administration Services Component
CFO	Chief, Flight Operations

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**Attachment 1 – Glossary of Acronyms**

CFT	Contractor Field Team
CMDR	Commander
CMO	Contract Management Office
COA	Certificate of Authorization
COMNAVAIRSYSCOM	Commander, Naval Air Systems Command
CRM	Crew/Cockpit Resource Management
CRADA	Cooperative Research and Development Agreement
CRO	Contractor's Requesting Official
CSS	Contractor Safety Specialist
CSSO	Cognizant Service Safety Office
DEA	Drug Enforcement Agency
DES	Directorate for Evaluation and Standardization (Army)
DFARS	DoD Federal Acquisition Regulation Supplement
DCMA	Defense Contract Management Agency
DCMA INST	Defense Contract Management Agency Instruction
DHA	Department of Homeland Security
DLAI	Defense Logistics Agency Instruction
DoD	Department of Defense
DOT	Department of Transportation
FAA	Federal Aviation Administration
FAR	Federal Acquisition Regulation
FCC	Federal Communications Commission
FCF	Functional Check Flight
FCIF	Flight Crew Information File
FDME	Flying Duty Medical Examination
FE	Flight Examiner
FMS	Foreign Military Sales (Also known as the Defense

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**Attachment 1 – Glossary of Acronyms**

	Security Assistance Program)
FO	Foreign Object
FOD	Foreign Object Debris or Damage
FOE	Foreign Object Elimination
FOPs	Flight Operations Procedures
GFE	Government-Furnished Equipment
GFP	Government-Furnished Property
<u>GFRC</u>	Ground and Flight Risk Clause
GFR	Government Flight Representative
GOPs	Ground Operations Procedures
GSE	Ground Support Equipment
GTV	Ground Test Vehicle
HATR	Hazardous Air Traffic Reports
HAZMAT	Hazardous Material
HCA	Heads of Contracting Activities
HQDA	Headquarters, Department of the Army
IE	Instrument Flight Examiner (Army)
IFR	Instrument Flight Rules
IG	Inspector General
IMC	Instrument Meteorological Conditions
IP	Instructor Pilot
LEL	Lower Explosive Level
LOX	Liquid Oxygen
MACOM	Major Army Command
MAJCOM	Major Command (Air Force)
MDR	Maintenance Deficiency Report
ME	Maintenance Evaluator (Army)

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**Attachment 1 – Glossary of Acronyms**

MIL-STD	Military Standard
MSL	Mean Sea Level
MTP	Maintenance Test Pilot (Army)
NAVSAFECEN	Naval Safety Center
NAS	National Aerospace Standard
NASA	National Aeronautics and Space Administration
NDI	Non Destructive Inspection
NOTAM	Notice to Airmen
OPI	Office of Primary Interest
OTA	Other Transactions Authority
PAS	Preaward Survey
PCO	Procuring Contracting Officer
PI	Program Integrator
PM	Program Manager
QA	Quality Assurance
QAR	Quality Assurance Representative
ROA	Remotely Operated Aircraft
RPA	Remotely Piloted Aircraft
RPV	Remotely Piloted Vehicle
SB	Service Bulletin
SCA	Supporting Contract Administration
SODA	Statement of Demonstrated Ability
SOFA	Status of Forces Agreement
SP	Standardization Instructor Pilot (Army)
SPO	System Program Office
TECH REP	Technical Representative
TCTO	Time Compliance Technical Order


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***Attachment 1 – Glossary of Acronyms***

TD	Technical Directive
TDY	Temporary Duty
TPS	Test Pilot School
UAS	Unmanned Aircraft System
UAV	Unmanned Aerial Vehicle
USAAWFC	U.S. Army Aviation Warfighting Center
USACRC	U.S. Army Combat Readiness Center
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
WX	Weather



