

ARMY REGULATION
No. 95-1

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AVIATION

ARMY AVIATION—GENERAL PROVISIONS

Effective 1 November 1969

This is a consolidation of AR 95-1, AR 95-4, AR 95-6, AR 95-10, AR 95-13, paragraph 3 of AR 95-15, AR 95-17, AR 95-29, AR 95-32, and AR 95-51 and updates the policies and procedures contained therein. Local limited supplementation of this regulation is permitted but is not required. If supplements are issued, Army Staff agencies and major Army commands will furnish one copy of each to the Assistant Chief of Staff for Force Development; other commands will furnish one copy of each to the next higher headquarters.

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*This regulation supersedes AR 95-1, 6 March 1964; including all changes; AR 95-4, 20 February 1968; AR 95-6, 7 April 1967; AR 95-10, 28 September 1966; AR 95-13, 26 October 1966; AR 95-17, 22 March 1967; AR 95-29, 10 June 1963; AR 95-32, 1 October 1959; including all changes; AR 95-51, 5 February 1962; and DA message 092904, 2 May 1967.

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CHAPTER 1

INTRODUCTION

Section 1. GENERAL

1-1. Purpose and scope. *a.* This regulation prescribes general flight and operating procedures governing the operation, command, and control of all Army aircraft; however, nothing promulgated herein will be interpreted as restricting or impeding the operation of Army aircraft within the combat zone. Major Army commands may issue such instructions not in conflict with Department of the Army regulations as necessary to carry out the provisions of this regulation.

b. Regulations governing Army aviation, aircraft, and aircraft equipment under the jurisdiction of Army National Guard not in Federal service are contained in applicable National Guard regulations.

1-2. Explanation of terms. For the purpose of this regulation, the following explanation of terms apply:

a. Administrative flight. Flight undertaken to accomplish military administration (i.e., courier service, transportation of personnel and supplies) in a nontactical environment.

b. Aerobatic flight. Aircraft maneuvers intentionally performed involving an abrupt change in attitude or an abnormal acceleration; the term does not include turns or maneuvers necessary to combat training maneuvers or normal flight.

c. Air search and rescue. The search for and rescue of personnel involved in aircraft accidents, ship abandonment, and the like which requires one or more of the following actions:

(1) Determining the location of the incident;
 (2) Rescuing the survivors; or
 (3) Providing personnel with means for survival.

d. Allied aircraft equipment. Accessory and related aircraft equipment authorized for the operation or maintenance of Army aircraft.

e. Army agencies. The offices of the Deputy Chiefs of Staff (Personnel, Military Operations, and Logistics); the Assistant Chiefs of Staff (Force Development and Intelligence); and the Chief of the Office of Reserve Components.

f. Army annual flying hour program. Planned annual flying hours developed by ACSFOR which

provide the basis for determining aircraft support requirements.

g. Army aviation disaster, search, and rescue unit. A unit organized provisionally for emergency employment and charged with equipping, supplying, safeguarding, maintaining, and operating Army aircraft during disaster operations or air search and rescue operations.

h. Army aviator. An aeronautical designation awarded by the Secretary of the Army, or such officers as he may designate, to members of the U.S. Army.

i. Authorized flight. Any flight authorized by a unit commander or his designated representative.

j. Aviation officer. An Army aviator performing duty as commander of an aviation unit and/or as a member of a commander's staff serving in an advisory or supervisory capacity on matters pertaining to Army aviation.

k. Combat readiness proficiency flying. Training flights performed to maintain basic aeronautical skills.

l. Cross-country flight.

(1) Any flight which extends beyond the local flying area;

(2) A flight within the local flying area which is planned to terminate at a place other than the place of origin;

(3) A round trip flight within the local flying area which meets specific requirements as to distance, duration, or routes as established in local flying regulations; or

(4) A flight within the local flying area when prolonged stops are anticipated, except when flight progress can be reported to the base field at no expense to the Government.

m. Disaster. A situation usually catastrophic in nature in which persons are rendered helpless and consequently may be in need of food, clothing, shelter, medical care or evacuation.

n. Military field operations office. A facility established by the installation commander to supply decision authority, weather forecasts, and appropriate services extracted with aircraft operations. Has administrative and major

o. Flight service station. A flight information and reporting facility operated by the Federal Aviation Administration to promote the safe conduct of flights.

p. Major Army commands. The U.S. Continental Army Command, U.S. Army Materiel Command, U.S. Army Combat Developments Command, U.S. Army Air Defense Command, U.S. Army Strategic Communications Command, U.S. Army Security Agency, CONUS armies, Military District of Washington U.S. Army, U.S. Army Europe, U.S. Army Pacific, U.S. Army Alaska, and U.S. Army Forces Southern Command.

q. Operational flight. Flight undertaken to accomplish the mission of Army aviation, normally conducted in a tactical environment.

r. Service and training flights.

(1) Engineering test flights.
 (2) Flights required for tests conducted by the U.S. Army Aviation School, major subordinate commands, and activities under U.S. Army Materiel Command, the U.S. Army Electronics Proving Ground, and similar authorized research development or testing activities.

(3) Transition training flights to qualify pilots.

(4) Flights made in established courses of in-

struction at the U.S. Army Aviation School (USAAVNS), U.S. Army Primary Helicopter School (USAPHS), or other aviation courses approved by the Department of the Army.

(5) Training flights which are a part of scheduled unit training.

(6) Flights in support of tactical exercises.

(7) Flights for search, rescue, and similar type emergency operations.

1-3. Mission. The mission of Army aviation is to augment the capability of the Army to conduct prompt and sustained combat.

1-4. Organization. The Commanding General, U.S. Army Combat Developments Command, in coordination with appropriate Army agencies, will develop the doctrine, concept, and organization of Army aviation.

a. Army aviation support is provided by Army aviation units organic, attached, or in support of divisions, corps, field armies, CONUS armies, schools, and service units.

b. Army aircraft will be integrated into combat, combat support, and combat service support units under the provisions of section V, chapter 1, AR 810-34 when their employment will benefit Army operations. Aircraft and ancillary equipment will be authorized Army units by TOE or TDA in accordance with AR 310-49.

Section II. AUTHORITY

1-5. General authority. Aviation within and organic to the Army is established by the National Security Act of 1947 (61 Stat. 495), title 10, United States Code, section 3062(b), as amended.

1-6. Flying status. Procedures for obtaining flying status orders are prescribed in AR 600-106; procedures for suspending flying status orders are prescribed in AR 600-107.

1-7. Aeronautical designations. Procedures for the awarding of aeronautical designations are prescribed in AR 600-106.

1-8. Authority for flights. *a.* Unit commanders having aircraft assigned, attached, or in direct support, and higher authorities of the military establishment may authorize operational, administrative, service, and training flights for aircraft under their control. Flights of any other nature or involving other than U.S. military personnel may be authorized by the commanding generals of major Army commands and Commandant,

USAAVNS provided such flights are in the interest of the Government and in consonance with AR 59-20/AFR 76-6/OPNAV INST 4630.10A/MCO 4630.5. This authorization will not be used to conduct flights for personal convenience or recreation, or:

(1) To permit flights which will involve the absence of any aircraft from its assigned base overnight, except when such flights are necessary in the direct interest of the Government, are made in accordance with approved operating, training, or ferry schedules, or are made in the course of normal training of aviators and/or aircrews whose employment is such that their flight training would otherwise be inadequate. Repeated flights to home area of aircrew members concerned, flights coinciding with major sports events or civic celebrations, and any flights which are open to misinterpretation by the public will be avoided. Flights

for the purpose of attending a sports event or civic celebration in an unofficial capacity are specifically prohibited.

(2) As authority to issue travel orders to personnel when TDY, PCS, or other travel expenses for the personnel are involved. Such authority is contained in appropriate travel regulations.

b. Army single engine fixed wing aircraft may be used as glider launching vehicles subject to the following criteria:

(1) Individuals requesting Army aircraft to launch gliders must be members of a duly constituted soaring club established by an installation commander under the provisions of AR 230-1.

(2) All members of soaring clubs and gliders used by soaring clubs will be certified by appropriate Federal Aviation Administration (FAA) inspectors under the provisions of Federal Air Regulations (FAR).

(3) Army aircraft used as glider tow vehicles will be modified only under the provisions of current applicable MWO and certified by the FAA under the provisions of FAR.

(4) Insurance coverage of gliders used by soaring clubs will be in accordance with AR 230-8.

(5) Only qualified aviators with documented experience in launching and towing gliders will pilot launching aircraft, and the aircraft used as the tow vehicle must be the same type and model as in the documented experience. The validity of the documented experience will be determined by the immediate unit commander.

(6) Any glider launch operations using Army aircraft and conducted outside of Government-owned or -leased land will be approved by the Department of the Army. Demonstrations or other events conducted in the civilian domain will be approved by the Department of Defense as outlined in AR 360-61.

c. Army aircraft may be used in accordance with AR 95-19 in support of duly constituted sport parachute clubs established by installation commanders under the provisions of AR 230-1.

1-9. Operations log and flight order. a. *General.* Commanders of units having aircraft assigned or attached may, for control purposes, require that aircraft be operated only with written authority. Such written authority will not be used to authorize—

(1) Expenditure of funds for reimbursement of expenses incident to travel.

(2) Delay en route, chargeable as leave.

b. *Operations log.* Locally produced operations logs may be used for controlling aircraft, and will normally contain—

(1) Name, grade, and SSAN of crew members.

(2) Name and number of passengers.

(3) Designation of place, date, and time of departure.

(4) Itinerary and duration of mission.

(5) Purpose of flight.

c. *Flight order.* Flight orders may be used for controlling cross-country flights. When used they will conform to the format contained in figure 1-1.

12 September 1969

(Headquarters)
(Station)FLIGHT ORDER
NUMBER

(Date)

The following named CR/M-WP on or about _____ in _____
(Date)

_____(Type of aircraft) aircraft number _____ from _____

_____(Date) to CIPAP, for purpose of
and upon completion of flight, will return
to proper station on or about _____.

(Date)

Grade	Name	SSAN	Organization	Duty
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

FOR THE COMMANDER:

(Name) Aviation officer
Grade, Branch

OFFICIAL:

(Name) Operations officer
Grade, BranchDISTRIBUTION:
1--Ea Indiv
1--FileNote. List of credit cards or other information considered pertinent may
be included immediately following distribution.

Figure 1-1. Flight order.

1-10. Aircraft use. *a.* Army aircraft are authorized for use as prescribed in AR 95-40.

b. Requests from civil agencies, both in CONUS and overseas, for services of Army aircraft will be referred to the Department of the Army for approval. Major Army commanders may authorize emergency flights requested by civil agencies if no suitable civil means are available.

1-11. Personnel authorized to pilot aircraft. *a. General.* Authorization for personnel to pilot aircraft, subject to the restrictions herein, is vested in the authorities listed in paragraph 1-8*a*. No exceptions will be permitted without the specific approval of Department of the Army.

b. Army aircraft.

(1) Members of the Army who are professionally and physically qualified, hold appropriate and duly authorized Army aeronautical designations, and are currently on flying status.

