

Army Regulation 40–8

Medical Services

**Temporary
Flying
Restriction
Due to
Exogenous
Factors
Affecting
Aircrew
Efficiency**

**Headquarters
Department of the Army
Washington, DC
22 March 2019**

UNCLASSIFIED

SUMMARY of CHANGE

AR 40-8

Temporary Flying Restriction Due to Exogenous Factors Affecting Aircrew Efficiency

This major revision dated, 22 March 2019

- o Implements NATO Standardization Agreement 3474 (edition 5) (para 1).
- o Defines personnel serving as aeromedical providers (4a).
- o Defines the responsibilities of aircrew members (para 4b).
- o Added provision for underwater escape/Helicopter Emergency Egress Device under hyperbaric exposure (para 7h).
- o Added flying restrictions following dilated eye exams or use of topical ocular medications (para 8).
- o Updates reference publications, forms and internet Uniform Resource Locators (throughout).

Medical Services

Temporary Flying Restriction Due to Exogenous Factors Affecting Aircrew Efficiency

By Order of the Secretary of the Army:

MARK A. MILLEY
General, United States Army
Chief of Staff

Official:


KATHLEEN S. MILLER
Administrative Assistant
to the Secretary of the Army

the Army civilian or contractor personnel, unless otherwise stated.

Proponent and exception authority.

The proponent of this regulation is The Surgeon General. The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. Refer to AR 25–30 for specific guidance.

Army internal control process. This regulation contains internal control provisions in accordance with AR 11–2 and identifies key internal controls that must be evaluated (see appendix B).

Supplementation. Supplementation of this regulation and establishment of agency, command, and installation forms are prohibited without prior approval from Headquarters, Department of the Army (DASG–HCZ), Washington, DC 20310.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to HQDA (DASG–HCZ) Washington, DC 20310.

Distribution. This regulation is available in electronic media only and is intended for the Regular Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

History. This publication is a major revision.

Summary. This regulation provides implementation guidance for NATO Standardization Agreement 3473 (edition 5).

Applicability. This regulation applies to the Regular Army and the U. S. Army Reserve. It also applies to all Department of

Contents (Listed by paragraph and page number)

Purpose • 1, *page 1*
References • 2, *page 1*
Explanation of abbreviations and terms • 3, *page 1*
Responsibilities • 4, *page 1*
General • 5, *page 1*
Exogenous Factors • 6, *page 2*
Vision • 7, *page 3*

Appendixes

A. References, *page 4*
B. Internal Control Evaluation, *page 5*

Glossary

*This revision supersedes AR 40–8, dated 16 May 2007.

1. Purpose

This regulation implements NATO STANAG 3474 (edition 5). It stipulates the minimum self-imposed temporary restrictions to be placed upon aircrew following exposure to certain physiological conditions in order to ensure optimal physiologic and psychological fitness in aircrew.

2. References

See appendix A.

3. Explanation of abbreviations and terms

See the glossary.

4. Responsibilities

The Surgeon General (TSG) has the overall responsibility for temporary flying restrictions due to exogenous factors affecting aircrew efficiency. TSG will ensure—

a. Aeromedical providers are aware of the exogenous factors affecting flight duties and the appropriate preventative measures to mitigate the potential associated aeromedical risk. The aeromedical provider will supervise and coordinate all medical treatment of all aircrew members for reasons of flight safety. The term aeromedical provider refers to the following personnel:

- (1) Flight Surgeon (FS); Area of Concentration (AOC); 65DM3.
- (2) Aeromedical Physician Assistant (APA); AOC 65DM3.
- (3) Aviation Medicine Nurse Practitioner (AMNP); AOC 66NP1.
- (4) Aviation Medical Examiner (AME).

b. Aircrew members consult an aeromedical provider anytime a physical or psychological condition is suspected or known to be detrimental to the safe performance of flight duty. Aircrew members will notify their aeromedical provider when they have participated in activities or received treatment for which flying restrictions may be appropriate. This includes exposure to exogenous factors listed in this regulation as well as any treatment or procedure performed by a non-aeromedical provider. This includes, but is not limited to, the following:

