

## Risk Assessment

*Number:* ST04

*Performed by:* Stephen Tonkin

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*Review Period:* Annual

### **Title: Astronomical Use of Laser Pointers**

*Affected persons:* All persons on observing site, aircrew and passengers on aircraft in vicinity of observing site.

*General precaution:* Consider using a focusable white-light LED torch in preference to a laser. At public events, only one club member at a time will use a laser pointer. It is a condition of attendance that members of the public do not use laser pointers at Fordingbridge Astronomers events.

*Hazard:* Laser being pointed at an aircraft.

*Risk:* Air accident resulting from laser being pointed at aircraft.

*Control:* On each occasion before a laser is activated the user must:

- Perform a visual check of the sky for aircraft lights
- Ask others present if they can see any aircraft lights

If aircraft or their lights are visible, or if there is any uncertainty whether a light is an aircraft or a satellite, the laser must not be used.

*Hazard:* Laser used for public instruction being pointed at someone's eye.

*Risk:* Eye injury; temporary or permanent blindness.

*Control:* When a laser is being used to point out objects in the sky, before the laser is activated the user must:

- Hold the laser above head height.
- Ensure that it is pointing upwards.

*Hazard:* Laser used as an astronomical finder being pointed at someone's eye.

*Risk:* Eye injury; temporary or permanent blindness.

*Control:* When the laser is being used as a finder for telescope or binoculars, before the laser is activated the user must:

- Ensure that nobody is in or near the intended beam of the laser.
- When targeting objects near the horizon, ensure that no potentially occupied structure is in or near the intended beam of the laser.
- Take special care if the laser is being used with a binocular mirror-mount.

*Hazard:* Laser causing injury to wildlife.

*Risk:* Eye injury; temporary or permanent blindness.

*Control:* On each occasion before a laser is activated the user must:

- Ensure that no animal is in or near the intended beam of the laser.
- Ensure that no potential animal habitation (e.g. tree) is in or near the intended beam of the laser.