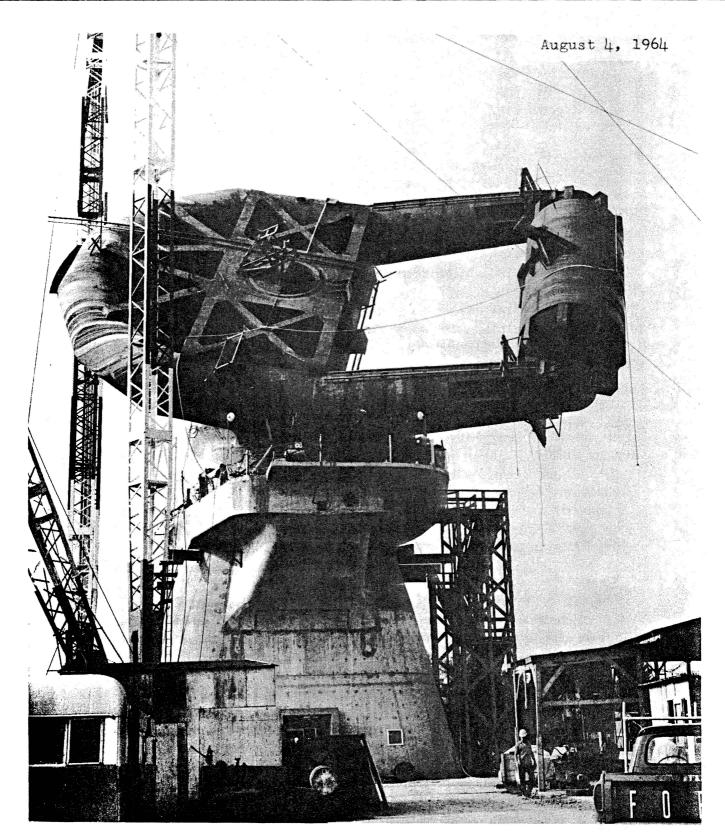
The O B S E R V E R

August 31, 1964



¹⁴⁰⁻ft. TELESCOPE

Editor: Peter B. Gocd

Cub Reporters for Month of August:

Howard Lambert Ray Walker John Gallagher Harry Wooddell

Tom Williams Leroy Webb Sis Michael Norma Brockway

Photography and Printing by: Graphic Arts Dept.

EAST AND WEST ROTATION OF 140-ft TELESCOPE by Howard Lambert

In the past few months we've pictured for you the major lifts at the 140-ft.and written small articles about each. Only one major lift remains at this project. This is the massive aluminum back-up structure for the aluminum surface. It will weigh approximately 240 tons when lifted and more detail will be given when it is lifted into place - you may even hurrah at the Lab.

After the major lifts to date were made, the hydraulic system was completed to the spherical bearing and the tail bearing. With the system in operation, the weight of the structure was transferred from the fifth pad and jack to the hydropads. The hydraulic system to the hydropads was placed in operation to demonstrate that the oil pressure would in fact lift the weight of the instrument and hold it. Success!!! There was some leakage around hydropad seals but not the squirting of oil all over Pocahontas County as some had expected.

Although the weight of the instrument had been placed on the pads and raised and supported by the oil pressure, no actual rotation had occurred and some were quite anxious to see what would happen when the first rotation was attempted.

After installation of High Density Concrete in the counterweight sections and filling of the load tank, first rotation was attempted. The instrument was rotated 10 degrees east and then 10 degrees west. Success! Additional counterweighting was needed so steel blocks fabricated for that purpose were added in the middle counterweight section. After the balancing operation was completed, the instrument was rotated 108 degrees to the west on 8/4 and a like rotation to the east on 8/5.

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August 31, 1964

Gear web plates and blocks have been completely installed, during which time the instrument had to be rotated east and west repeatedly. Rotation has been satisfactory and completely successful except for minor problems which are being overcome.

On 8/24 the first of the 28 polar gear sectors were temporarily placed on the gear blocks.

We are still going strong.....

85' REPORTS

85' operators would like to welcome two new operators, Spencer Everly who is from Kingwood, W. Va. and Charles Sutton who is from Charleston, W. Va.

We would also like to welcome Charles to the 40's Club. It's members are Bill Hunter, President Howard Brown, Vice-President, and Charles you can be Treasurer.

We hear when a technician goes on vacation and John Sapp is put in his place the technician is soon to leave. We're going to miss you Gay.

The operator here at the 85° and I think all the operators will say its been nice working with Harold Cris and we hope to see him again next year.

There was once a fellow named <u>KEEN</u> While working a midnight for the Dean Had an urge for a cup of steam HENCE HUNGER!!!!

Although the price was high And the chicken broth was wry <u>Snodgrass</u> knew it was do or die <u>HENCE SATISFACTION!</u>!

