

Directions: Take Constitution Avenue to Memorial Bridge. Follow Route 50 across bridge and on to Fairfax. Proceed on Routes 29-211 through Centerville to Stone House Inn (about 2 miles beyond end of divided highway). Turn left at Inn on Route 234 by Manassas National Battlefield Park signs. Go about 8/10th mile on Route 234 and turn right at "Mars Picnic" sign and follow picnic-area signs - past ruins of Chin House - to end of road, and you are there. Do not hesitate to ford the tiny creek - we have already tried it.

We should be there around 6:00 P.M., and we will have the picnic even if the sky is overcast--so long as it doesn't rain in town. It may be clear at Manassas. See you there.

--Tove Neville

CHANGES OF ADDRESS

Mr. & Mrs. Albert L. Cochran, 1302 N. Meade St., Apt.#13, Arlington, Va.

Pauline Friedland, new telephone: WO 6-4781

Leith Holloway, 3026 Porter St., N.W., #104, Wash. 8,D.C. EM 3-7708

Harry A. Kline, c/o FBIS APO 239, San Francisco, Calif.

Cdr. David H. Minton, 901 Washington St., Toms River, N.J.

Billy M. West, Jr. c/o M.Sgt. Billy West, Sr. Det. No. 4 1141 St., U.S. Air Force--Special Activities Sq. SPO Navy, New York, N.Y.

A NETWORK OF OBSERVATORIES around the earth will keep Mars under surveillance 24 hours a day from July until November. The data resulting from this vast investigation will be analyzed and summarized by the Lowell Observatory, at Flagstaff, Arizona.

Mars' mathematical minimum distance from the earth is 34.6 million miles. This can only occur when opposition takes place in mid-August. Mars comes to opposition at intervals of 2 years, 2 months; or 780 days, to be exact. This makes the opposition line shift completely around the Martian orbit, returning to the vicinity of the perihelion point every 15 to 17 years.

Jewell Boling, Editor, 1717 P Street, N. W. NO. 7-7693

STAR DUST
National Capital Astronomers

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SEPTEMBER CALENDAR

- Sept. 8 (Sat.) "THE IGY IN THE ANTARCTIC," Commander Charles Snay, U.S.N., Department of Commerce Auditorium, 8:15 P.M.
- Sept. 9 (Sun.) "MARS PARTY," Combined picnic and Mars Observing session at Manassas Battlefield Park - the perfect spot away from all the lights, less than an hour from town. Bring your picnic supper and your telescope or binoculars. Leaving Commerce Building 5:00 P.M. (See story inside.)
- Sept. 22 (Sat.) DISCUSSION GROUP with Bob McCracken on coordinate systems. (See story inside.) Department of Commerce Foyer. 8:00 P.M.
- Sept. 30 (Sun.) EXPLORING THE SKY, Joint program of the NCA and the National Capital Parks. Fort Reno Park, 40th and Chesapeake Streets, N. W. 7:00 P.M. Come one and all and bring your telescope if you have one.

Telescope Making Class -- Plans for the next season will be announced at the lecture meeting, September 8.

IGY AND ANTARCTICA -- The sun shines, the winds blow, the oceans rock 'n' roll, with no regard for political borderlines. The great vision behind the International Geophysical Year is simultaneous observation and uninhibited exchange of geographical phenomena for 18 months--on a global basis. So beginning next July, 5,000 scientists are going to cross-examine our world. In Antarctica alone, there are to be 32 bases (6 are U.S.) staked out on the last frontier -- the coldest spot on earth.

OFFICERS AND COMMITTEES FOR 1956-1957 SEASON

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SPECIAL EVENTS: Tove Neville (Temporary)

TELESCOPE MAKING: Hoy Walls

JUNIORS: Dana Law

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PROGRAM LINE-UP TO DATE FOR THE COMING SEASON

LECTURES:

September 8 Commander Snay on the IGY
October 6 Dr. Edson, O.C.O., U. S. Army on Mars
November 3 Dr. Wm. D. Markowitz, Naval Observatory

DISCUSSION GROUPS:

A complete program has been worked out, as follows:

September 22 Coordinate Systems - Bob McCracken
October 20 Planetary Motions - U. S. Lyons
November 17 Stellar Classification - Robert Brown
December 15 Stellar Composition - Roger Smith
January 19 Galactic Structure - Bob Rhynsburger
February 16 Extragalactic Nebulae -
March 16 Cosmology
April 20 Instrumentation
May 18 Photography -

Anyone interested in the above topics is urged to participate.

--Everette Neville

OBSERVATIONAL DATA AND LUNAR OCCULTATIONS

Mercury is poorly placed for observation in September, inferior conjunction being on the 26th. Venus is a brilliant morning star and is visible in the east several hours before sunrise. Mars is visible all night and reaches opposition on the tenth. The distance from the earth varies from 35 to 235 million miles, and the planet is 35,120,000 miles from the earth on the seventh. Jupiter is too close to the sun for observation this month, conjunction being on the fourth, Saturn is well down in the southwest at sunset and sets a few hours later.