**Attachment 2 – Request for Flight Approval**

<b>REQUEST FOR FLIGHT APPROVAL</b>			
		REQUEST DATE _____	
TO: (DCMA Activity Approving Flight)		FROM: (Name and Address of Contractor)	
1. PRIME CONTRACT NUMBER or BAILMENT NUMBER (Under Which Aircraft Assigned)			
2. FLIGHT CREW PERSONNEL		3. NON-CREW PERSONNEL	
POSITION	NAME and TITLE of PERSON	POSITION	NAME and TITLE of PERSON
4. AIRCRAFT MISSION, DESIGN, SERIES		5. DATE(S) OF FLIGHT(S)	
6. AIRCRAFT SERIAL NUMBER(S)			
7. FLIGHT DETAILS (Statement concerning flight objectives)			
8. <b>SIGNATURE OF CONTRACTOR REPRESENTATIVE</b> - I CERTIFY that this flight is in accordance with the flight program authorized by the contract and will be conducted in accordance with the approved flight operations procedures.			
NAME (Last, First, Middle Initial)	PHONE NUMBER / E-MAIL	SIGNATURE	DATE / TIME
9. <b>SIGNATURE OF GOVERNMENT FLIGHT REPRESENTATIVE (MUST BE SIGNED TO BE APPROVED)</b>			
NAME (Last, First, Middle Initial)	PHONE NUMBER / E-MAIL	SIGNATURE	DATE / TIME
<b>POST FLIGHT DETAILS</b>			
10. NUMBER OF FLIGHTS		11. HOURS FLOWN	
12. REMARKS (Enter brief statements as to flight results, trouble encountered during flight, and weather, or other conditions which prevented completion of flight.)			
13. <b>SIGNATURE OF CONTRACTOR REPRESENTATIVE</b>			
NAME (Last, First, Middle Initial)	PHONE NUMBER / E-MAIL	SIGNATURE	DATE / TIME

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**Attachment 3 – DD Form 2627, Request For Government Approval For Aircrew Qualifications And Training**

**Attachment 3 – Request For Government Approval For Aircrew Qualifications And Training**

<b>REQUEST FOR GOVERNMENT APPROVAL FOR AIRCREW QUALIFICATIONS AND TRAINING</b>		OMB NO. 0704-0347 OMB Approval Expires Jul 31, 2007	
<p>The public reporting burden for this collection of information is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operation and Reports (0704-0347), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p>			
<b>PRIVACY ACT STATEMENT</b>			
<b>AUTHORITY:</b> 10 USC 136, 10 USC 2302; DLAI 8210.1; EO 9397.			
<b>PRINCIPLE PURPOSE(S):</b> Used to monitor and manage individual contract flight and ground personnel records.			
<b>ROUTINE USE(S):</b> Records from this system may be disclosed to the Federal Aviation Administration (FAA) or any of the blanket routine uses published by the Department of Defense (DoD) or the DoD Component maintaining the records.			
<b>DISCLOSURE:</b> Voluntary; however, failure to provide the information could result in disapproval to participate in the program.			
1. FROM (Name and Address of Contractor's Requesting Official)		2. TO (Name and Address of Government Flight Representative)	
3. CREWMEMBER NAME (Last, First, Middle Initial)		4. SSN	5. DATE OF BIRTH (YYYYMMDD)
6. AIRCRAFT	7. CREW POSITION	8. SECURITY CLEARANCE	9. FAA RATING
10. EDUCATIONAL BACKGROUND			
a. HIGH SCHOOL (1) NAME		(2) LOCATION (Include Zip Code)	(3) DATE COMPLETED (YYYYMM)
b. COLLEGE(S) OR UNIVERSITY(IES) (1) NAME		(2) LOCATION (Include Zip Code)	(3) DEGREE(S) OBTAINED
c. FLIGHT SCHOOL (1) NAME		(2) DATE COMPLETED (YYYYMMDD)	d. TEST PILOT SCHOOL (1) NAME (2) DATE COMPLETED (YYYYMMDD)
e. SPECIAL PROFESSIONAL SCHOOL(S) (List name of school, location, primary subject of study, and date completed) (Use additional sheets if necessary)			
11. HAVE YOU EVER SERVED IN ANY BRANCH OF THE U.S. MILITARY SERVICE? (X one)		YES (Complete a. - f.)	NO
a. BRANCH OF SERVICE	b. SERVICE DATES (YYYYMMDD) (1) FROM (2) TO	c. LAST LOCATION	
d. HIGHEST RANK	e. AERONAUTICAL RATING	f. ARE YOU NOW A MEMBER OF THE RESERVES OR NATIONAL GUARD? (X one)	
		YES (if Yes, specify)	(1) BRANCH OF SERVICE (2) PRESENT RANK
		NO	
12. PROVIDE A RESUME OF EXPERIENCE IN THE FLIGHT TEST FIELD. (Include both engineering and aircrew experience by project, type of aircraft, and hours flown.)			
<input type="checkbox"/> RESUME ATTACHED. (X if applicable)			
13. FLIGHT CREWMEMBER CERTIFICATION. I certify that I have read and understand all of the contractor's procedures and directives pertinent to the accomplishment of my assigned duty.			
a. TYPED NAME (Last, First, Middle Initial)		b. SIGNATURE	c. DATE SIGNED
14. CONTRACTOR'S REQUESTING OFFICIAL (CRO) I have verified the records of the crewmember above and request the he/she be approved for qualification training as a (crew position) _____ for (Strike out all inapplicable) experimental/ engineering/acceptance/production/functional/support flights in _____ type aircraft.			
a. TYPED NAME (Last, First, Middle Initial)		b. SIGNATURE	c. DATE SIGNED
15. GOVERNMENT FLIGHT REPRESENTATIVE (GFR)			
<input type="checkbox"/> APPROVED	a. TYPED NAME (Last, First, Middle Initial)	b. SIGNATURE	c. DATE SIGNED
<input type="checkbox"/> DISAPPROVED			

