

OPHTHALMOLOGY WAIVERS

CONDITION: CONTACT LENS WEAR (ICD 9- None)

Revised June 2002

AEROMEDICAL CONCERNS: The use of non-medical soft contact lenses poses no significant medical risk in the aviation environment while supervised by the military optometrist or ophthalmologist and unit flight surgeon. Contact lenses may introduce certain operational and medical risks and cannot be worn by everyone all of the time. Some personnel may not be able to meet visual standards with contacts and, therefore, would be required to wear spectacles only. Complications of contact lens wear, e.g. corneal abrasion, corneal ulceration, infection, and transient or permanent loss of vision, can be detrimental in the aviation environment. Appropriate contact lens fit and visual acuity correction, at both distance and near, are required for safe flight operations.

WAIVERS:

Initial Applicants:

Class 1A/1W: Contact lens wear will be recorded as Information Only on the initial FDME. Contact lens wear is allowed while in student status in Initial Entry Rotary Wing (IERW) training and Advanced Aircraft Qualification Courses (AQC) if visual standards are met and appropriate contact lens evaluation is performed as below.

Class 2/3/4: Contact lens wear will be recorded as Information Only. There are no restrictions on contact lens wear while in student status.

Rated Aviation Personnel (All Classes): Contact lens wear will be recorded as Information Only and documentation of annual follow-up as listed below must be made on the FDME.

NOTE: Currently, contact lens wear is not required to operate any Army aircraft, as such, the purchase, examination, follow-up care, and supply costs may all be at the aircrew member's own expense. All aviation personnel wearing contact lenses must be correctable to at least 20/20⁻¹ visual acuity, at both distance and near in each eye, during contact lens wear. The use of monovision contact lenses, hard contact lenses, or bifocal contact lenses is not authorized for flight operations. The use of contacts while flying does not preclude the requirement, for all aviation personnel required to fly with corrective lenses, to carry one pair of corrective spectacle lenses on their person while performing aviation duties. An additional (second) pair of corrective spectacle lenses must be kept either on their person or in the flight bag accompanying the flight. It is strongly encouraged that the individual units ensure personnel train in both contact lenses and spectacles to maintain proficiency flying with their spectacle prescription. If a near prescription is required for presbyopia, the aircrew member must utilize the prescription that affords them 20/20⁻¹ vision at both distance and near in each eye while performing aviation duties. It is highly advised that any personnel wearing contacts for the first time wear the contacts successfully for a minimum of one month's time prior to flight

operations, flight duties, or air traffic control duties to ensure there are no unforeseen complications, eye health concerns, or safety risks.

INFORMATION REQUIRED: On the initial FDME or the first FDME listing contact lens wear, the following information must be submitted:

- Current contact lens parameters: brand, base curve, diameter, and power,
- Visual acuity with lens wear: both distance and near for each eye,
- Slit-lamp examination (noting fit, centration, and movement of contact lenses),
- Presence / absence of contact lens related complications; and,
- Keratometry readings for each eye .

FOLLOW-UP:

All aircrew using contact lenses will have a yearly eye exam to ensure adequacy of function and fit, physiological compatibility, and to monitor for complications. The following information must be included with the annual FDME:

- Current contact lens parameters: brand, base curve, diameter, and power,
- Visual acuity with lens wear: both distance and near for each eye,
- Slit-lamp examination (noting fit, centration, and movement of contact lenses); and,
- Presence / absence of contact lens related complications.

Both the initial contact lens evaluation or any follow-up evaluation may be recorded on a Standard Form 600 (SF 600, Chronological Record of Medical Care) or any locally produced medical record form. In addition, the information should be entered on the annual FDME to ensure receipt at AAMA and correct documentation.

