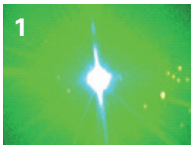
AVIATION LASER EXPOSURE
SELF-ASSESSMENT (ALESA)

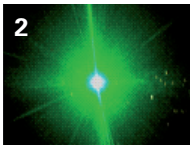
Civil Aviation Authority

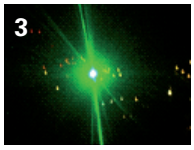
This self-assessment is designed to aid pilots, air-traffic controllers, or flight crew members who have been exposed to a laser beam in making a decision on whether or not to see an eye specialist.

The eye specialist may be either an optometrist or ophthalmologist. It is extremely unlikely that a laser beam exposure will result in permanent eye damage. Eye discomfort and irritation during the exposure is common and rubbing your eye can result in an abrasion that may be painful.

If you have experienced one or more of the following after a laser beam exposure please consult an eye specialist: Eye problems – swelling, pain, itching, watering, discharge, dryness or redness of the eye. Visual disturbance – blurring, black spot, trouble reading, loss of peripheral vision, floaters, halos, poor night vision, sensitivity to light. These symptoms may not appear until hours after the incident and may not be related directly to laser exposure but could reflect other eye issues perhaps not previously noticed.





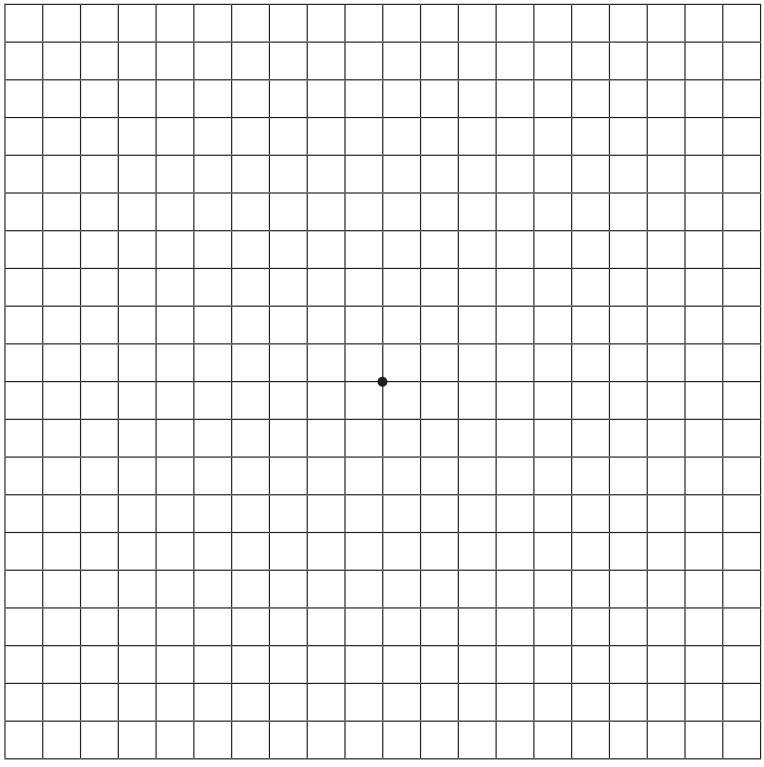


1. Flash blindness
   A visual impairment during and after exposure to a very bright light. It may last for seconds or minutes.
2. Glare
   Difficulty seeing in the presence of a bright light.
3. Distraction
   A light bright enough to disrupt attention.

While viewing the grid from 30cm in front of your eyes, please test one eye at a time to answer the following questions:

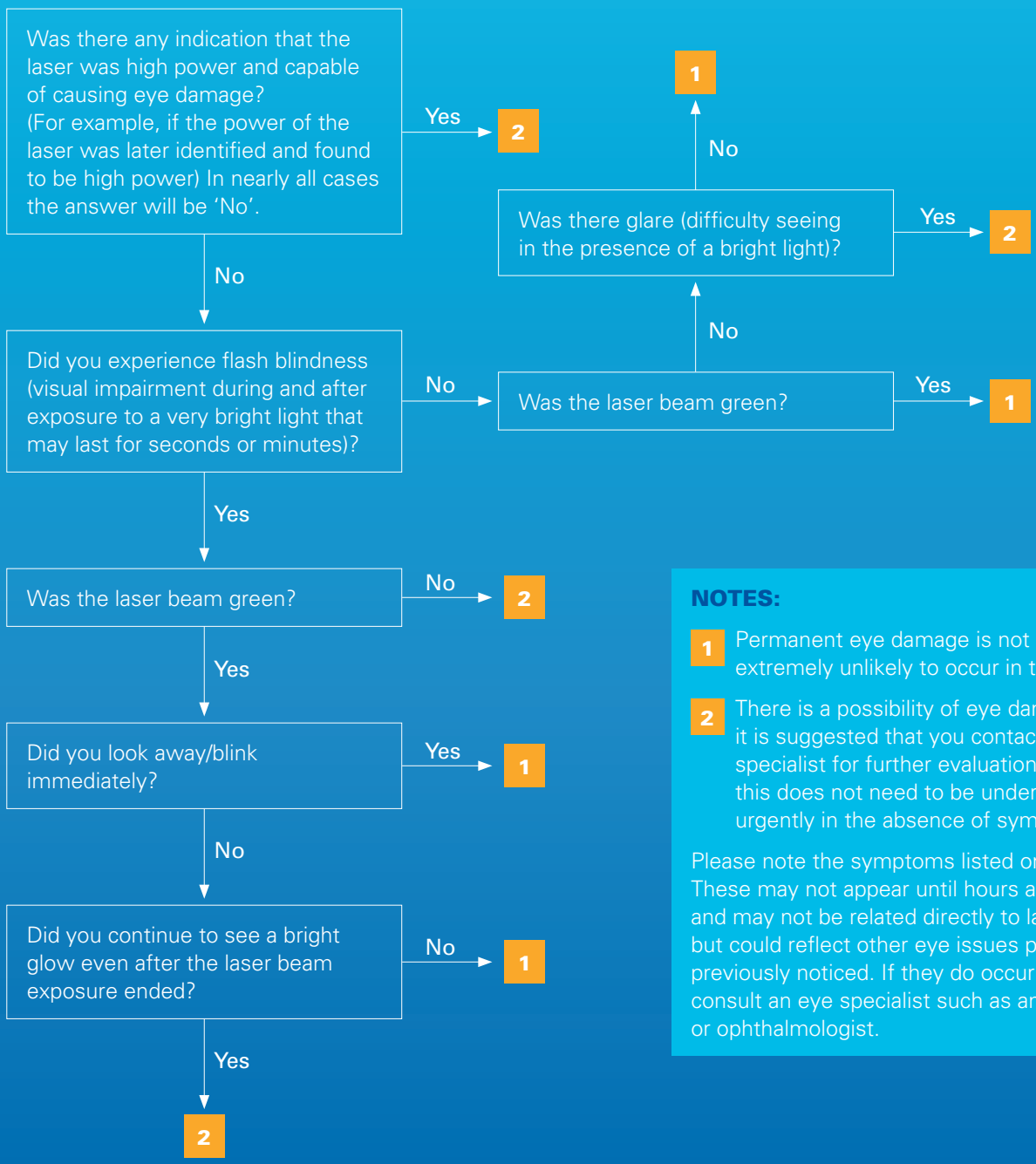
1. Can you see a dot in the centre of the grid?
2. While looking at the centre dot, can you see all four sides and corners of the grid?
3. While looking at the centre dot, do all of the lines appear straight with no distortions or blank or faded areas?

If you answered **YES** to all three questions then please turn to page 2. If you answered **NO** to any of the above questions then you may wish to remove yourself from flying or controlling duties as soon as it is safe to do so and consult an eye specialist.



The dimensions of the grid should be 10cm x 10cm.

In some circumstances it may be possible to have retinal damage without obvious symptoms. The relevance of this is uncertain in the absence of abnormal visual signs (e.g. answering "yes" to all three Amsler Grid questions on page 1) as it is unlikely to have an operational impact or be amenable to treatment. The following is designed to aid a pilot or ATCO in deciding whether or not an assessment should be sought with an optometrist or ophthalmologist after an exposure.



NOTES:

1. Permanent eye damage is not known or is extremely unlikely to occur in this situation.
2. There is a possibility of eye damage and it is suggested that you contact an eye specialist for further evaluation although this does not need to be undertaken urgently in the absence of symptoms.

Please note the symptoms listed on page one. These may not appear until hours after exposure and may not be related directly to laser exposure but could reflect other eye issues perhaps not previously noticed. If they do occur then please consult an eye specialist such as an optometrist or ophthalmologist.

For further information, the British Airline Pilots Association (BALPA) have produced an advisory information sheet which will be available on their website www.balpa.org.