(2) Individuals ordered or authorized by Headquarters, Department of the Army, or by agencies designated by Headquarters, Department of the Army, to receive pilot instruction at Army schools.

(3) Civilian employees of the Department of the Army, other governmental agencies or departments, or Government contractors, who hold a valid airman's certificate and rating issued by the FAA for the type of aircraft and operation involved, when essential to the accomplishment of the Army aviation mission and when directed or authorized by major Army commanders, or the Commandants of USAAVNS or USAPHS. Such authorization will not be granted if it competes with an authorized Army aviator position. Such authorization will not be used as a basis to increase civilian space allocations.

(4) Military personnel of foreign nations who are professionally and physically qualified, when necessary in the Government interest and so authorized by major Army commanders or the commandants of USAAVNS or USAPHS. The commander responsible for the aircraft will determine the adequacy of the qualifications of the personnel concerned.

(5) Members of the U.S. Navy, Air Force, Marine Corps, Air National Guard, and Coast Guard who hold appropriate and duly authorized aeronautical ratings, are currently on flying status and are specifically authorized by the commander responsible for the aircraft used.

(6) Personnel of the Army National Guard and U.S. Army Reserve, who have been designated as Army aviators and are on flying status may be permitted to pilot Army aircraft under regulations prescribed by the commanding generals of major Army commands.

(7) Members of the U.S. Navy Reserve, Air Force Reserve, Marine Corps Reserve, and Coast Guard Reserve who are on flying status and hold appropriate and duly authorized military aeronautical ratings may be permitted to pilot Army aircraft when necessary or desirable in the Government interest and when so authorized by commanding generals of major Army commands.

c. Other Government aircraft. The commanding officer of any unit, or higher authority, is authorized to permit personnel under his command who hold an Army aeronautical designation, are on flying status and are physically qualified, to pilot Government aircraft other than Army aircraft. This includes Government aircraft issued to the National Guard, when authorized by competent authority of the Government agencies concerned.

d. Other than Government aircraft. Members of the Army on active duty are authorized to pilot other than Government aircraft and will not be considered as removed from a line-of-duty status provided such personnel—

(1) Hold a valid FAA airman's certificate and rating for the type of aircraft and operation involved, or while receiving dual instruction under persons possessing such certificates and ratings.

(2) Comply with the rules and regulations prescribed by the FAA, or in cases of any station outside the continental United States, comply with the rules and regulations prescribed by the country concerned.

(3) Do not pilot aircraft for hire or reward purposes that may be construed as competition with commercial aviation. In questionable instances that may be construed as competition with commercial aviation, the provisions of AR 600-50 apply.

e. Aircraft under jurisdiction of foreign governments. Major Army commanders may permit Army aviators under their command, who are on current flying status and physically qualified, to pilot aircraft under the jurisdiction of foreign governments when authorized by competent authority of such governments.

f. Visiting aircraft. A visiting aircraft will not be flown except—

(1) On direct authority of the flight or aircraft commander.

(2) In emergencies.

(3) On engineering test flights following major repairs.

1-12. Personnel required to make aerial flights. *a.*

Any member of the Army may be ordered to make an aerial flight in military aircraft by an officer having command jurisdiction over the individual concerned when such flights are required in the performance of a military duty.

b. Any member of the Army may be ordered to make aerial flights for transportation purposes, provided such travel is necessary in the best interest of the service. Such flights must be performed in either military aircraft or in commercial aircraft whose operators are authorized by appropriate governmental regulatory bodies to engage in the air transportation of passengers for hire.

c. Performance of aerial flight as indicated in *a* and *b* above does not automatically entitle such personnel to hazardous duty pay.

d. Commanders will not require personnel under their command to perform regular and frequent aerial flights, except as provided in *a* and *b* above, unless such personnel are placed on flying status as crew members or noncrew members under the provisions of AR 600-106.

e. Personnel will not be required to participate in aerial flights under *a* and *b* above if a medical condition exists which would be detrimental to the health of the individual. Medical conditions will be validated by competent medical authority.

1-13. Passengers in Army aircraft. *a.* Passengers may be transported in Army aircraft under the provisions of AR 59-20 / AFR 70-6 / OPNAV INST 4630.10A / MCO 4630.5. Commanders, down to and including installation commanders, may authorize short local orientation flights for visiting nonmilitary dignitaries when such flights are considered to be in the best interest of the Department of the Army. Each flight will be approved on an individual basis and such authority will not be delegated below the installation commander level.

b. Passengers will not be transported in aircraft during maintenance test flights, formation flights, aerobatic flights, and hazardous training

flights involving contour flying, maximum takeoff and landing, engine-out operation, practice auto rotation, practice forced landings, confined area operations, sling load operations, or practice pinnacle operations. These restrictions (with the exception of maintenance test flights, practice engine-out operations, practice auto rotations, and practice forced landings) do not apply to units which must execute such maneuvers in the conduct of missions or to individual military and DAC personnel when necessary to the accomplishment of their jobs.

c. An Army aviator must meet all of the qualifications prescribed in TC 1-34 before transporting passengers in Army aircraft.

1-14. Commanders' responsibilities. *a.* Commanders have jurisdiction over all matters concerning the operation and use of Army aviation within their command.

b. Each commander is responsible for—

(1) Supervision of administration, aircraft maintenance, flight operations, unit training, and tactical employment of aircraft assigned to his command.

(2) Proper utilization of Army aircraft within his command.

(3) Evaluation of actual hours flown against the programmed flying hours and initiation of action for review of aircraft authorizations and adjustment of planned flying hours to conform with actual flying hours.

(4) Reporting and investigating accidents involving Army aircraft in accordance with AR 385-40.

(5) Reporting and investigating alleged flying regulation violations in accordance with AR 95-12.

(6) Periodic inspection of Army aviation to insure effective operations, economy, safety, maintenance, and adequacy of supply.

c. Commanders with aviators assigned or attached will insure that time and equipment are available during normal duty hours for combat readiness flying. Commanders will schedule training flights necessary to insure that minimum flight requirements are met and that the flights produce the maximum training benefit.

d. Commanders of aviation units and elements thereof should be qualified as aviator in each organic aircraft category.

CHAPTER 2

TRAINING AND QUALIFICATION

Section I. AVIATION TRAINING

2-1. General. The Department of the Army is responsible for the aviation training of Army personnel. Army personnel will receive appropriate training in aviation matters to insure that the best use is made of aviation assets.

a. Courses of instruction. The Commanding General, USCONARC, in coordination with appropriate Army agencies, will establish and revise as required, programs of instruction and Army training programs to provide for—

- (1) Flight training.
- (2) Aviation enlisted specialist training.
- (3) Instruction in employment, organization, tactics, field service support, and flight techniques of Army aviation.
- (4) Other specialized Army aviation training as required.

b. Initial flight training. Initial training in airplanes and helicopters will be conducted in an approved Army aviation flight training school.

2-2. Combat readiness training program. *a.* Major Army commanders will establish and conduct a thorough aviation combat readiness training program utilizing available literature, publications, equipment, and guides provided by higher authority and available within the command.

b. This program will provide ample time and facilities to permit aviation personnel to attain and maintain high standards essential for performance of aviation duties.

2-3. Instructor pilots. *a.* An instructor pilot must be specifically designated in official orders. Authority to establish minimum qualifications for instructor pilots and to publish appropriate orders is delegated to major Army commanders, Chief NGB (who may further delegate this authority to activities authorized a general officer command position), and commandants of designated Army aviator training schools. Instructor pilot orders will remain in effect regardless of assignment of the aviator unless revoked because the aviator demonstrates lack of proficiency in the aircraft specified. Instructor pilot orders for hooded and instrument flight only will be terminated if the

aviator's instrument qualification lapses or if the aviator demonstrates lack of proficiency. Written designation and/or revocation of instructor pilot orders will be included in the Individual Flight Record File.

b. Minimum qualifications for designation as an instructor pilot (except for hooded and instrument flight only):

(1) Demonstration of ability to conduct a prescribed course of instruction in a particular aircraft in accordance with the transition training circular for that aircraft.

(2) Completion of transition training and a minimum of 25 hours pilot time in the type, model, and series. Authority to waive the requirement for 25 hours pilot time is delegated to Commanding Generals, USAMC, U.S. Army Aviation Systems Command (USAAVSCOM), and U.S. Army Test and Evaluation Command (USATECOM), in the case of experimental, prototype, research test, and/or for standard and nonstandard aircraft which are being used as test vehicles.

c. The number of instructor pilots (excluding those for hooded and instrument flight only) will be held to the minimum required for qualification training, examinations, and proficiency checks.

d. For hooded and instrument instructor pilot qualifications see paragraph 2-18(3).

2-4. Qualification training. *a.* Qualification training of aviators into aircraft of a category other than that in which they are qualified is authorized only in a formal school course as listed in DA Pam 350-10 or specifically authorized by Headquarters, Department of the Army with the following exceptions:

(1) An Army aviator who has been designated by one of the other U.S. military services as a pilot or aviator in the category of aircraft other than that in which he holds an Army qualification does not require a waiver of formal qualification training. Such individuals are authorized local qualification training and a proficiency check ride in the category concerned, conducted

under the supervision of major Army commanders or the commandants of USAAVNS or USAPHS.

(2) Major Army commanders and Chief, National Guard Bureau, may waive the requirement to attend a formal school qualification course for Army aviators who meet the prerequisites and complete the training prescribed below. Prior to approving the waiver, the approving authority will obtain branch clearance from Office of Personnel Operations, Department of the Army, for Active Army personnel, or obtain concurrence of the Office of the Chief, Army Reserve, for Army Reserve personnel not on active duty. Clearance may be obtained telephonically.

(a) Prerequisites: 300 instructor pilot, first pilot, or student pilot flight hours in the category concerned; current standard or special Army or equivalent FAA instrument qualification in fixed or rotary wing aircraft; at least 12 months service remaining after qualification and before the expiration of current term of service (if a Reserve component officer not on active duty, the aviator must agree to serve 24 months in the Ready Reserve subsequent to completion of training); and a minimum of 500 hours military flight time in the category in which already qualified.

(b) Qualification training will consist of the following minimum requirements: 25 hours total qualification training, of which 15 hours will be dual flight training, 3 hours will be night flight training, and 5 hours will be shortfield and barrier approach (confined area, steep approach, and pinnacle) flight training.

(c) Flight training will not be conducted in Army aircraft to attain the 300 hours of flight experience in the category required for waiver of formal qualification training.

(d) The additional MOS will be awarded in accordance with AR 611-103.

b. The U.S. Army Aviation School is responsible for establishing and conducting qualification training in new standard-type aircraft introduced into the Army inventory except as otherwise approved by Headquarters, Department of the Army.

c. Requirements for special qualification training for nonstandard or special purpose aircraft will be forwarded through channels to USCONARC or USAMC, for review and approval prior to initiation. Additionally, Commanding Generals,

USATECOM and USAAVSCOM are granted authority to establish qualification requirements, in experimental, prototype, research test, and/or standard and nonstandard aircraft which are being used as test vehicles.

d. Except when otherwise specified, unit qualification training required to qualify an aviator for operation of particular types, models and series of standard Army aircraft will be conducted in accordance with TC 1-34. The Commanding General, USCONARC, major oversea commanders, and Chief, National Guard Bureau, may restrict transition training on complex aircraft to formal courses of instruction at schools established by major Army commanders.

e. Aircraft commanders will be designated as necessary on unit orders by unit commanders.

f. Requests for waivers to the provisions of this paragraph will be forwarded through channels to the Assistant Chief of Staff for Force Development, ATTN: FOR AV, Department of the Army, Washington, DC 20310.

g. A statement reflecting completed qualification training will be entered in the remarks section of DA Form 759 (Individual Flight Record).

