

**Administrative Remarks  
NAVPERS 1070/613**

Ship/Station: Navy ROTC Unit, University of Washington, Seattle, WA

**Elective Surgery Acknowledgement**

I \_\_\_\_\_ (Last, First MI), am aware that elective surgery requires pre-authorization and counseling by my Chain of Command regarding the impact this decision may have on commission and participation in the NROTC program, and if I have an unexpected outcome, or complications from an elective procedure which result in me being medically disenrolled, unable to commission or fulfill active enlisted service, I will be held liable for repayment of all scholarship and stipend costs.

If I have any of the following elective surgeries performed while a midshipman: bariatric surgery, other weight loss surgeries, Nuss bar or other hardware for cosmetic correction of pectus excavatum, or placement of intraocular contact lenses, I will be medically disenrolled and responsible for payment of the entirety of my scholarship and stipend costs.

I am aware that many elective surgeries will result in Medical Leave of Absence (MLOA) until the recovery period is complete and I either 1) meet the physical standards or 2) meet the criteria for a waiver of the physical standards for continuation in the NROTC program.

I also acknowledge that I have read Enclosure (1) {See next pages} [PRK/LASIK Guidelines prior to this elective surgery]. I will not be physically qualified for aviation duty for 6 months following this surgery. Summer cruise/OCS training requirements post PRK/Lasik surgery:

- a. Navy/Marine option MIDN: minimum of 3 months post op to go on summer cruise.
- b. Marine OCS candidates: minimum of 6 months post op to go to OCS.

\_\_\_\_\_  
Midshipman's Signature

\_\_\_\_\_  
Date

WITNESS: \_\_\_\_\_

\_\_\_\_\_  
Date

_____	_____	_____
Last	First MI	XXX-XX- USNR/USMCR

## 12.15 CORNEAL REFRACTIVE SURGERY (PRK/LASIK)

Last Revised: APR 15 Last Reviewed: APR 15

### AEROMEDICAL CONCERNS:

#### Definitions:

**Corneal Refractive Surgery (CRS):** A laser is used to reshape the anterior corneal surface reducing refractive error and reliance on spectacles or contact lenses. A “wavefront-guided” (WFG) or “custom” procedure uses wavefront analysis technology, and may improve the visual outcome of the procedure.

**Photorefractive Keratectomy (PRK) or Laser-Assisted Epithelial Keratectomy (LASEK):** Laser energy is applied to the anterior corneal surface after the epithelium is temporarily displaced or removed. No corneal flap is created. PRK variants include LASEK (epithelium is preserved), and Epi-LASIK (epithelial flap is created). Pain can be moderate to severe, and visual recovery can take months.

**Laser in-situ keratomileusis (LASIK):** A cornea stromal flap is created with a surgical blade or infrared laser after which, an excimer laser is used to reshape the exposed corneal stroma. The corneal flap is then repositioned. Pain is minimal and vision recovery is much faster than PRK.

**All forms of refractive surgery are disqualifying for aviation duty, but waivers are readily granted if the member meets all waiver guide policy guidelines.** Designated members who undergo refractive surgery shall be grounded at the time of surgery, but a grounding physical is not required. Designated members shall not return to flight duty until a Local Board of Flight Surgeons (to include one eye provider) recommends a waiver via an Aeromedical Summary (AMS) and issues a ninety-day temporary aeromedical clearance notice.

**Both PRK and LASIK are waiverable at this time (see specific sections below).**

**All other forms of refractive surgery**, or any vision or corneal manipulation or surgery, including RK (radial keratotomy), LTK (laser thermal keratoplasty), ICR (intracorneal ring), ICL (intraocular corrective lens), and clear lens extraction, are **permanently disqualifying (CD/WNR)** for all aviation duty Class I, II and III personnel. The prior use of orthokeratology (rigid contact lens corneal reshaping) is NCD provided that it is permanently discontinued prior to obtaining flight status and all appropriate refractive standards are met with stable topography.