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Attachment 4 – DD Form 1821, Contractor Crewmember Record

**Attachment 4 – Contractor Crewmember Record**

<b>CONTRACTOR CREWMEMBER RECORD</b>							<i>Form Approved OMB No. 0704-88</i>		
<b><u>PRIVACY ACT STATEMENT</u></b>									
<b>AUTHORITY:</b>		10 USC 8012.44 USC 3101, and EO 9397, November 1943 (SSN)							
<b>PURPOSE AND USE:</b>		Used to record individual contractor flight crew personnel records and approval to operated Government aircraft. Serves as a record of approval of private contractor personnel who will operate Government Aircraft.							
<b>DISCLOSURE:</b>		Voluntary; however, failure to complete will prevent approval of contractor flight crew members from operating Government aircraft.							
NAME OF CREWMEMBER ( <i>First, last, middle initial</i> )					CONTRACTOR REPRESENTATIVE ( <i>Name and Address</i> )				
IDENTIFY CREW POSITION									
<input type="checkbox"/> TEST		<input type="checkbox"/> SUPPORT							
<input type="checkbox"/> FUNCTIONAL		<input type="checkbox"/> OTHER ( <i>Specify</i> )							
MISSION, DESIGN AND SERIES AIRCRAFT OR OTHER REQUIREMENT FOR THIS QUALIFICATION					BASE OR LOCATION WHERE QUALIFICATION ACCOMPLISHED				
<input type="checkbox"/> INITIAL QUALIFICATION					<input type="checkbox"/> REQUALIFICATION				
<b>SECTION I FLIGHT EXPERIENCE (<i>Time to nearest hour</i>)</b>									
FLYING TIME ABOVE TYPE							TOTAL FLYING TIME		
JET _____ HRS.		TURBO PROP _____ HRS.		RECIPROCATING _____ HRS.		ROTARY _____ HRS.			
MISSION DESIGN AND SERIES AIRCRAFT	PERIOD OF TIME	IP	1ST PILOT				COPILOT	AIRCRAFT COMMANDER	OTHER CREW MEMBER ( <i>Specify</i> )
			TOTAL	WX	HOOD	NIGHT			
	LAST 12 MOS								
	LAST 4 YRS								
	TOTAL								
	LAST 12 MOS								
	LAST 4 YRS								
	TOTAL								
	LAST 12 MOS								
	LAST 4 YRS								
	TOTAL								
	LAST 12 MOS								
	LAST 4 YRS								
	TOTAL								
	LAST 12 MOS								
	LAST 4 YRS								
	TOTAL								

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**Attachment 4 – DD Form 1821, Contractor Crewmember Record**