2-5. **Multiengine operations.** a. *General.* This paragraph prescribes special requirements in the conduct of multiengine operations to accomplish proficiency flight checks.

b. *Simulated single-engine operations.* Simulated single-engine operations to accomplish proficiency flight checks and local checkouts are authorized under the following conditions:

(1) Aircraft will be equipped with fully functioning dual controls.

(2) The instructor pilot will be secured in the appropriate seat affording full control of the aircraft at all times.

(3) Indicated airspeed during simulated single-engine operations when below 4,000 feet above the terrain will be at or above the prescribed single-engine airspeed for the type aircraft until landing is assured. Prescribed single-engine airspeed is determined by aircraft configuration and obtained from the appropriate operator's manual.

(4) For simulated airplane single-engine operations during takeoffs and landings, the runway must be a minimum of 4,000 feet in length.

(5) Complete engine stoppage and/or propeller feathering will be practiced only under VFR.

conditions at least 4,000 feet above the terrain.

c. Instrument or hooded flights. Operation of multiengine aircraft during instrument or hooded flights will be in accordance with AR 95-2 and AR 95-63.

d. Passenger restrictions. During simulated single-engine operations only those personnel necessary for safe operation of the aircraft will be aboard.

2-6. Ejection seat training. *a. Requirement.* Prior to participating in aerial flight in or maintenance on OV-1 (Mohawk) airplanes, personnel must have completed the training requirements established in TC 1-26, except as prescribed in *d* below.

b. Personnel to receive training.

(1) OV-1 aviators (Army aviators, civilian instructor pilots, and civilian test pilots), observers, and crew chiefs.

(2) Maintenance personnel authorized to work on OV-1 airplane.

(3) Passengers in OV-1 airplane (para *d* below).

(4) Designated medical personnel who are required to fly in OV-1 airplane.

c. Record of training. Upon successful completion of the prescribed training, the following will be completed:

(1) Individuals listed in *b* (1), (3), and (4) above will be issued a DA Form 3015 (Flight Equipment Training Record). A record of refresher training will be entered on the reverse of this form.

(2) For Army aviators, an appropriate entry will be made in the remarks section of DA Form 759 (Individual Flight Record and Flight Certificate—Army).

d. Waivers. Waivers for the preceding training requirements may be granted by major Army commanders under the following provisions:

(1) When ejection seat simulators are not available to major Army commanders, the ejection seat simulator instruction (only) may be waived. However, advantage should be taken of ejection seat simulator training provided by the U.S. Air Force, U.S. Navy, or contractors.

(2) Under emergency conditions, major oversea commanders may waive training requirements for personnel listed in *b* (3) above. Major oversea commanders are authorized to delegate this authority to commanders of aviation units which employ OV-1 airplanes. When a waiver is granted, sufficient passenger briefing will be conducted by the aviator to insure that ejection procedures are understood. If at all possible, flights should be conducted at altitudes that will insure adequate time for ejection by inexperienced personnel.

Section II. QUALIFICATION AND ANNUAL REQUIREMENTS

2-7. Proficiency requirements. *a.* An aviator will be considered currently proficient in a particular type and model aircraft provided he has logged 500 hours in the aircraft category as pilot or instructor pilot and has completed qualification training in the particular type and model. An orientation ride will be provided the aviator who has not flown the particular type and model within the preceding 6 months. The orientation can be given by any qualified aviator who has flown the particular type and model aircraft within the preceding 30-day period.

b. An aviator not meeting the requirements in *a* above will be considered currently proficient only if he makes at least one flight of at least 1 hour duration in the type and model concerned every 30 days. If 30 days elapse without his having logged 1 hour, he must demonstrate his proficiency to a qualified aviator who has flown the type and model aircraft within the preceding 30-day period.

2-8. Proficiency flight checks. When the proficiency of an aviator to operate a specific aircraft is questionable, the unit commander will restrict the aviator from flying the particular type and model and require an instructional ride and/or a proficiency check ride by a qualified instructor pilot. Results of check rides and the action taken will be noted on the Individual Flight Record.

2-9. Annual flying requirements. Semiannual and annual minimums will be adjusted proportionately for aviators initially placed on flight status, reinstated on flight status, receiving a change in duty MOS, or returning from an area where their proficiency flight requirements have been waived, during the fiscal year under consideration.

a. Army aviators serving in aviation related duty MOS's (i.e., aviation MOS and other MOS's having a prefix 6). Annual flying requirements to be completed each fiscal year for retention of flying status

as an Army aviator while serving in aviation related duty MOS's are shown in table 2-1.

b. *Combat readiness flying program.* The following elaboration is provided reference table 2-1.

(1) *Night flying.* One-half of the annual night minimums will be as first pilot or instructor pilot and 5 hours of the annual night minimums will be cross-country.

(2) *Instrument flying.* Ten hours of the annual minimums may be logged in a synthetic trainer and up to 5 hours may be logged as copilot during actual instrument conditions. Five hours of the annual requirement will be cross-country. Rotary wing only aviators located in areas where adequate instrumented helicopters are not available may accomplish the annual instrument requirement in synthetic trainers.

(3) *Cross-country flying.* Night and instrument cross-country required elsewhere in this regulation will be credited toward the total cross-country requirement.

Table 2-1. Annual Flying Requirements for Aviation Related MOS Positions

	Hours			
	Semianual		Annual	
	Min- i- mums	Maxi- mums	Min- i- mums	Maxi- mums
Total	30	70	80	100
Night	5	—	15	—
Instrument	7	—	20	—
Cross-country	7	—	20	—

(4) *Copilot.* Up to one-half of total annual and semianual minimums may be logged as copilot.

(5) *Recommended review of fundamentals and tactical flight.* The program for review of fundamentals and tactical flight practice will be determined by the aviation unit commander for execution in the local flying area.

c. *Army aviators serving in nonaviation duty MOS's.*

(1) Annual flying requirements to be completed each fiscal year for retention on flying status of Army aviators while serving in a duty MOS that is not related to aviation are as follows:

	Hours			
	Semianual		Annual	
	Minimums	Maximums	Minimums	Maximums
Total	24	30	48	60

(2) The 60-hour maximum specified above will not be exceeded by aviators serving in a duty MOS that is not related to an aviation assignment except by examiners while conducting flights in performance of duties as an instrument examiner.

(3) Army aviators serving in nonaviation assignments who desire to maintain a current instrument qualification must meet the semianual/annual instrument requirements prescribed in table 2-1.

(4) Up to one-half of total semianual and annual minimums may be logged as copilot.

(5) Although night, instrument, and cross-country minimums are not required, aviators are encouraged to perform these types of flights where adequate aircraft and facilities are available.

(6) General officers will determine their maximum flight requirements based on their analysis of flight proficiency required by their position.

(7) Aviators will plan flying activities to qualify for flight pay within the requirements established in this paragraph.

d. *Refresher training.* When an aviator returns to an aviation related assignment the gaining commander will insure that the aviator is proficient. A minimum of 10 hours of refresher flight training is recommended.

e. *Guidance.* To obtain maximum training benefit from available resources, the following guidance applies to the requirements of this paragraph:

(1) Secure the maximum training benefit from each flight.

(2) When possible, combine combat readiness flights and service missions. Aviators who have completed combat readiness minimums will not be utilized for these missions, if qualified aviators who have not completed their minimums are available for flying.

(3) Use aviators whose primary duty is other than flying to the maximum for the performance of service flights.

(4) Eliminate flights which have a connotation of personal convenience.

2-10. Combat readiness flying. All military flying time will be credited toward minimum requirements. Flying time accomplished exclusively for the maintenance of individual proficiency will be held to a minimum. In this connection, combat readiness flying will be permitted only for maintaining basic aeronautical skills which cannot be done in the accomplishment of service missions. Army aviators will not accumulate combat readiness flying time in excess of the maximums listed in paragraph 2-9.

2-11. Army aviation annual written examination. Every Army aviator on flying status will successfully complete the Army aviation annual written examination each fiscal year in accordance with AR 95-63.

2-12. Noncompliance. When an Army aviator has not successfully completed the annual/semiannual flight minimums or written examination, an additional statement will be recorded in the remarks section of DA Form 759 (Part I) that the aviator has been suspended from flying status pending Flying Evaluation Board action or that a waiver has been granted by the major Army commander concerned.

2-13. Waivers. Waivers will be granted only in those exceptional cases where it has been determined that failure to meet the requirements was caused by circumstances beyond the control of the individual aviator. Where the minimum flying or examination requirements have not been met, waivers may be granted in justifiable circumstances by the Commanding Generals of major Army commands, or by the Commandant, USAAVNS for aviators who are in a student status.

2-14. Army National Guard aviators. The Chief, National Guard Bureau is responsible for insuring compliance with the provisions of this regulation by Army National Guard aviators. Those actions prescribed in paragraphs 2-12 and 2-13 will be administered by the Chief, National Guard Bureau for Army National Guard aviators. Administrative correspondence pertaining to requests for waivers, restoration to flight status, reports, and other related matters will be forwarded through channels in accordance with instructions issued by the Chief, National Guard Bureau.

Section III. AERIAL OBSERVER TRAINING

2-15. Aerial observer training course. Aerial observer training will be designed to meet the needs of each branch of service concerned. Training will include as a minimum the subjects prescribed and time allocated in ASubjSed 1-8.

2-16. Records. Upon successful completion of an aerial observer course, or completion of 1 month

combat aerial observer duty with a minimum of 20 hours flight time logged as an aerial observer, appropriate entry will be made on DA Form 66 (Officer Qualification Record) under the provisions of paragraph 52, AR 611-103, or on DA Form 20 (Enlisted Qualification Record) under the provisions of paragraph 9-41, AR 600-200.

CHAPTER 3

PROCEDURES

Section I. FLIGHT RULES

3-1. General. Within the limits of this regulation and other Department of the Army regulations and directives, a commander may establish additional restrictions in flight rules and flight clearance requirements only with respect to aviators and aircraft assigned or attached to his command.

3-2. Local flying rules. *a.* Local flying rules will be established and published by the installation commander having Army aircraft assigned, attached, or tenant to his command, subject to the approval of the appropriate major Army commander.

b. Major Army commands will coordinate the establishment of local flying rules with the appropriate U.S. Navy, U.S. Air Force, and/or FAA officials when activities under the jurisdiction of these agencies are within the local flying area.

c. State adjutants general will forward the recommendations concerning Army National Guard units to the appropriate major Army commander, for coordination with the appropriate U.S. Navy, U.S. Air Force, and FAA agencies, when activities under jurisdiction of these agencies are within the local flying area.

