



VCAS, P.O. Box 982, Simi Valley, CA 93062

WWW.VCAS.ORG

VCAS ALCor INFORMATION

Comet Club / Certificate



Comet Club Logo

Introduction:

Welcome to the Astronomical League's Comet Club. Comets are important members of our solar system, and their study is important to mankind. Comets are sometimes called "dirty snowballs". They are a mixture of ices (both water and frozen gases) and dust that for some reason didn't get incorporated into planets when the solar system was formed. This makes them very interesting as samples of the early history of the solar system.

Comet Award Levels:

Observers can receive a certificate from the Astronomical League for two different levels of observations. A [lapel pin](#) will also be awarded for the Silver Level. The levels are:

Silver Level - observe at least 12 different comets.

Comets observed and logged can be at any magnitude. Two of these comets can be observed prior to January 1, 2001, considering that all appropriate documentation is provided.

Gold Level - observe at least 18 additional comets

Comets observed and logged can be at any magnitude. Two of these comets can be observed prior to January 1, 2001, considering that all appropriate documentation is provided.

The observations can be accomplished through the use of:

- ✦ binoculars
- ✦ observatory telescope
- ✦ observer's personal telescope
- ✦ or accessible robotic telescope.

The observer can make these observations visually (eye to eyepiece) and hand sketch the comet. Or the observer can image the comet by using camera and film or by using a CCD camera.

What To Document:

Your observation log should be recorded in a notebook, hard copy print out or some other method. You can also use the observing form attached. Whatever method you use to record your observations, the following needs to be included:



Comet Hale-Bopp

- (1) Name of the observer, email and location of the observer
- (2) Date and time of observations/image and location at which the observation/image taken
- (3) Official designation of the comet and name
- (4) The size of the telescope, location of telescope, exposure length, time of exposure (UT time) and additional information, power used, etc
- (5) Documentation of observations:
 - (5a) A sketch/ drawing or CCD image or photograph. When it is a faint comet with no tail, at least two should be submitted indicating the movement of the object against the background stars. Planetarium programs may be used to indicate comet position and stars names.
 - (5b) Regarding the drawings made by the observer- The nucleus, tail and background stars (drawn as dots) should be identified and labeled especially when the comets are very faint and non-comet like (little or no tail or coma). Tick marks can indicate the direction of movement against the star background, indicating hourly/ daily move-

ment of fainter comets, to indicate movement against the stars either on a hourly basis or over two nights.
(5c) Computer based images can be submitted on 3.5-inch floppy diskette, CD, or ZIP disc in jpg, gif, or tiff format or on a html page, word document, etc. Images can be inverted (a negative exposure) if it brings out more detail in the comet. The name of a electronic file should indicate the common name of the comet and/or letter designation and date photographed-month/date/year (example, Ikeya-Zhang2001c10402).
(5d) Each photograph/image should be numbered and identified appropriately in the log/journal (ex. cometlin-earwm1112001.jpg)
(5e) Photographs/Images can be printed out and included with the journal/log either background sky as dark with stars and comet white on black or an inverted image (black on white). An option is place the images on an html page, PowerPoint or other multimedia product on a ZIP disc or 3.5-inch floppy diskette. Appropriate documentation of the files and application used should be also sent.
(5f) While comets are quite noticeable because of the coma/tail, two or more observations should be used to verify the motion and identity of the comet that is dimmer than 6th magnitude and/or does not have a noticeable tail or coma.

Program Rules:

The rules for obtaining a Comet Award as follows:

- Be a member of the Astronomical League, through either VCAS or as a member-at-large.
- Observe comets as a group or individually.
- Each observer should keep his or her own data on the report form or own log system.
- The completed observing report should include the following submission/index information: Observer's Name, Observer's E-mail address, Address of observer, and a listing of the comets included in the final submitted report.
- To receive either the silver or gold comet observer award, log copies and all the above listed information must be sent to Dr. Eric Flescher, for verification at:

Dr. Eric Flescher
Comet Observers Club
15016 W 150th Street
Olathe, KS 66062
Phone: (913) 780-5902; E-mail: KCStarguy@aol.com

If you need any assistance with the observations or submission process, feel free to contact the VCAS ALCor through VCAS or at :

Tom deBoisblanc
972 Cedarcliff Court
Westlake Village, CA 91362
(805) 857-4908
e-mail: tomdeboisblanc@ieee.org

Some Suggested Resources:

Observing & Photographing the Solar System
Willmann-Bell, Inc.