SECTION II FLIGHT CHECK <i>(Instructor fill in remarks where applicable)</i>				
1. PREFLIGHT INSPECTION AND FORMS		7. IN-FLIGHT EMERGENCY PROCEDURES		
2. EMERGENCY ESCAPE PROCEDURES		8. PRELANDING CHECK, TRAFFIC PATTERN AND LANDINGS		
3. PRESTART COCKPIT PROCEDURES & ENGINE START		9. POSTFLIGHT INSPECTION		
4. COMMUNICATIONS AND TAXI PROCEDURES		10. ACCOMPLISHMENT OF FORMS AND AIRCRAFT SECURITY		
5. PRETAKEOFF COCKPIT CHECK AND ENGINE RUNUP		11. INSTRUMENT PROFICIENCY CHECK		
6. TAKEOFF AND FLIGHT PROCEDURES		12. OTHER <i>(Specify)</i>		
SECTION III ADDITIONAL REQUIREMENTS <i>(fill in where applicable)</i>				
	CHECKED BY	GRADE	DATE AND PLACE	HOURS
13. PHYSICAL EXAMINATION				
14. PHYSIOLOGICAL/ALTITUDE INDOCTRINATION				
15. PRESSURE SUIT TRAINING				
16. PERFORMANCE DATA				
17. GROUND SCHOOL <i>(By Subject)</i>				
AIRCRAFT GENERAL				
AIRCRAFT PREFLIGHT				
ENGINE SYSTEM				
OXYGEN SYSTEM				
AIR CONDITIONING				
PRESURIZATION				
FUEL SYSTEM				
INSTRUMENT SYSTEM				
ELECTRICAL SYSTEM				
HYDRAULIC POWER SYSTEM				
UTILITY SYSTEM				
FLIGHT CONTROL SYSTEM				
AUTO PILOT SYSTEM				
ROTARY SYSTEM				
18. COMMUNICATIONS AND NAVIGATION				
19. AIRCRAFT EMERGENCY PROCEDURES				
20. OTHER REQUIREMENTS AS STATED IN APPROVED CONTRACTOR OPERATING PROCEDURES				
21. Have you ever had an accident <i>(as defined by FAR or military procedures)</i> or physiological reaction <i>(e.g. hypoxia, decompression sickness, hyperventilation, spatial disorientation)</i> as a pilot, or other crewmember? _____ If yes, explain.				
22. Have you ever been charged with a flying violation? If so, state the circumstances.				
23. Remarks. <i>(For additional space use blank sheet.)</i>				

**APT Reference Book Volume I – TAB L**  
 Attachment 4 – DD Form 1821, Contractor Crewmember Record

CERTIFICATION OF QUALIFICATION			
This is to certify that _____ <small>(Name and Crew Position)</small>			
Has satisfactorily completed the training or special qualification indicated hereon:			
YEAR	TRAINING OR SPECIAL QUALIFICATIONS	DATE COMPLETED	CERTIFYING OFFICIAL
	GROUND PHASE		
	WRITTEN EXAMINATION		
	EMERGENCY PROCEDURES		
	EGRESS TRAINING		
	PHYSIOLOGICAL TRAINING		
	OTHER <i>(Specify)</i> <sup>1</sup>		
	FLIGHT PHASE		
	PROFICIENCY		
	INSTRUMENT		
	OTHER <i>(Specify)</i> <sup>1</sup>		
	GROUND PHASE		
	WRITTEN EXAMINATION		
	EMERGENCY PROCEDURES		
	EGRESS TRAINING		
	PHYSIOLOGICAL TRAINING		
	OTHER <i>(Specify)</i> <sup>1</sup>		
	FLIGHT PHASE		
	PROFICIENCY		
	INSTRUMENT		
	OTHER <i>(Specify)</i> <sup>1</sup>		
<sup>1</sup> Formation, Refueling, Night or special maneuver requirements.			
SECTION IV - CERTIFICATIONS			
I certify that I have read and understand all pertinent technical orders, handbooks, contractor's operating Procedures, and pilot's operating instructions pertaining to the above aircraft.			
DATE	SIGNATURE OF		
The above crewmember has/has not demonstrated proficiency in, and has/has not a satisfactory knowledge of _____ mission/design/series aircraft and has/has not completed the flight requirements for the type of flight check indicated above, and is/is not fully qualified in this type aircraft.			
This checkout consisted of _____ hours dual, _____ hours solo, _____ landings from right <i>(or rear)</i> seat, and _____ landings from left <i>(or front)</i> seat.			
DATE	BASE OR HOME STATION OF INSTRUCTOR	TYPED OR PRINTED NAME OF INSTRUCTOR	
		SIGNATURE OF INSTRUCTOR	