3-3. Local flying areas. Each installation commander having Army aircraft assigned, attached, or tenant to his command will establish a local flying area to permit the orderly conduct of aviation training with minimum interference to other military or civil flying activities, and to prevent unnecessary flying over cities, populous areas, hospitals, arsenals, proving grounds, ranges, and similar installations. The following provisions apply:

a. Boundaries will be within 100 nautical miles distance of the base airfield.

b. Natural or manmade features of terrain which are easily identified from the air will be used as boundaries wherever possible.

c. Subareas should be established to facilitate control of operations within the area, to include specified areas for contour flying.

d. A local flying area once established for an installation will remain in effect until revised or rescinded by the appropriate commander.

e. VFR traffic patterns will be established for each base airfield and each designated landing site, as follows:

(1) Traffic flow: counterclockwise.

(2) Altitude:

(a) Helicopters: 700 ft above ground level (AGL).

(b) Approach category A, B, and C fixed wing: 1,000 ft AGL (as defined in DOD Flight Information Publication (FLIP)).

(c) Approach category D and E fixed wing: 1,500 ft AGL (as defined in DOD FLIP).

f. The local commander may authorize deviations to the above standards when safety of flight is involved or when in his judgment such deviations are necessary. The local commander is responsible for insuring that deviations from the above standards are well publicized. Deviations of standards at locations listed in DOD FLIP not having full time air traffic control towers nor having radio communication service will be published therein in accordance with AR 95-14.

3-4. Cross-country flights. *a. Authority.*

(1) *Flights originating in continental United States.* Subject to limitations imposed by Headquarters, Department of the Army, and within the limitation of available funds, unit commanders and higher authority may order personnel under their control to make flights in Army aircraft to any point within the geographical limits of the United States. Flights of Army aircraft originating within and extending to any point outside the continental limits of the United States, Alaska, or Hawaii will be authorized only by Headquarters, Department of the Army. They will be planned and conducted under the provisions of the U.S. Air Force Foreign Clearance Guide.

(2) *Flights originating in oversea areas.* Unit commanders and higher authority may order personnel under their control to make cross-country flights to any point within areas of United States responsibility or such other areas as may be specified by the major oversea commander concerned. Such flights will be planned and con-

ducted under the provisions of U.S. Air Forces Foreign Clearance Guide.

b. Purpose. Cross-country flights will be authorized only in connection with the performance of a military duty, including the training of personnel in cross-country flight.

c. Care of equipment. Every reasonable precaution will be taken to insure the proper care and protection of Government equipment. When a landing is made at other than an active Army, Navy, Air Force, Marine Corps or Coast Guard station, appropriate measures will be taken to insure that the aircraft is adequately secured or safeguarded.

3-5. Required equipment. *a. Day VFR.* The following instruments in operating condition:

(1) Airspeed indicator.

(2) Altimeter.

(3) Turn and bank indicator (optional for observation helicopters).

(4) Attitude indicator (optional for observation helicopters).

(5) Magnetic compass with current compass calibration card.

b. Night VFR.

(1) Navigation and cockpit lights in operating condition.

(2) A dependable flashlight, available to the pilot in flight.

(3) The following instruments, lighted and in operating condition: airspeed indicator, altimeter, turn and bank indicator (optional for observation helicopters), attitude indicator (optional for observation helicopters), magnetic compass with current compass calibration card.

Section II. FLIGHT PLANS

3-7. General. Subject to the following conditions, a flight plan will be completed and filed in accordance with DOD FLLP or Airman's Information Manual for each flight.

a. IFR flight plans. All aircraft assigned to Active Army units (excluding Q-1, OH-6, OH-23 OH-58, and T-41 aircraft), that are instrumented for IFR flight and with an instrument-rated aviator in command will operate on IFR flight plans in CONUS, except when—

(1) Time will not permit mission accomplishment under IFR.

(2) Air traffic control departure delay exceeds 30 minutes.

c. Flights into icing conditions. Army aircraft will not be flown into known or forecast heavy icing conditions. If flight is to be made into known or forecast light or moderate icing conditions, the aircraft must be equipped with adequate de-icing and/or anti-icing equipment.

d. Flights into IFR conditions. If flight is to be made into known or forecast instrument conditions, the aircraft will be equipped with the following:

(1) Pitot heater.

(2) Airspeed indicator, sensitive altimeter, turn and bank indicator, clock with sweep second hand, compass, with current calibration card, attitude indicator, heading indicator, vertical speed indicator, suction gage when suction-driven instruments are employed. The above instruments must be lighted and fully operational. The vacuum or electrical sources for the flight instruments must be operational.

(3) A radio transmitter and receiver with frequencies available for communication with air traffic control facilities and terminal control centers, ADF (low frequency), VOR if VOR facilities are to be used during the flight, marker beacon if considered essential to the instrument flight planned.

(4) Current editions of appropriate navigation, approach, and communication publications that are available to the pilot in flight.

3-6. Use of airports. Aviators are authorized to land Army aircraft at any airport listed in DOD FLLP. Closed airfields will be used only in an emergency, or when prior authorization for use has been obtained from the appropriate military or civil authority concerned.

(3) Excessive en route or terminal area delays are encountered.

(4) Hazardous weather conditions must be avoided.

(5) Flight is primarily for training in dead reckoning or low level navigation off airways.

b. Weather briefing. Pilots are responsible for obtaining the most recent weather information available for the area of the flight prior to takeoff.

(1) If available, a qualified weather forecaster will complete weather entries on the flight plan. The weather forecaster will enter in the "Briefing Void After" space, the current time plus 1 hour and 30 minutes, and will sign the flight plan.

"Briefing Vold" times will be extended only by the flight clearance authority after coordination with the forecaster.

(2) If a forecaster is not available, the pilot will complete weather entries and indicate the source of information on the flight plan.

c. *Units of measure.* All flight plans will indicate distances in nautical miles, speed in knots, and time in Greenwich Mean Time.

d. *Combat areas.* Flights performed within combat areas will conform to regulations prescribed by appropriate major Army commanders.

3-8. Local flights.

Pilots will accomplish a DD Form 175 (Military Flight Plan) or DD Form 1080 (Local Flight Clearance) for each flight, except for supervised training flights when the supervising authority maintains adequate flight dispatch records.

3-9. *Cross-country flights.* Pilots will accomplish a flight plan for each flight, as follows:

a. *From an area with a military base operations.* Pilots will execute and submit a DD Form 175 (Military Flight Plan) and DD Form 175-1 (Flight Weather Briefing) to the operations office for approval by appropriate clearance authority.

b. *From an area without a military base operations.*

(1) Pilots will file a flight plan with the nearest Flight Service Station (FSS) using FAA Form 7233-1, either in person, by interphone (private line extension to FSS), by telephone (Government collect), or in flight by radio.

Section III. CLEARANCE AUTHORITY

3-10. *General.* No Army aircraft, including aircraft operated under Department of the Army contract, will be flown unless an appropriate flight plan has been filed and approved by an appropriate clearance authority.

3-11. *Designation.* The following persons have clearance authority for Army aircraft flights for the type of flight indicated:

a. *Commanders of U.S. Army, Navy, Marine Corps, or Air Force installations having a military base operations office.* For VFR or IFR flights from areas under their command, except as provided in b through e below. Army installation commanders will appoint Army aviators on written orders to act as clearance authorities in the base operations office. To be appointed as clearance authority,

- (2) Under IFR pilots will file a complete flight plan prior to takeoff.
- (3) Pilots will submit to the airport manager or other suitable authority a manifest indicating name, grade or rank, SSAN, and home station of each occupant of the aircraft.

c. *Intermediate stops.* Army aircraft are authorized to make refueling or passenger stops at military and nonmilitary airports while on cross-country flights (except DVFR) without filing a new flight plan, subject to the following provisions:

(1) At each intermediate airport the pilot will inform the local control agency that the aircraft is on an en route stop.

(2) Ground time at an intermediate stop will not exceed 1 hour, excluding air traffic clearance delay.

(3) A weather and NOTAM briefing will be obtained at point of origin for the entire route of flight or before filing an IFR flight plan en route.

(4) No change will be made in the crew.

(5) A corrected manifest will be left at any intermediate airport at which a change of passengers occurs.

(6) If an IFR departure from any intermediate airport is required and an IFR flight plan has not been filed the pilot must close out the remainder of his original flight plan and accomplish a new flight plan.

(7) The pilot will close out the remainder of the original flight plan if the flight is terminated at an intermediate airport.

3-12. *Criteria.* An Army aviator must meet one of the following criteria:

(1) Possess current special instrument qualification;

(2) Be an Army Instrument Examiner (MOS 1984 or 1985); or

(3) Possess current standard instrument qualification and have a minimum of 6 months flying experience at the base installation during the current tour of duty.

b. *Army aviator with current special instrument qualification in the category concerned.*

(1) VFR clearance authority for his own and other aircraft under his direct control.

(2) IFR clearance authority when existing weather at takeoff is below that applicable to

standard instrument qualification in that category and he is at the controls.

a. Army aviator with current standard instrument qualification in the category concerned.

(1) VFR clearance authority for his own and other aircraft under his direct control.

(2) IFR clearance authority en route when he is at the controls.

(3) IFR clearance authority for his own flights from an area not having a military base operations office with clearance authority available.

b. Army aviators with current rotary wing tactical instrument qualification.

(1) VFR clearance authority authorized for a standard instrument qualification.

(2) IFR clearance authority during operations in an actual or simulated tactical environment when he is at the controls.

c. Army aviator without current instrument qualification. VFR clearance authority for his own and other aircraft under his direct control when such flights—

(1) Are within the local flying area;

(2) Are from an area not having a military base operations office with clearance authority available; or

(3) Require change of flight plan en route provided the ceiling and visibility en route and at the destination is reported VFR and forecast to remain so until ETA plus 1 hour.

3-12. Responsibilities. *a.* The clearance authority will insure that the proposed flight will be conducted under appropriate flight rules, that all applicable regulations are complied with, that the aircraft is suitable, and that the pilot is qualified for the flight.

b. The clearance authority will refuse clearance for a flight by any pilot not holding an appropriate instrument rating when in the opinion of the clearing authority weather exists or may exist along the proposed route which would make the successful completion of the flight questionable. This paragraph will not be interpreted as limiting the authority of the unit commander when the safety of personnel, property, or interference with military operations is involved.

Section IV. LOGGING FLYING TIME

3-13. General. The procedures outlined in this section will be used in accomplishing the DA Form 2408-12 (Army Aviator's Flight Record).

3-14. Aircraft designations. *a. Category.* Category indicates a designation of aircraft such as airplane or helicopter.

b. Designation system. AR 700-26/AFR 66-11/NAVAIRINST 13100.3 prescribes the system to be utilized in aircraft designations, e.g.: JUH-1H.

J—Status prefix

U—Modified mission symbol

H—Basic mission and type symbol

1—Design number

H—Series symbol.

3-15. Flying duty symbols. *a. Aviator duty.*

(1) Aircraft commander—AC.

(2) Pilot—P.

(3) Instructor pilot—IP.

(4) Copilot—CP.

