



# THE SHORELINE OBSERVER



*Newsletter for the  
Shoreline Amateur Astronomical Association*

**President-** Peter Burkey

**Vice President-** Steve Tuls

**Secretary/Treasurer-** Rob Tuls

*Robert Wade, Editor*

*July 1991*

## July Meeting

The July meeting of the Shoreline Amateur Astronomical Association will be held on Thursday, July 18th, beginning at 7:00 PM in the West Ottawa Middle School Planetarium in Holland, Michigan. The agenda will be as follows:

- 6:00-7:30 Socializing followed by a tour of the July Night Sky.
- 7:30-8:30 StarBowl Quiz and slides from the recent triple conjunction.

## 1991-1992 Dues Lowered

At our June meeting the membership voted to lower the basic club membership rate. Previously, Junior or Senior Contributing Members paid \$10/yr and Regular Contributing Members paid \$20/yr. The rates are now \$5/yr for Junior/Senior Contributing Members and \$15/yr for Regular Contributing Members. The additional cost for Full membership, which includes either *The Observers Handbook* or *Astronomy* magazine is currently \$14. Remember that membership payment for the 1991-1992 year (September-August) is due by the September meeting.

For those of you who are about to break out the Brillo pad and Ajax in order to remove the sum-

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mer's dust from your telescope mirror or lens --  
**read on!**

## Cleaning Mirrors and Lenses

by Lenny Abbey, 72277,566

This file is an elaboration of a message sent in response to a request for help on ASTROFORUM in January, 1987. It is presented as an effort to assist those who have never had occasion to perform this delicate task. The best advice on cleaning mirrors and lenses is..... *DON'T*. But if things are so bad that you must, do it as follows:

## MIRRORS

1. Blow all loose dirt off with "Dust Off" or another canned clean air product. Take care not to shake the can while you are using it, and be sure to release a little air before using it on the optical surface. This will assure that no liquid is dispensed to make things worse!
2. Prepare a *very* dilute solution of mild liquid detergent (Dawn)
3. Rinse the mirror off under a moderate stream of luke-warm water.
4. Make a number of cotton balls from a newly opened package of Johnson & Johnson sterile surgical cotton, U.S.P. Soak 2 or 3 balls in the detergent solution. Wipe the surface of the wet mirror. The only pressure on the cotton should be its own weight.
5. Throw cotton balls away.
6. Repeat process with new cotton balls, using a *little* more pressure.
7. Rinse mirror thoroughly under tap, which has been kept running for this step.
8. Rinse mirror with copious amounts of distilled water (do this no matter how clean your tap water is).
9. Set mirror on edge to dry, using paper towels to absorb the water which will all run to bottom of mirror. Keep replacing paper towels.
10. If any beads of water do not run to bottom, blow them off with Dust Off.
11. Replace mirror in cell, being careful to keep all clips and supports so loose that the mirror can rattle in the cell if it is shook. (Perhaps .5 to 1 mm clearance).
12. Spend the next month realigning your scope.
13. If you do anything more than this, you will damage the coating, and maybe the glass.

## OBJECTIVE LENSES

*Do not under any circumstances remove a lens from its cell, or the cell from the telescope. This restriction means that the above procedure must be modified. Only the front surface can be cleaned. If you remove the cell from the telescope, you will be in big trouble. There are probably not more than 25 people in this country who can effectively collimate a refractor!*

1. Blow loose dirt off with Dust-Off, using the above precautions.
2. Soak the cotton balls in a 50:50 solution of Windex and water. Squeeze slightly so that the balls are not dripping wet.
3. Wipe front lens surfaces with the wet cotton. Follow immediately with dry cotton, using little or no pressure.
4. Repeat procedure, using slightly more pressure.
5. If some cotton lint remains on surface, blow off with Dust-Off.
6. Repeat procedure if lens is not clean, but if one repeat does not do it give up and leave it as is.
7. Inspect lens to make sure that no cleaning solution has found its way into the lens cell, or between the elements. If this has happened, leave the telescope with the lens uncovered in a warm room until it is dry.

## EYEPIECES AND BARLOWS

Follow the procedure given for objective lenses, but use Q-Tips (with plastic sticks) instead of cotton balls. You may, of course, clean both surfaces. The eyebrow juice on the eye lens of eyepieces may require repeated applications. I think that this is OK in this case.

## SOME DONT'S

1. Do not use any aerosol spray product, no matter who sells it, or what their claims are.
2. Do not use lens tissue or paper. It *does* scratch.
3. Do not use pre-packages cotton balls, they frequently are not cotton.
4. Do not use any kind of alcohol.
5. Do not use plain water.
6. Do not use any lens cleaning solution marked by funny companies, like Focal, Jason, Swift, or even Edmund's. Dawn and Windex are cheap and commonly available.