- (1) Any medical or dental procedure requiring use of medication after the treatment.
- (2) Any medical or dental procedure requiring the use of any type of anesthesia or sedation.
- (3) Treatment by mental health professionals, including but not limited to psychological, social, psychiatric, alcohol, or substance abuse counseling.
- (4) Any chiropractic or osteopathic manipulative treatment.
- (5) Any treatment given by a homeopath, naturopath, herbalist, or practitioner of other types of alternative medicine.
- (6) Any emergency room or urgent care visits.

c. The aeromedical provider will—

(1) Keep the aviation unit commander informed of the health of the command as it pertains to aircrew and unit readiness, recommend flight restrictions when applicable, and ensure that aviation unit personnel are familiar with the physiological limitations of flying found in TC 3–04.93.

(2) Participate in the unit safety program including the steering committee and instruction of aircrew on aeromedical and flight environmental topics.

(3) Make provisions of this regulation known and readily available for all supported flight personnel.

5. Records management (recordkeeping) requirements

The records management requirement for all record numbers, associated forms, and reports required by this regulation are addressed in the Army Records Retention Schedule-Army (RRS–A). Detailed information for all related record numbers, forms, and reports are located in ARIMS/RRS–A at <https://www.arims.army.mil>. If any record numbers, forms, and reports are not current, addressed, and/or published correctly in ARIMS/RRS–A, see DA Pam 25–403 for guidance.

6. General

a. Aircrew members must have optimal physiological and psychological fitness in order to perform their duties safely and efficiently. The term aircrew, or aircrew members, applies to any individual involved in the flight operation of aircraft, to include all non-rated crewmembers, air traffic controllers, unmanned aircraft systems operators, and Department of the Army Civilian personnel and contractors. The provisions of this regulation will apply regardless of flight activity category or readiness level.

b. Apart from pathological conditions, fitness may be adversely affected by a variety of exogenous factors, the effects of which may be hardly perceptible and, therefore, negligible in everyday activities; however, these same factors may have a considerable effect on aircrew efficiency.

c. In those instances where an aeromedical provider is not assigned to a unit or installation, or is otherwise not immediately available, a physician may return aircrew members to flight duty after remote consultation with an aeromedical provider. This clearance will be recorded in the medical record and on the DD Form 2992 (Medical Recommendation for Flying or Special Operational Duty).

d. Aeromedical providers will not serve as their own primary care managers. Aeromedical providers on flight status shall not aeromedically clear themselves for flying duty. Should another aeromedical provider not be available for this purpose, clearance may be performed remotely, as described in paragraph 6c above.

7. Exogenous Factors

Factors to consider and appropriate medical restrictions to flying activities include, but are not limited to—

a. *Administration of medications.*

(1) *Medication Use.* Use of medications will be with the knowledge of an aeromedical provider. Aircrew members taking any medications will be restricted from flying duties until convalescence and/or rehabilitation is completed, unless cleared for flying duties by an aeromedical provider. Self-medication is permitted only in accordance with the over-the-counter medication aeromedical policy letter (APL). The most recent APL is available at <https://vfso.rucker.amedd.army.mil> or <http://www.rucker.amedd.army.mil/tools/links.html>.