(5) Student pilot—SP.

(6) Flight evaluator—FE.

b. Nonaviator duty.

(1) Aircraft observer—O.

(2) Technical observer—TO.

(3) Flight engineer, crew chief, or aircraft mechanic—CE.

(4) Flight surgeon, aviation medical officer, or medical attendant—M.

(5) Aerial photographer—F.

(6) Gunner—G.

(7) Miscellaneous—Z.

3-16. Missions and symbols. *a. Training—T.* Missions flown for the purpose of review of fundamentals and tactical flight training of pilots and crews to meet proficiency requirements and annual minimums.

b. Combat—C. Missions flown against the enemy and within the range of his countermeasures, such as ground weapons and fighter aircraft.

c. Service—S. Missions with purposes other than training or combat, such as administrative courier service.

3-17. Flight conditions and symbols. *a.* Weather instrument flights are those flights in which the flight path and attitude of the aircraft are controlled solely by reference to instruments under conditions of visibility which do not permit visual reference to the horizon, ground, or water. The

letter "W" symbolizes actual weather instrument flight in daylight; "NW" symbolizes actual weather instrument flight at night.

b. Hooded instrument flight is instrument flight in which pilot vision is limited to the interior of the aircraft by artificial means. The letter "H" symbolizes hooded instrument flight, and has neither day nor night connotations.

c. Night flight is flight conducted between the hours of sunset and sunrise, symbolized by the letter "N".

3-18. Flight time. a. *General.* Aviators will log flight time only in the category in which they are qualified, except when undergoing a formal course of instruction unless prior approval is granted by Headquarters, Department of the Army. An aviator designated as aircraft commander will not log flight time unless the aircraft is engaged in unit operations or unit training and he is also performing duty as instructor pilot, pilot, copilot, or as commander of the organization.

b. *Type pilot time.* Only one person can perform any one of the following duties in one aircraft at any one time.

(1) *Aircraft commander time.* Flying time acquired by a qualified pilot designated as aircraft commander while performing in this function in aircraft which normally requires two pilots and a crew chief, flight engineer, or gunner aboard during flight.

(2) *Pilot time.* Flying time acquired by a qualified pilot while performing pilot duties in aircraft requiring only one pilot or pilot and copilot while performing pilot duties in aircraft requiring an aircraft commander and a pilot, or while under the supervision of or receiving flight instruction, a proficiency check, or examination from an instructor pilot.

(3) *Instructor pilot time.* Flying time acquired by an instructor pilot while performing instructor duty in handling or operating an aircraft, excluding gun systems. Aviators who are instrument rated in the category and currently proficient in the aircraft being flown may log IP time when performing safety pilot/copilot duties and imparting

instructions to the pilot during hooded or instrument flights.

(4) *Copilot time.* Flying time acquired by an Army aviator performing copilot duty in aircraft equipped with dual controls.

(5) *Student pilot time.* Flying time acquired while performing student pilot duty.

(6) *Flight evaluator time.* Flying time acquired by an instructor pilot designated as a flight evaluator while performing flight evaluator duties in the designated category of aircraft. This time will be logged as IP time on the DA Form 759.

c. *Other time.* Flying time acquired by other than a qualified pilot or student pilot may be logged using the appropriate symbol.

d. *Multiengine aircraft.* An Army aviator will not log aircraft commander or pilot time in an Army multiengine aircraft unless he is currently proficient in the aircraft and holds a current Army instrument rating. Exceptions are authorized as follows:

(1) When receiving instruction from a qualified instructor pilot who holds a current Army instrument rating; or

(2) When performing hooded flight accompanied by a pilot who is currently proficient in the aircraft and who holds a current Army instrument rating.

e. *Computations.*

(1) Flying time for an aerial flight starts when an airplane begins to move forward on the takeoff run, or when a helicopter lifts off the ground and ends when the aircraft is on the ground (landed) and—

(a) The engines are stopped;

(b) The aircraft remains stationary with engines operating for a period in excess of 5 minutes; or

(c) The flying crew changes.

(2) A flight which consists of a series of practice landings will be considered as one flight except when interrupted as provided in (1) above.

(3) Flying time will be recorded in hours and minutes to the nearest 5 minutes.

CHAPTER 4

SAFETY

Section I. GENERAL PROVISIONS

4-1. General. Unit commanders will give due consideration to the Army aviation mission and incorporate adequate safety practices to insure maximum safe operation of Army aircraft. Army aviators will operate aircraft with due regard for accepted safe standards and in such manner that the safety of personnel and property will not be unnecessarily jeopardized.

4-2. Aviation safety publications. *a.* Army aviation safety training pamphlets, bulletins, notices, and posters will be dispatched periodically to all major Army commands, ATTN: Army Aviation Officer, for distribution to—

- (1) Individual Army aviators,
- (2) Army airfields, for display on bulletin boards, or
- (3) Army airfields, for operations office reading file.

b. Commanders will make maximum use of these publications to aid in accomplishing the Army aviation mission with minimum loss of assets.

4-3. Safety of flight messages. Active Army, National Guard, and Army Reserve activities which operate and maintain Army aircraft will, upon discovery of an unsafe condition on an aircraft which can be reasonably assumed to exist on similar aircraft, follow the procedures outlined in AR 95-18.

4-4. Aircrew checklists. The hazards inherent in inadequate preflight, starting, runup, takeoff, and landing procedures require that special attention be given to the use of aircrew checklists. To preclude aircraft accidents resulting from the failure to use checklists, the unit commander will insure that—

a. The latest Department of the Army published/revised U.S. Army operators and crew members checklist (CL or -10CL) is available in the aircraft.

b. TM 1500-1, U.S. Army operators and crew members checklist binder is available in the aircraft for housing the checklist.

c. Local publication/reproduction of aircraft checklists is not authorized except on aircraft for

which Department of the Army has not published a checklist, i.e., T-41, T-42, TH-55.

d. Crew members accomplish oral callout and confirmation of checklist items.

e. Crewmembers *will not* rely on memory for the accomplishment of prescribed operational checks.

4-5. Safety procedures. The aircraft commander will insure that the following safety measures are observed.

a. Smoking. Smoking within 50 feet of an aircraft on the ground is prohibited. Smoking is prohibited in aircraft under the following conditions:

- (1) During all ground operations.
- (2) During and immediately after takeoff.
- (3) During fuel transfer operations.
- (4) Immediately before and during landings.
- (5) At any time any occupant detects gas fumes.
- (6) When oxygen is being used.

b. Oxygen. Crew members will use supplementary oxygen when the cabin pressure altitude is 10,000 feet or above, except for aircraft not equipped with oxygen when flight between 10,000 and 14,000 feet is necessary to clear high terrain or local weather conditions. Such altitude will not be maintained for more than 1 hour, of which no more than 30 minutes will be above 12,000 feet. Aircraft will not be flown above 14,000 feet without oxygen.

c. Aircraft lighting.

(1) *In flight.* The anticolision light (Grimes Light) will be ON when airborne, except while operating under actual instrument conditions when the light may induce vertigo. During darkness the navigation lights will be on STEADY unless the Grimes Light is inoperative, in which case the navigation lights will be on FLASH.

(2) *Ground.* The Grimes Light will be OFF during all ground operations, and ON when entering the active runway for takeoff.

4-6. Weather reporting. In-flight and post-flight weather reports will be made to requesting agencies. Any unforeseen weather conditions

encountered will be reported without request to appropriate agencies. (For procedure see sec. II, DOD FLIP)

4-7. Operational hazard reports (OHR). An operational hazard is any condition or act that affects or may affect the safety of Army aircraft or associated personnel and equipment.

a. Operational hazards include, but are not limited to, inadequacies, deficiencies, or unsafe practices in—

(1) Operation of weather services and facilities.

(2) Aircraft maintenance or inspection.

(3) Operation and maintenance of airfield facilities and services.

(4) Aircraft ground support services.

(5) Navaids (en route or approach facilities).

(6) Procedures, techniques, or instructions in management of air traffic.

(7) Regulations, procedures, or policies published by the Federal Aviation Agency, International Civilian Aviation Organization, or Department of Defense agencies.

(8) Training and education.

(9) Flight publications.

(10) Near collisions between aircraft in flight.

b. OHRs are not submitted when action is appropriate under AR 385-40 (Accident Reporting and Records) or AR 95-12 (Reporting and Investigating Alleged Violations of Flying Regulations).

c. OHRs will not be submitted on materiel failure of aircraft components, or ground support equipment, where the submission of DA Form 2407 (Maintenance Request (Section III, Equipment Improvement Recommendation)) is appropriate.

d. Each major Army command will establish in accordance with AR 335-15 its own specific procedures for reporting and accomplishing corrective action.

e. Commanders will insure that means and procedures are provided for promptly reporting and investigating operational hazards, and that immediate corrective action is taken.

f. All commands will use DA Form 2696 (Operational Hazard Report) for reporting. See sample form, figure 4-1.

OPERATIONAL HAZARD REPORT

For use of this form, see AR 95-1; the proponent agency is Office of the Assistant Chief of Staff for Force Development.

(An operational hazard is any condition or act that affects or may affect the safe operation of Army aircraft, associated equipment, facilities, or cause injury to personnel.)

1. THIS HAZARD OCCURRED OR WAS OBSERVED WHILE:

a. IN-FLIGHT c. OTHER (specify) _____
 b. ON THE GROUND d. LOCATED AT _____

DATE _____ HOUR _____

2. THIS HAZARD IS CONCERNED WITH (select most appropriate category):

a. AIR TRAFFIC CONTROL c. WEATHER e. AIRCRAFT g. OTHER (specify) _____
 b. AIRFIELD d. PUBLICATIONS f. PERSONNEL

3. IN THE AREA OF (select one or more to describe above category):

a. PROCEDURES/INSTRUCTIONS d. FACILITIES g. SERVICING (e.g., refueling)
 b. POLICIES/REGULATIONS e. MAINTENANCE INSPECTION h. OTHER (specify) _____
 c. OPERATIONS f. SERVICE(S) (e.g., wx)

4. IF THIS HAZARD OCCURRED WHILE IN FLIGHT, COMPLETE THE FOLLOWING:

a. A/C TYPE U-8E	b. SERIAL NUMBER 68-1410	c. MISSION Administrative
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d. DEPARTED FROM
Fort Belvoir, Davison AAF

e. DESTINATION
Cairns VOR (OZR 111.2)

f. NEAREST NAVIGATION, FIX, FACILITY, OR AIRPORT
Cairns VOR (OZR 111.2)

g. YOUR AIRCRAFT WAS	h. DISTANCE	DIRECTION	
<input type="checkbox"/> ON AIRWAYS <input type="checkbox"/> OFF AIRWAYS <input type="checkbox"/> EN ROUTE <input type="checkbox"/> TERMINAL <input checked="" type="checkbox"/> IN CONTROL ZONE <input type="checkbox"/> AIRPORT TRAFFIC PATTERN	<input type="checkbox"/> OUTBOUND FROM AIRPORT <input type="checkbox"/> INBOUND TO AIRPORT <input type="checkbox"/> POSITIVE CONTROL AIRSPACE <input type="checkbox"/> OTHER (specify) _____	<input type="checkbox"/> VFR DD 175 <input type="checkbox"/> VFR WITH IFR CLEARANCE <input checked="" type="checkbox"/> IFR DD 175 <input type="checkbox"/> IFR WITH NO CLEARANCE	<input type="checkbox"/> IFR/VFR ON TOP <input type="checkbox"/> DVFR/ADIZ FLIGHT LIMITS <input type="checkbox"/> LOCAL