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**Attachment 5 – DD Form 2628, Request for Approval of Contractor Crewmember**

**Attachment 5 – [Request For Approval Of Contractor Crewmember](#)**

<b>REQUEST FOR APPROVAL OF CONTRACTOR CREWMEMBER</b>		OMB NO. 0704-0347 OMB Approval Expires Jul 31, 2007	
<p>The public reporting burden for this collection of information is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operation and Reports (0704-0347), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p>			
1. FROM (Name and Address of Contractor's Requesting Official)		2. TO (Name and Address of Government Flight Representative)	
<p>3. CONTRACTOR'S REQUESTING OFFICIAL (CRO).</p> <p>I have verified the records of (Crewmember's name) _____ and request that he/she be approved As a (crew position) _____ for (Strike out all inapplicable) experimental/engineering/acceptance/production/ functional/support flights in _____ type aircraft.</p>			
a. TYPED NAME (Last, First, Middle Initial)	b. SIGNATURE	c. DATE SIGNED	
<p>4. INSTRUCTOR PILOT/FLIGHT EXAMINER (IP/FE)</p> <p>I certify that the crewmember above has satisfactorily flown a proficiency flight check on (Date) _____</p>			
a. TYPED NAME (Last, First, Middle Initial)	b. SIGNATURE	c. DATE SIGNED	
<p>5. GOVERNMENT FLIGHT REPRESENTATIVE (GFR)</p>			
APPROVED	a. TYPED NAME (Last, First, Middle Initial)	b. SIGNATURE	c. DATE SIGNED
DISAPPROVED			

DD FORM 2628, APR 2006

PREVIOUS EDITION IS OBSOLETE

**Attachment 6 – GFR Delegation of Authority Letter Sample Format**

[LETTERHEAD]

[Date]

MEMORANDUM FOR WHOM IT MAY CONCERN

FROM: [Position Title] (See Chapter 1, Definitions, paragraph 1.5. for appropriate Approving Authority)

Pursuant to DCMA INST 8210.1/AFI 10-220/AR 95-20/NAVAIRINST 3710.1F/ COMDTINST M13020.3, Contractor's Flight and Ground Operations, [name/rank] is hereby designated [Alternate or Ground, if appropriate] Government Flight Representative (GFR) for [name/location of contractor]. This authority is granted to [name/rank] as an individual, and is not to be re-delegated. It is effective only so long as [name/rank] remains in his/her present assignment, unless sooner terminated.

(Use this paragraph for assigning qualified flight and ground operations GFRs under this Instruction, paragraph 1.24.1./1.24.2.) [Name/rank] is delegated full authority to approve contractor crewmembers, flights, and the Procedures for aircraft flight and ground operations under his/her jurisdiction for which the Government, by contract, assumes some, or all, of the risk of loss under DFARS 252.228-7001, the Ground and Flight Risk Clause [or DFARS 252.228-7002, the Aircraft Flight Risk Clause, as appropriate].

or,

(Use this paragraph for assigning qualified Ground GFRs under this Instruction, paragraph 1.24.3.) [Name/rank] [is delegated authority to approve contractor aircraft ground operations Procedures under his/her jurisdiction], or [is responsible for assisting the GFR in reviewing and overseeing the ground operations Procedures] for which the Government, by contract, assumes some, or all, of the risk of loss under DFARS 252.228-7001, the Ground and Flight Risk Clause [or DFARS 252.228-7002, the Aircraft Flight Risk Clause, as appropriate].

Direct any questions concerning this letter to this office, DSN 123-4567, (888) 123-4567.

[Approving Authority]

**Attachment 7 – Sample Supporting Contract Administration Delegation Format**

[LETTERHEAD]

[Date]

MEMORANDUM FOR [Supporting CASC Commander]

FROM: [Supported CASC Commander]

SUBJECT: Supporting Contract Administration (SCA) Request

Request that your command provide supporting contract administration of contractor flight/ground operations under [designate contract number/or program]. Please appoint one or two members of your command as Primary/Alternate Government Flight Representative(s) (GFR(s)), to monitor contractor flight and/or ground operations. We ask that acceptance of this SCA request be in writing and include your GFR's name(s). The personnel selected should attend the DCMA administered GFR Training Course prior to assuming GFR contract administration duties.