(2) *Anesthesia.* Aircrew will be restricted from flying duty for 48 hours after general, spinal, or epidural anesthesia or conscious sedation, and for a minimum of 12 hours after local or regional anesthesia, to include dental.

b. *Use of dietary supplements, herbal and dietary aids, and performance enhancers.* All supplements, herbal and dietary aids, preparations, and performance enhancers are prohibited unless cleared by the aeromedical provider in consultation with applicable APLs.

c. *Alcohol.* Aircrew will not perform aviation duties for a minimum of 12 hours after the last drink consumed and until no residual effects remain.

d. *Immunizations.* Medical restriction from flying duty will be for a minimum period of 12 hours following any immunization. If any type of reaction occurs, local or systemic, the aircrew member remains restricted from flying duties until cleared by an aeromedical provider.

e. *O-chlorobenzylmalonitrile/tear gas exposure.* Aircrew will not be restricted from flying duties after exposure as long as there are no residual systemic effects (for example, coughing, wheezing, or shortness of breath), and all local effects (for example, tearing, eye pain, skin discomfort) have resolved and any contaminated clothing or aviation life support equipment has either been exchanged or decontaminated. Exposure to any other nuclear, biologic, or chemical agent or simulant will require clearance from an aeromedical provider before flight duties can be resumed.

f. *Blood or plasma donation.* Aircrew members will not be regular (more than two times per year) blood or plasma donors. Following blood donation (200 cubic centimeters or more), aircrew members will be restricted from flying duty for a period of 72 hours. Following plasma donation, aircrew members will be restricted from flying duty for a period of 24 hours. Bone marrow donors will be cleared by an aeromedical provider prior to returning to flight duties.

g. *Decompression experience/hypobaric chamber runs.*

(1) Any adverse reaction, barotraumas, or decompression sickness resulting from a decompression experience, requires restriction from flying duties until cleared by an aeromedical provider.

(2) Flight personnel will not perform high altitude flight duties for 24 hours after exposure to hypobaric chamber runs in excess of 25,000 feet. They may perform flying duties during the initial 24 hours following a decompression experience in aircraft where cabin altitude does not exceed 10,000 feet. Heavy exercise or work may mimic the signs and symptoms of decompression sickness and are discouraged in the 24-hour period following a decompression experience.

h. *Diving and hyperbaric exposure.*

(1) Aircrew members will not fly or perform low pressure altitude chamber flights within 24 hours following self-contained underwater breathing apparatus (SCUBA) diving, compressed air dives, or hyperbaric chamber exposures. When urgent operational requirement dictates, aviation personnel may fly within 24 hours of SCUBA diving provided no symptoms of decompression sickness have developed and the aircrew members are examined and cleared to perform flying duties by an aeromedical provider (or provider trained in diving medicine/diving medicine officer).

(2) Following underwater escape/Helicopter Emergency Egress Device training, aircrew members may fly within 24 hours provided the aircraft's maximum altitude (or cabin altitude) remains below 10,000 feet above mean sea level.

(3) Decompression sickness, resulting from diving or other hyperbaric exposure, requires a restriction from flying duties by an aeromedical provider.

i. Tobacco. Smoking and use of tobacco products degrade physical performance, including vision. Aircrew members are discouraged from smoking and using tobacco products at all times.

j. Strenuous physical activities. Strenuous training events, sporting activities, or work may adversely affect the ability of aircrew members to perform their respective flight tasks safely. Aeromedical providers must recognize when this occurs, or is likely to occur, and advise commanders as to any restrictions applicable either to units or individuals. Examples of strenuous training events or work include, but are not limited to, those listed in ATP 4–25.12 and GTA 05–08–012.

k. Simulator training. Under ordinary circumstances, restrictions on actual flight are not required after simulator training, provided there are no symptoms of simulator sickness. Simulator sickness can occur in any aircrew, regardless of experience level. Aircrew exhibiting symptoms of simulator sickness will be restricted from actual flight for 12 hours after full resolution of symptoms.

l. Centrifuge runs. Centrifuge runs may adversely affect aircrew due to the physical strain of high G-load and sensory disturbance. Aircrews are restricted from all flying duties for a minimum of 6 hours after centrifuge runs and until no residual effects remain.

8. Vision

a. Corrective Lenses. Aircrew members requiring corrective lenses in order to achieve 20/20 vision will be restricted from flying duties unless they are wearing either spectacle or contact lenses which provide 20/20 vision, near and far vision bilaterally. Aircrew members will use contact lenses only as specified in the Contact Lens APL.

b. Ocular medication use. Aircrew members will be restricted from flying duties for 24 hours (or as otherwise specified by an aeromedical provider) following dilated eye exams or use of ocular cycloplegic, mydriatic, or miotic agents.