DEPLOYMENT REQUIREMENTS: Aviators must train in the same manner as they fight. Aircrew members subject to deployment are responsible for maintaining the following in their personal equipment bag:

- Two pair of clear and one pair of tinted (“sunglass”) spectacles with current prescription achieving at least 20/20⁻¹ at both distance and near in each eye.
- If aircraft requires the use of an optical device (currently the AH-64 A/D and the RAH-66), one (1) pair of spectacles, adequate for accommodating the optical device, should be maintained in lieu of one of the clear pair of spectacles stated above, if a different or special frame is needed.
- If specifically required by the unit mission, the individual should also maintain one (1) pair of KG-5 laser lenses, with the current spectacle prescription achieving visual standards for flight (these are not intended for wear over contact lenses and are only available in the military-issued “Apache frame”).
- Aircrew members who wear soft contact lenses that are not disposable, should maintain two spare sets of soft contact lenses, sealed in their original containers and clearly labeled for left and right eyes (labeling only necessary if the prescription is not the same in each eye). Aircrew members with disposable soft contact lenses should keep an additional 12 pair of soft contact lenses, in addition to their normal 24-week supply.

- One spare case for disinfecting soft contact lenses; one spare, sealed case (no vent) for temporary storage and transportation; at least three months and preferably six months current supply of disinfecting solutions. Also, if required per prescribed cleaning regimen, three to six month's current supply of enzymatic solutions, rewetting drops, artificial tears, and/or special cleaners, whichever apply.

TREATMENT: Aircrew members using contact lenses are encouraged to seek medical evaluation for even the most minor eye symptom.

DISCUSSION: The following points should be considered in selecting aircrew to use routine non-medical contact lenses:

- Not all aircrew can be successfully fitted with contact lenses. Therefore, contact lens use should always be considered optional.
- Individuals must meet all vision standards while wearing contact lenses.
- Contact lens wearers should achieve at least 8 hours per day of comfortable and successful lens wear.
- Individuals must be free from eye disease and infections that contraindicate contact lens use.
- Individuals must be available for follow-up care for a minimum of one month after initial contact lens fit to monitor the personal and operational efficacy of their contact lenses and report complications to the Flight Surgeon immediately.
- It is recommended that the unit flight surgeon/APA office maintain records on all of the active aircrew wearing contact lens to include contact lens parameters, spectacle back-up prescription data, and contact lens related complications.
- Aircrew should be proficient in removing contact lenses in flight with or without gloves.
- Contact lens wear may be considered for aviation personnel regardless of aircraft type.

With regard to contact lens selection, the following guidelines are provided:

- Darkly tinted contact lenses or lenses to achieve cosmetic alteration of iris colors are not approved, even if the color of the contact is the same natural color of the eye. This can act as a selective waveband filter or a limitation of field of view and can adversely affect color perception or peripheral viewing, respectively. However, a light tint regarded as a "visibility tint" to facilitate location of a dropped contact lens is recommended.
- Monovision fitting with contact lenses is not approved. Such fitting techniques are known to acutely degrade stereopsis, contrast sensitivity, and target acquisition. In non-presbyopes, both eyes must be bilaterally corrected for both distant and near vision at the same time. If reading correction is required this should be provided with a spectacle with the appropriate reading add as a bifocal segment.

- Bifocal and multifocal contact lenses are not approved. Such lenses are difficult to fit, costly, and depend too critically on lens position to achieve optimal visual performance.

With regard to operational Contact lens issues:

- Contact lenses should be worn primarily on a daily-wear basis (no more than 16 hours per day). A minimum of six to eight (6-8) hours of time without contacts is recommended between periods of contact lens wear. Wear during sleep is highly discouraged as it can lead to oxygen deprivation of the cornea. If operational conditions preclude removal, remove the contact lenses for cleaning at first opportunity in order to minimize the risk of complications.
- Aircrew must be advised of the need to maintain the highest possible standard of lens hygiene. Smoking cessation is strongly recommended for all contact lens wearers to reduce the incidence of serious complications. The potential hazards of contact lens use should be explained by both the consulting optometrist/ophthalmologist and the Flight Surgeon.
- Dislocation or loss of a contact lens while flying is a definite possibility. It is highly advised that aircrew become proficient in removing contact lenses in flight in case one becomes dislodged or the need arises in which contacts must be removed. Should a contact lens dislocate or fall out of the eye, it is usually best to immediately remove the other contact lens and utilize the carried spectacle correction. However, safety and pilot judgment always take precedence in these situations to maneuver the aircraft in the safest manner possible.

REFERENCE: AR 40-63, Ophthalmic Services, January 1986.