5. IF THIS HAZARD WAS A NEAR MIDAIR COLLISION WITH ANOTHER AIRCRAFT OR OBSTACLE, COMPLETE THE FOLLOWING:

FIRST SIGHTING OTHER AIRCRAFT		FLIGHT ATMOSPHERIC CONDITIONS	
OTHER AIRCRAFT/OBSTACLE OBSERVED AT 9:00 O'CLOCK		<input type="checkbox"/> OVERCAST <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> BROKEN CLOUDS <input type="checkbox"/> SCATTERED <input type="checkbox"/> VISIBILITY MILES 5NM <input checked="" type="checkbox"/> SAME ALTITUDE <input type="checkbox"/> CLOUD PROXIMITY <input type="checkbox"/> BELOW YOU <input type="checkbox"/> IN/OUT CLOUDS <input type="checkbox"/> ABOVE YOU <input type="checkbox"/> IN CLOUDS <input type="checkbox"/> BETWEEN LAYERS	
WHAT FIRST DIRECTED ATTENTION TO THE OTHER AIRCRAFT/ OBSTACLE?		<input type="checkbox"/> OVERCAST <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> BROKEN CLOUDS <input type="checkbox"/> SCATTERED <input type="checkbox"/> VISIBILITY MILES 5NM <input checked="" type="checkbox"/> SAME ALTITUDE <input type="checkbox"/> CLOUD PROXIMITY <input type="checkbox"/> BELOW YOU <input type="checkbox"/> IN/OUT CLOUDS <input type="checkbox"/> ABOVE YOU <input type="checkbox"/> IN CLOUDS <input type="checkbox"/> BETWEEN LAYERS	
DISTANCE BETWEEN AIRCRAFT/OBSTACLE		DISTANCE TO CLOUDS	
FIRST SIGHTING	CLOSEST PROXIMITY	HORIZONTAL	VERTICAL
500 yds	250 yds	same alt	NA
PHASE OF FLIGHT		FLIGHT CONDITIONS	
YOU	OTHER	YOU	OTHER
<input type="checkbox"/> TAKEOFF <input type="checkbox"/> CLIMB <input checked="" type="checkbox"/> LEVEL FLIGHT <input checked="" type="checkbox"/> DESCENDING <input type="checkbox"/> LANDING <input type="checkbox"/> HOLDING PATTERN	<input type="checkbox"/> PHASE <input type="checkbox"/> TURNING, <input type="checkbox"/> REFUELING <input type="checkbox"/> ACROBATICS <input type="checkbox"/> OTHER (specify) _____	<input checked="" type="checkbox"/> PHASE <input type="checkbox"/> TURNING, <input type="checkbox"/> REFUELING <input type="checkbox"/> ACROBATICS <input type="checkbox"/> OTHER (specify) _____	<input checked="" type="checkbox"/> BRIGHT DAY <input type="checkbox"/> DAWN <input type="checkbox"/> GLARING SUN <input type="checkbox"/> THUNDERSTORM <input type="checkbox"/> NIGHT <input type="checkbox"/> PRECIPITATION <input type="checkbox"/> DUSK <input type="checkbox"/> TURBULENCE
OTHER AIRCRAFT/OBSTACLE		FLIGHT CONDITIONS	
TYPE A/C		OBSTACLE DESCRIPTION	
U-8		NA	

DESCRIPTION/EXPLANATION/COMMENTS (continue on reverse)

U-8 turned across my flight path at the same altitude from left to right.

TO: (Your Aviation Safety Officer) Avn Safety Officer Davison AAF	YOUR SIGNATURE (optional) John Doe	DUTY AC	DATE 12 May 1969
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DA FORM 2696 1 AUG 69

PREVIOUS EDITION IS OBSOLETE

Figure 4-1. Sample DA Form 2696, Operational Hazard Report.

OPERATIONAL HAZARD REPORT

DESCRIPTION/EXPLANATION/COMMENTS - CONTINUED

SUMMARY OF INVESTIGATION

Telephonic communication with the aviation safety office, Cairns AAF revealed that numerous aircraft were using Cairns VOR for practice Air traffic control and instrument approach training at the time the U-8F arrived over the VOR. All IP's and resident students in the U-6 instrument flight have been cautioned to maintain a constant vigil. All A-C are under ATC or approach control while in the area over Cairns VOR.

Tom Jones
LTC USA
Ayn Safety Off.

RECOMMENDATIONS

No further action required.

CORRECTIVE ACTION TAKEN

Figure 4-1—Continued.

g. Any person, military or civilian (DA or contractor), assigned or attached to or employed by the U.S. Army is authorized and encouraged to submit OHRs. The person's signature on the OHR is desirable but not mandatory.

h. OHRs will be submitted to the aviation safety officer or airfield operations officer. The OHR will be thoroughly investigated by the aviation safety officer. Appropriate recommendations will be submitted to the commander. When corrective action cannot be taken at unit level, the report will be forwarded through channels to the command level at which corrective action can be taken.

i. When the reporting person is unable to submit an OHR to the unit or installation where he noticed the deficiency, he will submit the report at his home airfield, or at the next airfield at which he lands. The aviation safety officer will immediately forward the OHR to the installation concerned.

j. The U.S. Army, Navy, and Air Force have similar OHR systems. Army personnel should submit OHRs directly to the station or base operations office concerned when hazards are noted while operating at any of these installations. U.S. Navy and Air Force personnel have been encouraged to submit OHRs at Army installations. Hazards noted at civilian airfields should be brought to the attention of the appropriate airport manager or authority.

k. The commander responsible for taking necessary corrective action will notify the originator of the OHR within 15 working days of action taken or contemplated.

l. Major Army commands will forward to the Director of Army Aviation, OACSFOR, any reports that require corrective action beyond command capability, or that cannot be resolved bilaterally with other major commands or agencies outside the U.S. Army.

m. Information copies of all OHRs not correctible at or below major Army command level, reports that indicate possible involvement or deficiency of FAA personnel or facilities, and any reports that have worldwide application will be forwarded to: Director, U.S. Army Board for Aviation Accident Research (USABAAR), Fort Rucker, AL 36360.

n. OHRs will be used within the Department of the Army for accident prevention only. Requests

to agencies outside the Army for corrective action will be handled by separate correspondence, stating the facts of the hazard involved and indicating corrective action desired. All such correspondence will specifically state that the sole purpose of the request is accident prevention and that it should not be used for any other purpose.

o. This regulation does not preclude any agency, organization, or individual from communicating directly with USABAAR on any matter pertaining to aviation safety in accordance with AR 15-76.

4-8. Aircraft accident prevention. Accident prevention is the personal responsibility of the commander. He must provide clearly defined policies and objectives for aviation safety. AR 95-5 provides information and procedures for establishing and developing accident prevention programs.

4-9. Aircraft accident reports. Procedures for investigating and reporting aircraft accidents are prescribed in AR 385-40. Release of information relative to casualties resulting from aircraft accidents is governed by the following:

a. AR 600-10 prescribes the policy and procedures for reporting casualties and notification of next of kin of personnel involved in aircraft accidents.

b. Letters of sympathy will be prepared as prescribed in AR 600-10. Original notification and letter of sympathy or explanation of circumstances will contain date, location of event, and a brief, tactful summary as to what occurred (gruesome aspects of injuries or events will be omitted). Information provided will not refer to cause factors or events that show error or negligence on the part of any person or failure or suspected failure of equipment or facilities. Information that is classified or designated "For Official Use Only" will not be included in these notices or letters. The aircraft accident investigation file (DA Form 2397), or any portion thereof, will not be mentioned, either orally or in correspondence, to relatives of persons involved in the accident, nor will it be made available for their review. If further inquiries are made, a discreet letter (fig. 4-2) describing the circumstances will normally suffice. The letter will not suggest or recommend that the relative contact the Director of Army Aviation for information. If the relative demands a copy of the aircraft accident investiga-

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tion; indicates a desire to review the file; or requests information from the file which cannot be released, his request will be immediately forwarded

to the Assistant Chief of Staff for Force Development, ATTN: Director of Army Aviation, Department of the Army, Washington, DC 20310.

Dear _____:

I am writing you in regard to the _____ accident of _____, 196_____, in which your son was lost.

(Reference is made to your inquiry concerning the circumstances of the _____ accident of _____ 196_____, in which your son was lost.)

I wish to assure you that the Army is vitally interested in preventing such tragic accidents and exerts every effort to identify cause factors and initiate appropriate corrective action. Each accident is treated individually and is the subject of thorough investigation and painstaking analysis. Every clue or circumstance is followed to a logical conclusion in our efforts to prevent similar occurrences.

_____ was on an administrative flight from _____ Army Airfield to _____ Army Airfield in an _____ aircraft. His aircraft crashed and burned shortly after takeoff.

While this may be of little solace to you and your family at the time of your tragic loss, you may be assured that the protection of its personnel is of paramount interest to the Army. We sincerely hope that this information will help clarify some of your questions.

Please accept my personal sympathy at this time.

Sincerely,

Figure 4-2. Sample letter of sympathy or circumstances.

Section II. EMERGENCY EQUIPMENT

4-10. Parachutes. a. Requirements. Occupants of Army aircraft will be provided parachutes except in—

(1) Helicopters, unless prescribed by the unit or installation commander.

(2) Multiengine aircraft with reliable single engine performance at all stages of the mission profile.

(3) Aircraft when transporting patients, children, and other persons who cannot be fitted with parachutes.

b. Use of parachutes. When parachutes are required during flight the aircraft commander will insure that—

(1) Before flight:

(a) A parachute is available, assigned, fitted, and readily accessible to each person making the flight.

(b) Each occupant knows the location of his assigned parachute.

(c) Each occupant knows how to operate the parachute equipment.

(d) Each occupant knows the location and proper operation of emergency exits and is assigned a particular emergency exit.

(e) TM 10-1670-201-25 has been complied with for parachute repack and maintenance requirements.

(f) Emergency and abandon-aircraft signals and procedures are known and understood by all occupants. In aircraft equipped with an alarm bell system, three short rings will alert occupants for bailout and one long or continuous ring will be the signal to abandon aircraft. The aircraft commander will test the alarm system for passenger familiarization after starting engines and before taxiing.

(2) *During flight:*

(a) The emergency back-type parachute will be worn at the aircraft commander's discretion. It will be kept immediately available to the occupant to whom assigned.

(b) When the emergency chest-type parachute is required, occupants wear the parachute with packs attached during times when bailout is imminent. When the pack is not worn, it will be kept immediately available to the occupant to whom it is assigned. The parachute harness will be worn at all times.