The newly appointed GFR(s) shall ensure contractor compliance for all contractual flight and ground operations, and safety requirements. The GFR(s) shall also ensure the contractor complies with the requirements of DCMA INST 8210.1/AFI 10-220/AR 95-20/NAVAIRINST 3710.1F/COMDTINST M13020.3, "Contractor's Flight and Ground Operations."

[Supported CASC Commander's Signature Block]



## **Attachment 8 – Sample Survey Report Format**

### **I. EXECUTIVE SUMMARY**

#### **A. INTRODUCTION/TEAM MEMBERS**

The Flight Operations assessment of [contractor] was accomplished [date]. This assessment fulfills the requirements of DCMA INST 8210.1/NAVAIRINST 3710.1F/AR 95-20/AFI 10-220/COMDTINST M13020.3 for conducting an Annual Flight Operations Survey of contractor operations where the Government, by contract, assumes some or all of the risk of loss. The following team members conducted the assessment:

[List team members, duty titles, and office symbols]

[To the maximum extent possible teams should include customers (from program office) and contractor representatives.]

#### **B. PURPOSE**

The purpose of the Flight Operations survey/assessment is to thoroughly analyze those contractor ground and flight operations conducted with Government aircraft. The assessment process provides an open forum with the contractor, the program office(s) and the GFR jointly analyzing those operations to determine what steps can be taken to improve overall operations. In conjunction with the assessment, the team examined the Procedures, contractual requirements, and ground & aircrew qualifications. The analysis contained in this report provides a tool to manage and lower risk. The goal is to improve the safety and security for all personnel involved and to better protect and conserve Government resources.

This report includes the Executive Summary narrating the teams' observations, and a Facility Data Sheet.

The information herein is to be considered "For Official Use Only" and is not to be distributed outside [the contractor's], owning program offices, or CAS channels.

**C. DISCUSSION** [Include an overall assessment of the contractor's current flight operations program (procedures and operations) in relation to the requirements of the contract, which will be substantiated and specifically documented in subsequent sections of the report. Address sub-elements of each program in sufficient detail to confirm adequate review by the GFR and provide an adequate overview of the contractor's performance. Include appropriate comments. Cite references from the contract for all observations requiring corrective actions.]

1. Safety Program.
2. Ground Operations.
  - a. Ground procedures.
  - b. Foreign Object Damage Control Program.
  - c. Training and Certification.
  - d. Engine Run Procedures.
  - e. Corrective Action Requests (CARs).
3. Facility and Property Protection.
  - a. ARFF.
  - b. Facilities and Property.
4. Flight Operations.
  - a. Flight Operation Procedures.
  - b. Flight Environment.
  - c. Flight Crews.
  - d. Flight Hours and Sorties.
  - e. Flight Plans and Approval.
  - f. Deployed Operations.
5. Miscellaneous.
  - a. Contract Provisions/Waivers.
  - b. Host Nation.

D. OBSERVATIONS [Included here are special deficiencies previously noted which warrant management involvement and follow-up action. The GFR may provide recommended courses of action and shall indicate the specific regulation or contractual requirement not complied with, if applicable. If documentation of corrective action is necessary, include specific instructions on a cover letter as to whom and when corrective action reports are required.]

II. OTHER DOCUMENTATION (e.g. Worksheets, Facility Data Sheets, etc., Attached)

[GFR's signature block]

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Attachment 9 – Example Facility Data Sheet, (also, Flight and Ground Operations/Flight Safety Program Data Sheet)

**Attachment 9 – Example Facility Data Sheet**

[Contractor’s name and address]

<b>Government Personnel</b>	<b>Office</b>	<b>Commercial #</b>	<b>DSN</b>	<b>FAX/Email</b>
CMDR				
CFO				
GFR				
A/GFR				
AMM				
CSS				
PROPERTY				
QA				
ASO/FSO				