Appendix A

References

Section I

Required Publications

This section contains no entries.

Section II

Related Publications

A related publication is a source of additional information. The user does not have to read a related reference to understand this publication.

AR 11–2

Managers' Internal Control Program

AR 25–30

Army Publishing Program

AR 40–501

Standards of Medical Fitness

ATP 4–25.12

Unit Field Sanitation Teams

GTA 05–08–012

Individual Safety Card

NATO STANAG 3474

Temporary Flying Restrictions Due to Exogenous Factors Affecting Aircrew Efficiency (available at <https://nso.nato.int/nso/>)

TC 3–04.93

Aeromedical Training for Flight Personnel

Section III

Prescribed Forms

This section contains no entries.

Section IV

Referenced Forms

Unless otherwise indicated, DA forms are available on the Army Publishing Directorate (APD) website (<http://armypubs.army.mil>); DD forms are available on the OSD website (www.dtic.mil/whs/directives/forms/index.htm); and standard forms (SF) are available on the U.S. General Services Administration website (<https://www.gsa.gov/portal/forms/type/sf/>).

DA Form 11–2

Internal Control Evaluation Certification

DA Form 2028

Recommended Changes to Publications and Blank Forms

DD Form 2992

Medical Recommendation for Flying or Special Operational Duty

Appendix B

Internal Control Evaluation

B-1. Function

The function covered by this evaluation is aviation medicine.

B-2. Purpose

The purpose of this evaluation is to assist commanders and aeromedical providers in evaluating key internal controls listed below. It is not intended to cover all controls.

B-3. Instructions

Answers must be based on the actual testing of internal controls (for example, document analysis, direct observation, sampling, simulation, other). Answers that indicate deficiencies must be explained and the corrective action identified in supporting documentation. These internal controls must be evaluated once every three years. Certification that the evaluation has been conducted must be accomplished on DA Form 11-2 (Internal Control Evaluation Certification). This form is available on the Army Publishing Directorate website.

B-4. Test Questions

- a.* Have unit commanders established, in writing, an Aviation Medicine standard operating procedures (SOP) that addresses crewmember compliance with AR 40-8?
- b.* Have aeromedical providers established a written Aviation Medicine SOP that addresses crewmember compliance with AR 40-8?
- c.* Do medical providers conduct a review of crewmembers' medical histories to determine compliance with AR 40-8 and issue a DD Form 2992 accordingly when temporary or permanent restriction from flying duties is required?
- d.* Does the U.S. Army Aeromedical Activity review information contained within the Aviation Electronic Resource Office (available at <https://vfso.rucker.amedd.army.mil>) and/or service treatment records to ensure crewmember compliance with AR 40-8?
- e.* Does the Dean, School of Army Aviation Medicine ensure that the Aviation Medicine functional area of the Aviation Resource Management Survey (ARMS) is conducted on all aviation units in concert with the Forces Command ARMS every 24 to 36 months?

B-5. Supersession

Not applicable.

B-6. Comments

Help make this a better tool for evaluating internal controls. Submit comments to Office of the Surgeon General, 7700 Arlington Boulevard, Falls Church, VA 22042-5140.

Glossary

Section I

Abbreviations

AME

aviation medical examiner

AMNP

aviation medicine nurse practitioner

AOC

area of concentration

APA

aeromedical physician assistant

APL

aeromedical policy letter

ARMS

Aviation Resource Management Survey

FS

flight surgeon

SCUBA

self-contained underwater breathing apparatus

SOP

standard operating procedures

TSG

The Surgeon General

Section II

Terms

This section contains no entries.

Section III

Special Abbreviations and Terms

This section contains no entries.

UNCLASSIFIED

PIN 000503-000