Comet Chasing

<http://www.skyhound.com/sh/comets.html>

Weekly Bright comets

<http://www.aerith.net/comet/weekly/current.html>

Potentially observable comets

<http://cfa-www.harvard.edu/iau/Headlines.html>

Sketching a comet

<http://hou.lbl.gov/~vhoette/Comets/cometexp.html>

SOHO comet hunting

<http://sungrazer.nascom.nasa.gov/>

What's observable tonight

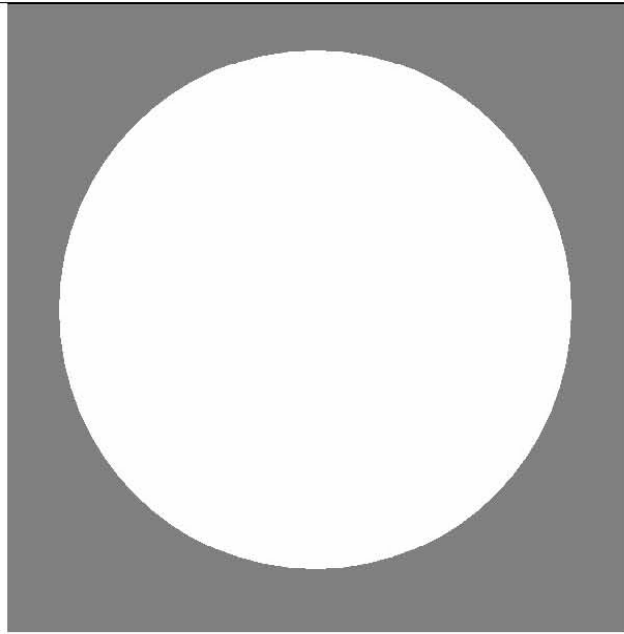
http://ssd.jpl.nasa.gov/cgi-bin/what_obs

British comet page

<http://www.ast.cam.ac.uk/~ids/>

www.astroleague.org

They have a great online bookstore and detailed information on all of the observing programs. You can order from Astronomical League Sales or go to www.vcas.org to receive all pertinent info on a single pdf file.
(Information from this flyer taken from www.astroleague.org)



Observer's name: _____

Comet: _____

Date / Time: _____

Observing location: _____

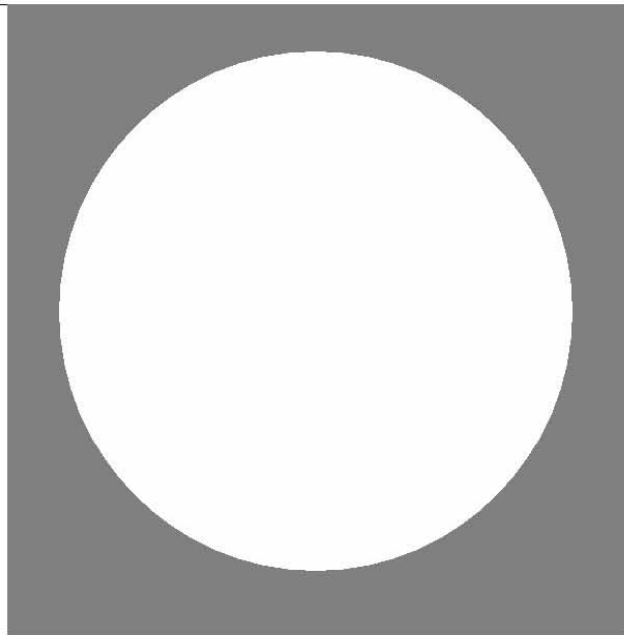
Instrument / eyepiece / magnification / field of view: _____

Comet sky location (*constellation, nearest star, or RA/DEC*): _____

Sky & Star steadiness					Sky transparency	
boiling	(circle one)			steady	Un-aided zenith	
↓				↓	magnitude limit:	
5	4	3	2	1		

Comet description (*magnitude, coma size, condensation, tail(s), color, shape, texture, motion*):

Observing notes (*difficulty, observing partners, interesting objects in field, general comments*):



Note: This can be the second drawing of the same comet above to show motion compared to background stars. Or, if a second position is indicated in the first drawing, this can be a different comet observation.

Comet: _____

Date / Time: _____

Observing location: _____

Instrument / eyepiece / magnification / field of view: _____

Comet sky location (*constellation, nearest star, or RA/DEC*): _____

Sky & Star steadiness					Sky transparency	
boiling	(circle one)			steady	Un-aided zenith	
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