<b>Contractor Personnel</b>	<b>Position</b>	<b>Commercial#</b>	<b>Beeper</b>	<b>FAX / Email</b>
-----------------------------	-----------------	--------------------	---------------	--------------------

<b>Contractor Crewmembers</b>	<i>Aircraft:</i>	<i>Pilot:</i>	<i>Nav:</i>	<i>FE:</i>	<i>CC:</i>	<i>Boom:</i>	<i>Other:</i>
	<i>Aircraft:</i>	<i>Pilot:</i>	<i>Nav:</i>	<i>FE:</i>	<i>CC:</i>	<i>Boom:</i>	<i>Other:</i>
	<i>Aircraft:</i>	<i>Pilot:</i>	<i>Nav:</i>	<i>FE:</i>	<i>CC:</i>	<i>Boom:</i>	<i>Other:</i>

<b>Government Crewmembers</b>	<i>Aircraft:</i>	<i>Pilot:</i>	<i>Nav:</i>	<i>FE:</i>	<i>CC:</i>	<i>Boom:</i>	<i>Other:</i>
	<i>Aircraft:</i>	<i>Pilot:</i>	<i>Nav:</i>	<i>FE:</i>	<i>CC:</i>	<i>Boom:</i>	<i>Other:</i>
	<i>Aircraft:</i>	<i>Pilot:</i>	<i>Nav:</i>	<i>FE:</i>	<i>CC:</i>	<i>Boom:</i>	<i>Other:</i>

**Clause & Requirement Reference Matrix**

<b>Contract Number:</b>	<b>xxxx</b>	<b>xxxx</b>	<b>xxxx</b>	<b>xxxx</b>
Ground and Flight Risk, DFARS 252.228-7001				
Aircraft Flight Risk, DFARS 252.228-7002				
Accident Reporting, DFARS 252.228-7005				
Contractor Flight Ops, [DCMA INST 8210.1]				
Tool/FOD Control [NAS 412/Mil-Std 980]				
Aircraft Rescue and Fire Fighting [NAS 3306, AFMCI 91-101, NAVAIR 00-80R-14, AR 420-90]				

<b>Program Support Team</b>	<b>Office</b>	<b>Commercial #</b>	<b>DSN</b>	<b>FAX/Email</b>
PCO				
ACO				
PM				
PI				
CSSO				

<b>Contract Number:</b>	<b>Aircraft Type:</b>	<b>Number Per Year:</b>
<b>Contract Description</b>		
<b>Program Support Team</b>	<b>Office</b>	<b>Commercial #</b>
		<b>DSN</b>
		<b>FAX/Email</b>

PCO		
ACO		
PM		
PI		
CSSO		
<b>Contract Number:</b>	<b>Aircraft Type:</b>	<b>Number Per Year:</b>
<b>Contract Description</b>		

## **Attachment 10 – Procedures Outline**

When writing Procedures, contractors must include all items from this attachment, item by item, as applicable. Paragraphs from this Instruction not listed or referenced below are either directive in nature or provide clarifying information for the contractors and GFRs, and therefore need not be addressed in the written Procedures. Refer to Chapter 3 for further guidance on writing Procedures. The paragraph titles listed below may not match exactly the text in this Instruction and are included only as a convenient reference to the paragraphs' purpose.

### Chapter 1: DEFINITIONS.

Contractors need not address the definitions chapter in their Procedures. Including them as a ready reference or adding organizational specific definitions is acceptable. However, if included in the Procedures, the definitions from this Instruction shall not be modified and GFR approval of the Procedures does not extend to any definitions so included.

### Chapter 2: WAIVERS

Contractors need not address the waivers chapter in their Procedures. Including waiver procedures as a ready reference or adding organizational specific processes is acceptable. However, if included, the GFR approval of the Procedures does not extend to waiver processes so included.

### Chapter 3: PROCEDURES

This chapter provides overarching guidance and requirements for the development of Procedures and need not be addressed except for paragraphs 3.5. and 3.7.2.