(c) All occupants wear parachutes whenever practicable during aerobatic, test, formation, night, and tactical training flights; flights under instrument flight conditions; and other flights when the danger of collision, fire, explosion, or structural failure is greater than normal. *Exception:* In multiengine aircraft, parachutes may be removed during night flights and flights under instrument flight conditions at the discretion of the aircraft commander.

(d) Occupants wear parachutes or an approved safety harness restraint when engaged in activity near an open door of an aircraft in flight.

(e) Individual ceramic plate body armor is not worn with parachute, as it is not compatible and serious injury may result.

(f) *Types of parachutes.* Emergency back-type parachutes will be standard for use by occupants of O-1, T-41, and U-6 type aircraft. Either the back-pack or chest-pack parachute is acceptable in all other fixed wing aircraft based on mission requirements.

4-11. **Safety belts and shoulder harnesses.** The aircraft commander will insure that—

a. The number of occupants of the aircraft does not exceed the number of safety belts available.

b. Each occupant is familiar with the use and operation of safety belts, and that each occupant uses a safety belt during landings, takeoffs, and in rough air.

c. Shoulder safety harness, when available, is used during landings, takeoffs, and in rough air. The aviator in control of the aircraft will wear a properly adjusted safety belt and shoulder harness at all times to preclude loss of aircraft control in the event of malfunction, turbulence, or violent evasive action.

4-12. **Helmets.** Crewmembers will wear protective helmets on all flights in Army aircraft, except for twin-engine executive and staff transport aircraft.

4-13. **Survival equipment.** a. Aircraft on extended or sustained flight over bodies of water where forced landings on land cannot be negotiated will be equipped with sufficient lifevests, liferafts, and appropriate emergency survival equipment for each person aboard.

b. Aircraft on extended or sustained flight over the desert, arctic, or jungle will be equipped with emergency survival equipment appropriate for the geographical area, in sufficient quantity for the number of persons aboard.

c. The aircraft commander will insure that all passengers are familiar with the location and general use of all survival equipment. Crewmembers will wear individual survival equipment if available.

4-14. **Fire extinguishers.** Each Army aircraft will have a minimum of one operating fire extinguisher of the proper type installed and available during all flights.

4-15. **Protective clothing.** Leather boots, fire retardant clothing, and flying gloves will be worn by crewmembers on combat, tactical training, test flights, or similar flights that involve unusual hazards and at other times as prescribed by unit commanders.

4-16. **Protective masks.** a. Either the pilot or copilot will wear a protective mask at all times when fuzed items filled with incapacitating or toxic chemicals are carried inside Army aircraft. Other crewmembers will have a protective mask readily available which has been adjusted and fitted prior to takeoff.

b. When incapacitating or toxic chemicals are carried inside an aircraft without arming and fuzing systems installed, the pilot or copilot may fly with the mask readily available, unless the possibility exists of accidentally releasing the agent by gunfire or turbulence.

Section III. FLIGHT LIMITS AND CREW REST

4-17. General. Commanders may establish local flight time limitations and crew rest based upon factors outlined in this section.

4-18. Factors. The maximum number of hours to be flown in any one day will vary with the factors affecting safety of operations. They will be adjusted at the local level based on the type of mission, type of aircraft, operating conditions, weather, time of flight, diet of crewmembers, physiological and psychological condition of crewmembers, and rest facilities available.

4-19. Considerations. When developing implementing directives, commanders will consider the following:

a. Advice of the flight surgeon and the aviation safety officer, in determining limits for specific operations.

b. The criticality of the approach and landing phase at a time when the crew is most tired, for flights under instrument conditions.

c. Flight time maximums, to insure efficiency of operations commensurate with safety of operations. Although maximums cannot be established for all circumstances, the following weekly and monthly limits are suggested as guidelines for establishing maximums under normal operating conditions:

(1) *Fixed wing aircraft.* 30 hours in any 7-day period, not to exceed 100 hours in a 30-day period.

(2) *Rotary wing aircraft.* 25 hours in any 7-day period, not to exceed 90 hours in a 30-day period.

(3) *Combined fixed and rotary wing.* 25 hours in any 7-day period, not to exceed 100 hours in a 30-day period.

d. Flight crew duty time, which starts 2 hours before initial takeoff or when the crew reports for a mission, whichever is earlier, and ends with the final landing. Maximum flight crew duty time and minimum crew rest for administrative flights of long duration are shown below. The limitation will be used as a guide only for operational missions involving unit deployments.

(1) *Flight crew duty time.*

(a) *Basic crew.*

Without crew bunks—12 hours.

With crew bunks—12 hours.

(b) *Augmented crew.*

Without crew bunks—14 hours.

With crew bunks—18 hours (not to exceed 48 hours in any 72-hour period).

(2) *Crew rest before starting flight crew duty time.*

(a) *Basic crew*—12 hours.

(b) *Augmented crew*—15 hours when 18 hours flight crew duty time is exceeded; 12 hours at other times.

Section IV. AIRCRAFT GROUND OPERATIONS

4-20. General. This section prescribes procedures for operation and movement of aircraft on the ground and procedures to qualify nonaviator personnel to perform these operations.

4-21. Starting engines. Engines will be started or operated only as follows:

a. For airplanes on wheels (for airplanes on floats and skis, see pertinent technical orders) when—

(1) A person qualified and authorized to operate the engine of such airplane is seated at the controls.

(2) Chocks are placed securely in front of the wheels of such airplane or when parking brakes are securely locked.

(3) Navigation lights are turned on for night operation before engine is started and remain on until after the engine is stopped.

b. For helicopters when—

(1) A person qualified and authorized to operate the engine of such helicopter is seated at the controls, except that during the conduct of tactical training, maneuvers, combat exercises, or combat operations, the pilot may leave the helicopter provided that all controls are locked, according to procedures prescribed in appropriate flight handbooks.

(2) Chocks are placed securely in front of the wheels or when parking brakes are securely locked on helicopters equipped with wheels.

(3) Navigation lights are turned on for night operation before engine is started and remain on until after the rotors are stopped.

4-22. Taxiing and moving aircraft. *a.* Aircraft will be taxied only by authorized individuals and will not be taxied closer than 100 feet to active runways unless the operator is specifically authorized to do so by proper authority.

b. When an aircraft is maneuvered in close proximity to other aircraft, buildings, or other obstructions, or in gusty or high winds, members of the ground crew will be positioned to insure adequate guidance.

c. When moving aircraft by hand, pressure for pushing, lifting, and turning will be applied only at authorized pressure points as designated in the applicable technical manual or order.

d. Approved towbars will be used for towing aircraft. A qualified individual will be seated at the aircraft controls to operate the brakes in the event of an emergency. Ground crew personnel will provide adequate guidance to avoid collision. Aircraft will be towed at speeds no faster than a normal walk.

4-23. Operation by nonaviator personnel. *a.* Nonaviator personnel who start, run, warm up, test, taxi, or otherwise operate aircraft on the ground will—

(1) Be fully qualified to perform these duties on the aircraft involved.

(2) Demonstrate satisfactory ability to operate and taxi aircraft.

(3) Be authorized to perform such duties by written order of the unit commander.

(4) Have operated the type of aircraft in question, fixed or rotary wing, at least once during the last 30 calendar days.

b. Copies of orders will be posted in unit maintenance and operations offices.

c. Specific safety procedures for helicopters are as follows:

(1) Nonaviator personnel who are qualified as specified in *a* above may start, warm up, run, test, and stop the engines of helicopters only when the collective pitch control stick is locked or lashed down into full low-pitch position.

(2) Qualified nonaviator personnel may engage clutches on larger type helicopters with separate engaging clutches only if—

(a) No qualified aviator is available.

(b) They have been placed on orders in accordance with *a*(3) above.

4-24. Operations at other installations. Army personnel operating aircraft from installations other than their own will also comply with appropriate additional safety regulations prescribed by that installation commander. Each airfield commander will bring such local regulations to the attention of all transient aviators.

4-25. Hand signals. The system of signals depicted in section III, FM 21-60 will be used to direct and control the operation and movement of aircraft on the ground.

CHAPTER 5

RELATED ACTIVITIES

Section I. GENERAL

5-1. Firefighting and rescue. Aircraft firefighting and rescue teams consist of highly trained specialists who must be prepared to respond immediately upon notification of an aircraft accident or emergency. They must also be proficient in fire suppression, forced entry of aircraft, rescue and removal of victims, first aid medical treatment, and evacuation of the injured to medical facilities. To insure this capability, it is essential that a complete and fully coordinated training and emergency mobilization plan be prepared at each Army airfield and heliport in accordance with AR 95-26.

5-2. Assistance to nonmilitary aircraft. Air navigation facilities owned or operated by the United

States may be made available for public use under such conditions as the heads of the department or other independent establishments having jurisdiction thereof prescribe (49 U.S.C. 1507). For instructions concerning assistance to civil aircraft and aircraft of foreign ministry, see AR 210-95.

5-3. Plant quarantine. No plant or plant product will be carried by any Army aircraft into the continental limits of the United States unless a permit has previously been procured from the Department of Agriculture (AR 40-12/Navy General Order No. 20/AFR 161-4).

5-4. Aircraft weight and balance. The system to insure operation of Army aircraft within design limitations is prescribed in AR 95-16.

Section II. DISASTER OPERATIONS

5-5. General. a. Disaster relief. Authorization for disaster relief operations is prescribed in AR 500-60.

b. Air search and rescue. Authority for undertaking air search and rescue operations is delegated to unit commanders and higher authority having Army aircraft within their commands.

c. Cooperation with other Government agencies. When requested by USAF Air Rescue Service or comparable organizations of the Navy or Coast Guard, the commanders of units possessing aviation facilities are authorized to make such facilities available. Such action will be reported by the most expeditious means to the next higher commander.

5-6. Control and procedure. a. When a major disaster area includes territory in more than one Army area, each Army commander will assume control of relief activities in his Army area as outlined in paragraph 5, AR 500-60.

b. If the appropriate Army commander decides that Army aviation under his jurisdiction will be used in relief operations, he will organize a provisional Army aviation disaster search and rescue unit. When a disaster or air search and rescue operation is undertaken, by an Army aviation

disaster, search, and rescue unit, it will be based so far as possible upon military installations nearest the disaster and will follow normal installation procedures for drawing supplies.

5-7. Functions. Missions that may be performed by Army aircraft in disaster and air search and rescue operations include, but are not limited to—

- a.** Aerial drop of medicine, food, and emergency supplies.
- b.** Air evacuation of sick and wounded.
- c.** Rescue of stranded personnel.
- d.** Guidance to surface rescue parties.
- e.** Message drop and pickup.
- f.** Radio relay operations.
- g.** Courier service.
- h.** Insect control.
- i.** Wire laying for emergency communications.
- j.** Use of flares for night operations.
- k.** Photographic and reconnaissance missions.
- l.** Warning missions.
- m.** Dropping leaflets relative to—
 - (1) Areas to be evacuated.
 - (2) Advice urging the population to move voluntarily and giving directions as to where those needing refuge may be accommodated.
 - (3) Information as to transportation facilities.

(4) Information as to available routes.

(5) Measures to be taken to protect personal property and livestock.