### PRK AND LASIK GENERAL GUIDELINES (applicants and designated personnel)

1. Post-operatively, the member must still pass all MANMED vision standards for their class or applicant status, and must wear corrective lenses while flying, if required, to achieve the vision standard.
2. Refractive stability and a satisfactory postoperative slit lamp exam are required. Trace, stable, peripheral haze that is not visually significant, is not a hindrance to waiver. Brightness acuity testing is required for any corneal haze.
3. There must be no symptoms or conditions that would be cause for concern during flight duties, including, but not limited to: post-operative discomfort requiring ongoing care, moderate or severe dry eye requiring the use of artificial tear drops more than 4 times per day or punctal plugs, recurrent corneal erosions, or visually significant glare, haloes or starbursts.
4. A subsequent PRK or LASIK enhancement or “touch-up” must meet the same timeframe and clinical guidelines, and requires a second waiver submission package and AMS.
5. Wavefront-guided LASIK (“Custom LASIK”) is preferred in aviation personnel, as custom treatment may increase visual acuity and final vision outcomes, but in no way is required for a waiver recommendation, as not all patients are candidates for custom treatments. LASIK may reduce the risk of significant haze symptoms, which can occur after PRK. LASIK also reduces the operational down-time before a waiver application may be submitted for designated aviation personnel. The final decision of performing PRK or LASIK is made by the operating ophthalmologist with the patient’s informed consent.
6. Copies of pre-operative, and post-operative examination paperwork, including the laser treatment reports, are required for waiver considerations. NAMI may request additional information as deemed medically necessary to make a waiver determination.
7. For PRK and LASIK waiver renewal, submission is as stated in the member’s BUMED waiver letter. All new refractive surgery waiver approvals will usually only require routine five-year submission.

#### Applicants only:

1. **Applicants** may not have more than 3D of pre-operative cylinder and 3.5D of pre-op anisometropia, and must satisfy the above general guidelines, as well as the following guidelines:
  - a. **SNA applicants** shall not exceed pre-operative refractive limits of +3.00 to -8.00 (SE) for either PRK or LASIK, and must additionally have a post-operative cycloplegic refraction using cyclopentolate performed at a military installation.
  - b. **Class II & III applicants:** pre-operative refractive error shall not exceed +6.00 to -8.00 (SE) for PRK or LASIK.
  - c. **Civilian applicants** must obtain PRK or LASIK at their own expense at a civilian refractive surgery center. DoD instruction 6130.03, enclosure 4, requires a six month minimum wait time before submitting LASIK or PRK waiver requests for civilian accessions. All paperwork and operative reports must be available and submitted for waiver consideration.
  - d. **Active duty applicants** with a normal and stable post-operative course who are applying for aviation programs (i.e. STA-21, UAV operator, NFO/SNFO to SNA transition, etc.), may be considered for waivers at 3 months, with due consideration for all MANMED and ARWG policies and guidelines.
  - e. **Active duty applicants** may have astigmatism correction up to 6D of cylinder, per FDA limits on the respective laser platform utilized. ***Programs leading to a commission must still adhere to the 3D cylinder limit.***
  - f. **Active duty aviation students** (SNA, SNFO, etc.) who are authorized to undergo refractive surgery by the aviation training command may be considered for waivers at 3 months. Active duty members require treatment at a military refractive surgery center. Aviation students may have astigmatism correction up to 6D of cylinder, per FDA limits on the respective laser platform utilized.

**Active duty aviation personnel only:**

Designated aviation personnel must satisfy all the above general guidelines and the following guidelines:

1. A PRK waiver request may be submitted after the following wait periods:
  - a. myopia -6.00 diopters or less spherical equivalent (SE): 3 months
  - b. myopia greater than -6.00 diopters SE: 6 months
  - c. hyperopia SE: 6 months
2. A LASIK waiver request may be submitted after the following wait periods:
  - a. myopia correction up to -11.5D SE: 2 weeks
  - b. hyperopia up to +4D SE: 4 weeks
  - c. hyperopia greater than +4D SE and up to +6D SE: 8 weeks
3. If still requiring prescription topical medication (artificial tears, or cyclosporine drops excluded) then restriction of flight activities to the local area is recommended.
4. Class I aviators, specifically, must undergo PRK or LASIK treatment at one of the USN designated refractive surgery centers which have Navy ophthalmology staffing (includes Tripler AMC, Keesler AFB, or Wilford Hall). Check for a current listing if considering a non-Navy facility since staffing may change.
5. Class II, III, and other active duty flight personnel (e.g. UAV personnel, select passengers) may undergo PRK or LASIK at any DoD refractive surgery center.
6. For PRK, pre-operative refractive limits are per the FDA limits for the particular refractive laser platform utilized, for already designated personnel within their aviation class. For LASIK, waivers may be granted for myopia up to -11.5D spherical equivalent (SE), hyperopia up to +6.00D (SE), and up to 6D of cylinder (astigmatism correction).
7. For both PRK and LASIK, the PRK AMS template (available on the NAMI waiver guide website) may serve as a Local Board of Flight Surgeons, requiring review and endorsement by two flight surgeons, plus an eye care provider (military optometrist or military ophthalmologist), and commanding officer cognizance. A ninety-day aeromedical clearance notice may be issued at that time, pending BUPERS waiver approval. Submit the AMS and waiver package immediately to NAMI to avoid unnecessary delays in obtaining BUPERS final approval.
8. No deployment for at least three months following PRK and one month following LASIK surgery (per NAVMED POLICY 08-008, dtd 10 JUN 2008). Post-operative operational training requirements (such as CS gas, pepper spray, water survival training, etc.) may be performed per ophthalmologist guidance.

**Select Reserve designated aviators:**

Reservists must satisfy all the above general guidelines and the following guidelines:

1. May obtain PRK or LASIK at their expense from civilian sources of care.

2. A pre-operative evaluation is strongly encouraged to be submitted to NAMI Ophthalmology before corneal refractive surgery is performed. Contact NAMI Ophthalmology at 850-452-2933 or NOMI-EyeDept@med.navy.mil.
3. Final approval to proceed with PRK or LASIK requires written permission from the unit commander and unit flight surgeon.

#### **REFRACTIVE SURGERY DISCUSSION:**

The goal of corneal refractive surgery is to reduce or eliminate dependence on spectacles or contact lenses, which can be bothersome at times while flying. Refractive surgery has been studied extensively in the aviation environment and has yielded highly satisfying results. More than 95% of Naval Aviators reported "increased effectiveness" after undergoing refractive surgery.

Wavefront guided (WFG), or "custom" refractive surgery has been evaluated by the Naval Refractive Surgery Center and yielded results that are superior compared to conventional treatment. Based on this analysis, aviation personnel should undergo a wavefront-guided or custom procedure, if at all possible. Some patients are not candidates for a wavefront-guided treatment or LASIK for various reasons, and conventional or PRK treatment remain viable options.

As with any surgical procedure, there are inherent risks, such as quality of vision deficits (e.g. halos and glare at night), haze, flap complications and persistent eye discomfort (e.g. dry eye or recurrent erosions). A detailed description of the risks, benefits, and alternatives should be discussed and consented between the patient and their refractive surgeon.

Undergoing PRK or LASIK does not guarantee qualification for aviation. The member must meet pre-operative standards in MANMED and this waiver policy guide. Post-operatively the applicant must meet all MANMED vision standards appropriate to their aviation class.

When obtaining corneal refractive surgery it is incumbent upon the member and the member's commanding officer and flight surgeon to be aware of corneal refractive surgery waiver recommendations at the time of the surgery and subsequent submission. Rapidly evolving technology results in changes to waiver guidelines when appropriate. Every effort will be made to publish new regulations widely, but the only valid source of current recommendations shall remain the Manual of the Medical Department. When in doubt, NAMI ophthalmology remains available for consultation through phone or email: 850-452-2933; [NOMI-EyeDept@med.navy.mil](mailto:NOMI-EyeDept@med.navy.mil)

#### **ICD-9 CODES:**

**P1177/H1177 PRK**

**P1171/H1171 LASIK**