3.5. Subcontractors. Address the processes used to flow down the requirements of this Instruction to a subcontractor.

3.7.2. POC.

### Chapter 4: Flight Operations

4.1. Flight Management.

4.1.1. Contractor flight planning area.

4.1.2. Flight profiles.

4.1.3. Contractor Flight Approval.

4.1.4. Flights with Multiple Contractors/Multiple Contracts.

4.1.5. Approved Flights.

4.1.5.1. Process for ensuring currency and qualification for flight approvals.

4.1.5.2. Performed IAW...

4.1.5.3. IAW Procedures.

4.1.6. Flight Supervision.

- 4.1.6.1. Communication.
- 4.1.6.2. Flight areas.
- 4.1.6.3. Aircraft maintenance release procedures.
- 4.1.6.4. Records of supersonic flights.
- 4.1.7. Documentation of Certificates, Licenses, and Permits.
- 4.1.8. Mixed Crew Flights.
- 4.1.9. Minimum Crew Requirements.
- 4.1.10. Aircrew Duty and Rest Limitations. Contractors need not address these paragraphs. Including these procedures as a ready reference or making them more restrictive is acceptable.
- 4.1.11. Other Aircrew Restrictions.
- 4.1.12. Publications.
  - 4.1.12.1. Flight Crew Information File (FCIF).
  - 4.1.12.2. Current publications.
- 4.2. Crewmember/Non-Crewmember Approval.
  - 4.2.1. Requesting Officials (or Contractor's Requesting Official (CRO)).
  - 4.2.4. Contractor Approval for Non-crewmember Status.
  - 4.2.5. Termination of Approvals.
    - 4.2.5.1. Process.
- 4.3. Crewmember Qualification Requirements. Contractors need not address these paragraphs. Including these procedures as a ready reference or making them more restrictive is acceptable.
- 4.4. General Procedures.
  - 4.4.1. Airfield Operations.
    - 4.4.1.1. Local airfield operations.
    - 4.4.1.2. Radio operators or tower controllers.
  - 4.4.2. Weather Requirements. Also address all subparagraphs.
  - 4.4.3. Required daylight operations.
  - 4.4.4. Flight operating limits.
  - 4.4.5. Filing of flight plans.
  - 4.4.6. Arming and disarming (if applicable).
  - 4.4.7. Live fire, laser, and gunnery operations.
  - 4.4.8. Night Vision/low light operations.
  - 4.4.9. Life Support Equipment.

- 4.4.10. Experimental and Engineering Test Operations.
- 4.4.11. Emergency Operating Procedures. Also address all subparagraphs.
- 4.4.12. Passenger Transportation Procedures.
- 4.4.13. Aircrew and Flight Briefings.
- 4.4.14. Determining Weight and Balance.
- 4.5. Crewmember Training Requirements.. Also address all subparagraphs.
- 4.6. Crewmember Ground Training Requirements. Also address all subparagraphs.
- 4.7. Crewmember Evaluations. Also address all subparagraphs.
- 4.8. Forms and Records.
- 4.8.1. Responsibilities.
- 4.8.2. Request For Flight Approval.
- 4.8.3. Contractor Crewmember Record.
- 4.8.4. Training Folder. And all subparagraphs.

#### Chapter 5: Ground Operations

- 5.1. Ground Operations Procedures (GOPs).
- 5.1.2. Specific Ground Operations. Address all subparagraphs.
- 5.1.3. Records management.
- 5.2. Medical (Physical) Requirements for Ground Personnel.
- 5.3. Training Requirements for Ground Personnel. Address all subparagraphs.
- 5.4. Ground Operations Certification Requirements.
- 5.4.1. Certification.
- 5.4.2. Re-certification.

#### Chapter 6: SAFETY

- 6.1. Mishap Prevention Program. Address all subparagraphs.
- 6.2. Aircraft Rescue and Fire Fighting (ARFF) Procedures.
- 6.2.1. Basic ARFF requirement.
- 6.2.2. Basic ARFF requirement for UAV operations. (If applicable)
- 6.2.3. Use of outside agencies for ARFF. (If applicable)
- 6.2.4. Specific minimum ARFF requirements.

#### Chapter 7 Government Flight Representatives

Contractors shall not include Chapter 7 responsibilities in the Procedures.

Attachments

**APT Reference Book Volume I – TAB L**  
Attachment 10 – Procedures Outline

Contractors need not include Attachments from this Instruction in the Procedures. Including the attachments as a ready reference is acceptable.

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