5-8. Plans. Major Army commanders will formulate plans and provide for the execution of such measures within their areas as necessary to accomplish the provisions of this regulation. Plans should clearly outline the mission, responsibilities, and duties of the Army aviation disaster, search, and rescue units with respect to the following:

- a. Administration.
- b. Operations.
- c. Maintenance.

d. Food service.

e. Supply.

f. Transportation.

g. Medical service.

h. Security.

5-9. Liaison. Major Army commanders are responsible for establishing liaison with the USAF Air Rescue Service and comparable organizations of the Navy and Coast Guard. Active and continuous liaison will be maintained among all echelons to insure complete coordination, understanding, and expeditious handling of aircraft, supplies, and equipment during relief operations.

Section III. DISPLAYS AND DEMONSTRATIONS

5-10. General. Participation of military aircraft in displays and demonstrations is defined as any flight or display of aircraft in connection with public gatherings, demonstrations, ceremonies, and similar events.

5-11. Types of participation. *a. Static display.* A ground display of any aircraft and its related equipment not involving flight, taxiing, or starting of engines.

b. Flyover. A flight of one or more aircraft over a fixed point at a specific time, not involving aerobatics or demonstrations.

c. Flight team demonstration. A demonstration of tactical techniques by an officially designated unit.

d. Aircraft demonstration. A demonstration, by other than an officially designated unit of tactical capabilities, of aircraft by a single or group of aircraft, including air-to-air refueling, helicopter hover and pickup capabilities, low altitude Parachute Extraction System, maximum performance takeoff, and other flight techniques.

e. Aerial review. A flyover of multiple type of aircraft representing one or more of the military services.

f. Glider launch. Aircraft used as a glider launching and towing vehicle for a public audience on a Government owned or leased installation.

5-12. Authority. Commanders down to and including installation level are authorized to approve participation of aircraft under their control in aerial demonstrations except as provided in paragraph 1-6b(1) and (2), AR 360-61.

5-13. Suitable occasions. Commanders will follow

the guidelines set forth in paragraph 4-1, AR 360-61.

5-14. Rules for participation. *a. General.*

(1) Occasion must be sponsored by nonprofit civic agencies, public officials, or Federal agencies.

(2) No monetary gain will accrue to any individual or organizations other than that which would be used in the interest of the general public or a bona fide philanthropy.

(3) Sponsor must provide information indicated in appendix C, AR 360-61.

(4) Aircraft will not be flown in any race or engage in aerobatics except as specifically authorized by the approving authority.

(5) Aircraft may demonstrate such tactics as are justified by conditions and by pilot proficiency but are subject to armed forces and/or civil air regulations.

(6) So far as practicable, flying time devoted to aerial demonstrations will be utilized to the fullest extent for combat readiness training purposes. Decisions for aircraft to participate in any class event will be based on fuel allowances, operating schedules, safe operating radius and conditions, interference with normal operations and training, expenses of personnel, and availability of suitable types of aircraft in the area of participation.

(7) In no case will participation be authorized without reasonable reimbursement by the sponsor to personnel participating for necessary expenses which may be incurred as a result of such participation.

(8) A successful aerial demonstration is di-

rectly dependent on air discipline. All personnel concerned will insure that this essential element is stressed in planning and executing aerial demonstrations.

(9) Communication procedures will be in accordance with prearranged Signal Operation Instructions (SOT).

(10) Only those aircrews and maintenance personnel absolutely necessary for operation and maintenance of equipment will be authorized to participate in demonstrations.

(11) When required, a commentator will be brought into the planning phases as early as possible.

(12) VFR flight will be maintained at all times.

(13) If the weather is in doubt, an aircraft will make a weather observation flight over the orbit area, target area, and departure radius from the target.

(14) Minimum altitude above terrain for flyover safety will be the primary consideration at all times. The axis of aircraft approach and departure will be planned to provide maximum protection to spectators and populated areas.

(15) An Aviation Safety Officer will review flight demonstration plans, monitor rehearsals, and recommend appropriate measures to protect participants, spectators, and Government property.

(16) A nonparticipating Army aviator will be designated to act as liaison officer. On occasions where two or more services are participating, the Office of the Secretary of Defense, or the commanders in chief of the unified commands

in areas outside the continental United States, will indicate the service to designate the senior liaison officer. The senior liaison officer will be detailed in time to arrive at the appointed place sufficiently ahead of the participating units. He will be responsible for coordination between the sponsoring agency and the Armed Forces units for rigid adherence to all flight regulations, and to insure that the insurance bond is properly executed.

b. Glider launches.

(1) Launching and towing of gliders will be in accordance with FAA rules.

(2) Release hook installation will be FAA approved and installed by an FAA licensed mechanic.

(3) Personnel participating in glider flights must be active duty officers or enlisted members of an established glider or soaring club approved by the installation commander. Participation by other established clubs may be authorized when in the best interest of the armed forces, and the requirements of appendix B, AR 360-61, have been accomplished by the participating club.

(4) Hook installation will be inspected by an FAA licensed mechanic at frequent intervals during glider launches to insure the safe operation of towing and release mechanism.

5-15. Budgeting and financing. Budgeting and financing will be handled in accordance with paragraph 2-3, AR 300-01.

5-16. Indemnity insurance. Insurance requirements are set forth in AR 360-61.

Section IV. SAFETY RULES FOR FLYING DISPLAYS (STANAG 8533) - DETAILS OF AGREEMENT

5-17. Policies. *a.* STANAG 8533 applies to all military forces of nations ratifying this STANAG participating in air displays when more than one NATO nation's aircraft are involved. For the purpose of this agreement a flying display is an exhibition of aircraft or parachutists which may be combined with competitions.

b. The nations ratifying this STANAG will agree that their military forces taking part in any air display will not accept less stringent limits than those laid down in this STANAG.

5-18. Rules for control of flying. *a.* The organizing authority for the display is to be responsible for designating one overall director, who must be experienced in such work. He is to be responsible for all administrative details, briefing of flying personnel, and for all flying aspects of the display.

b. The overall director is to be responsible that all those taking part in the display have adequate general information at least 6 weeks before the due date.

c. For the actual display, there is to be an

officer or official in charge of flying, who may be the overall director, but may be detailed by the director. He is to be responsible for—

- (1) The flying program in detail.
- (2) The issue of detailed regulations for the flying display.

(3) Control of flying at the display from a suitable and adequate control center and position.

d. Before the flying display, there is to be a detailed briefing by the officer, or official in charge of flying, at which full details, particularly of safety regulations, are to be given to participating crews, except where distance considerations make this impossible.

e. If the display is at an airfield, it is to be closed to all forms of flying, other than the display aircraft, from 15 minutes before until 15 minutes after the flying display. The notice of a closure of an airfield, or restriction on flying in an area when the display is not at an airfield will be published by NOTAM in adequate time. Exceptions to this rule can only be made by the director of the display.

f. Appropriate and adequate firefighting and medical services are to be available at the place of the display.

5-19. Pilot training. Each nation operating aircraft in a display is to insure that pilots are properly trained in the mission they are to perform.

5-20. Spectator safety. *a.* Safety is to be the prime consideration at all times. The axis of aircraft approach and departure is to be planned to provide maximum protection to spectator enclosures and populated areas. In no case are aircraft on high-speed runs and flyovers to be flown closer than 1,000 feet horizontal distance from spectator enclosures. All maneuvers likely to jeopardize the safety of spectators in the event of any mishap to the aircraft or misjudgment, are to be avoided.

b. If the display is held at an airfield, then the airfield and parking spaces for aircraft taking part in the display are to be isolated from spectators by enclosed areas, to be known as spectator enclosures. In addition, areas allotted to spectators at any display are to be on one side only of a runway or display area run, and not in the approach or departure sections of that airfield or display area.

c. Flying over spectator enclosures is to be prohibited except as provided in paragraph 5-21g.

d. Aircraft capable of high speeds will not make turns toward spectators closer than 1,500 feet to

the spectators enclosure. In certain local circumstances where spectators safety is not thereby compromised and participating nations agree, the horizontal distance minimums may be relaxed.

e. Demonstrations are to be made parallel to the front of the spectators enclosure and never closer than 1,000 feet, except for certain safe demonstrations by helicopters and light aircraft.

f. Aircraft demonstrations which involve cutting and relighting of engines, and where there is a possibility of spreading paraffin vapor on spectators, are to be flown at such a height and in such a position that no nuisance is caused to spectators.

g. Helicopters, especially those with suspended loads, are not to be flown in such proximity to spectator enclosures, buildings, or aircraft on the ground so as to cause a possible hazard if the load were to become detached or the rotocraft to suffer control difficulties.

h. There is to be adequate clearance between spectator enclosures and starting-up and taxiing aircraft.

i. Live ammunition is to be removed from gun chambers and feed belts and armament circuit breakers are to be in the off position.

5-21. Limitations. *a.* Aircraft are to be flown within the proved or cleared limits. They are not to be flown at indicated speeds greater than 95 percent of that tested and cleared as satisfactory.

b. An absolute true speed limit of Mach. 95 is not to be exceeded, and aircraft speed is to be reduced below this level before beginning turning maneuvers, except where supersonic flight is an agreed part of the demonstration.

c. Minimum heights for demonstrations and weather minimums are shown in table 5-1

d. No turns are to be executed below 300 feet (100 m) above the highest obstacle in the display traffic zone except by light aircraft or helicopters.

e. Flying in clouds is prohibited, and cloud gaps are not to be flown through unless the cloud cover is two-eights or less in the display traffic zone.

f. The minimum heights specified in *d* above and table 5-1 are to be only within the display traffic zone.

g. The following limitations are to apply to jet aerobatic teams and solo jet aerobatic demonstrations:

(1) Full scale (vertical) display cloud base 7,500 feet (2,500 meters), and 5 nautical miles visibility.

(2) Limited (horizontal) display cloud base 3,000-7,000 feet (1,000-2,300 meters) and 3 nautical miles visibility.

(3) No demonstrations will be performed when the cloud base is below 3,000 feet (1,000 meters) and/or visibility is below 3 nautical miles.

(4) Spectators may only be flown over at

minimum altitude of 300 feet (100 m) above the highest obstacle during demonstrations such as a "bomb-burst."

(5) No solo aerobatics will be performed by any member of a team over spectators and no solo aerobatics will be performed in lieu of performance by a full team.

Table 5-1. Minimum Heights

Item	Minimum height over display of lowest aircraft	Minimum flight visibility	Minimum height of main cloud base
(1) Formations up to 16 aircraft.	300 feet (100 meters).	5 nautical miles	2,500 feet (800 meters).
(2) Formations from 17 to 32 aircraft.	500 feet (160 meters).	7 nautical miles	2,500 feet (800 meters).
(3) Formations of more than 32 aircraft.	500 feet (160 meters).	10 nautical miles	5,000 feet (1600 meters).
(4) Light aircraft demonstrations.	Minimum safe altitude.	2 nautical miles	1,500 feet (500 meters).

The proponent agency of this regulation is the Office of the Assistant Chief of Staff for Force Development. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications) to Assistant Chief of Staff for Force Development, ATTN: FOR AV, Department of the Army, Washington, DC 20310.

By Order of the Secretary of the Army:

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