Date	Star	Mag.	Age	Phase	E.S.T.
23rd	53 Ari	6.1	19.4	R	9:46.0 P.M.
24-25	Omega Tau	4.8	20.6	R	4:59.1 A.M.

NEIGHBORHOOD ASTRONOMY

During the past season a number of us enjoyed discussing astronomy with neighborhood youngsters. Mr. and Mrs. Adelman, Mr. and Mrs. Neville, and Mr. and Mrs. Law held meetings in their homes once every 2 to 4 weeks. Mr. Robinson, assisted by Mr. Schiff, held monthly meetings in a public school library. A good many of the youngsters joined the NCA as juniors. The experience during the past season with the neighborhood groups has given us a good idea of what the youngsters under 12 want and of how an adult member can render this service in his neighborhood with a minimum of effort. Any regular members who might be interested in setting up discussions in their neighborhood can get a resume of our experience last season from Dana Law. Phone OT 4-6835.

COORDINATES OF THE UNIVERSE

It seems a safe assumption that the celestial pursuits of most star gazers are primarily concerned with the visible features of the sky; for who has witnessed the ecstatic gasp of one enraptured by his first thrilling view of the EQUINOCTIAL COLURE? or the HOUR CIRCLE of a nebula?

Yet, star charts are loaded with stuff that won't show in a telescope. These are the highways, milestones, and sign-posts of the celestial sphere. Very necessary to any serious consideration of astronomy, their understanding provides the basis for appreciation of our own aspects of the universe.

Their purpose is to find out:

- 1) How much the earth is warming up;
- 2) How fast glaciers are melting;
- 3) Will all the ice covering Antarctica melt? If so,
- 4) How much will the ocean rise?
- 5) Will our coastal cities drown?
- 6) Will new ports be opened for commerce?

Data from all bases and field parties will be correlated; daily weather maps will be issued to all stations. An extensive communication system will be set up and is already partly in operation.

The U. S. Navy Unit that is supporting IGY here is known as Task Force Forty-three. The speaker for the first meeting of the 1956-57 season is Commander Snay. He first enlisted in the naval service in 1929, and has served throughout the successive years in various types of ships. He advanced through the radioman ratings and was appointed a warrant radio electrician prior to World War II. During the war, he was appointed Ensign and has successfully advanced to his present rank. He holds a permanent status in the Navy as Commissioned Warrant (W-4) as a Chief Radio Electrician as well as his temporary status as a Commander. Based on his extensive experience in both communications and electronics, coupled with prior duties on international staffs, he was selected for his present position as the Staff Communications Officer for Operation DEEPFREEZE and Task Force FORTY-THREE. --"Rikki" Heisey

LEO SCOTT is in the hospital and is getting along fine after an emergency operation. We wish him a very speedy recovery.

GERTRUDE DELLAR reminds us that 1956-57 dues should be in by September 1. SKY AND TELESCOPE subscriptions must be sent to SKY AND TELESCOPE by September 10 to insure continuity of subscription.

Besides the meridian, equator, and ecliptic, are you conversant with the equinoxes, solstices, ascending and descending nodes, the nadir, (wonder why this one isn't on the star charts?), celestial latitude and longitude, galactic coordination, etc.?

If the Washington weather (e.g., the last couple of months) has at times suggested the abandonment of astronomy as having a lost future, don't despair, but reconnoiter these many invisibles. The intellectual edification will engender new inspiration when the sky "returns."

Then come to the September 15th discussion group to consolidate your gains--and help straighten the rest of us out!
--Robert H. McCracken

MARS PICNIC -- Our first special event this year should start off the season with the possibilities for a perfect atmosphere! There are two reasons for having a picnic-observing session on September 9 this year. This Sunday is the one closest to Mars' nearest approach to earth in this the most favorable year for viewing the red planet. The other reason is that the weather will still be pleasant this time of year--we hope.

So we scouted around the perimeter of Washington to find the place which was high, open, and absolutely without artificial light - and we believe we've found it! It is out at Manassas Battlefield Park; on a ridge where observing should be ideal if the meteorologists of our society will only provide the weather. Here the eastern horizon is completely unobstructed, and an unlimited line of telescopes can be set up. Down on the side of the ridge are picnic tables, fire grates, etc., but since this is a far-out-of-the-way place, there is no water, and each will have to bring his own. Bring also your own picnic supper, and we will bring some coffee or iced drinks, depending on weather. Also bring flashlights, for there is nothing but starlight there.

Anyone living in Virginia might just want to go straight from home, but we would like as many cars as possible to be at the Commerce Department Building at 5:00 P.M. to pick up passengers. Let us know on JA 7-4130 or at the lecture meeting September 8 if you will be there