300' TELESCOPE

On August 17th the 11 and 21 CM Observations were discontinued. This Program was for measuring the Surface Accuracy. This was conducted by Dr. Mezger, J.M. Baars and H. Wendker.

The same day, the Naval Research Laboratory installed their 21 CM Receivers. This system has two identical receivers. Each receiver is fed from a circular feed horn having two dipoles spaced 90[°] apart. Therefore, each receiver input is polarized 90[°] from the other. From day to day the dipoles are rotated and the Scurces are studied for increase or decrease in signal.

This program is continued from last year to get better statistics and more Polarization Data on other sources. It will continue through September 27th. Those visiting NRL personnel are E. McClain, J. Bologna, R. Sloanaker, and J. Kenny.

ENGINEERING ESSENSE

Continued the design of quadrapods, spherical and tail bearing housing, panel supports, extension section for legs and quadrapod ladder and cable tray. Completed first part of a check-up on panel R. M. S. after panels were reset, and one additional half panel added on each side. Preliminary date shows an R. M. S. of between 0.040 and 0.050.

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Design on rotating and focusing feed support for the 140 - 85- 300 is proceeding and some preliminary designs shall be ready for comments by the end of 8/31/64.

Addition to 85-2 control building design is presently also being work ed on and should be ready for comment by 8/31/64.

W. G. Horne still working full time at 140-ft. Has also been in contact with Blaw Knox's Mr. Pottmeyer about certain jobs still open on the 85-2.

Machine Shop

Completed all machining of panel supports for 140-ft. Presently positioning these supports on inner center platform along with S. C. Smith optical control in layout measurements.

Further various maintenance jobs, such as repositioning panel supports at Works Area Test Site, welding in place and double checking accuracy with engineering staff.

Completed ladder extension welding on 300-ft. Various boxes cut and welded for Electronics Dept. Jig making for 140-ft., layout control. Provided manpower for installation of Air Conditioning units of new computer room.

Emergency and ventilation door for 140-ft., transformers in basement. Maintenance electrician pick-up tool box fabrication and assembly. Gusset plate cutting for 140-ft., and machining of parts for maintenance such as pump bushings, etc.

Electrical Shop

Disconnected all lights above new computer room ceiling, rewired roof exhaust fan, lights, and additional new lights needed to light up storage area. Also wired up the two new Air Conditioners.

Completed the installation into the cable tray of 3 additional No. 2 wires for power supply

to station 2 thru 6.

Ordered transformers for power supply down range 85-2. Removed one Control Transformer from 140-ft., sent for rewinding. Ordered and received one new transformer for control for 140-ft., basement and shipped to Niagara Transformers for rewinding. Started the 140-ft. air conditioning unit. Rewired some shortened out wiring on the 85-2 after removing the damaged wire. Installed 4 flood lights on west side of new warehouse in order to illuminate access to new computer room. Wired up the Janski telescope and connected to main breaker. Prepared power cut-off cabinets ready for wiring for the 85-2. Completed the replacement of the tray support and repair of damaged tray.

LADIES TEA

Ladies Tea will be postponed from September 9 until September 16 due to Labor Day weekend and school beginning.

IT'S THE WORKS

Much progress is being made toward the completion of the Recreation Association's picnic shelter. It should be finished by the time you read this.

The Maintenance and Engineering groups joined in a farewell gathering for "Pappy" St. Clair after work on Monday evening the 17th. It was held on the RFE spread (Bob Elliott that is). With a supply of snacks, a little liquid refreshments and some stories. An enjoyable time was had by all with the possible exception of the honored guest. I thought I detected a bit of reluctance to leave. In spite of this, I'm sure our guest appreciated the gathering in his honor and to know he was leaving a group of good friends. The guest was given a silver table lighter, which I hope wasn't worn out from use before he got it home.

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LAB GAB

George Behrens and family returned from a vacation trip. Their travels took them to Indianoplis, Ind., various points in Canada, and the New York World's Fair.

Carl Davis can you explain how your nick - name "Pig's Ear" originated?????

Turkey is looking forward to the West Virginia State Fair. Rumor is that he will be :! on stage (by some of his associates). Jerry -----we can't reveal which stage.

B. did you receive a letter from O. J.???

Warren Wooddell will leave A. U. I. September to join the Hewlett Packard staff at Richmond, Va.

Interferometer problem in a nut shell: Too much bologna and not enough sausages.

IT'S MONKEY BUSINESS

Carl and Jean Kuehnert set aside the week of August 17-22 as vacation week. Instead of a long, tiresome, back-breaking motor trip, their vacation was spent in the kitchen of their lovely farm house at Huntersville. It is understood that Carl is an expert on canning beans, corn, and making pickles. Carl reports a very enjoyable week.

⁵ Michael is wondering where that pot of gold can be found that she has always heard about. She and her husband, James, are enrolling their two children at the University at Morgantown next week. Jane Kay as a Senior and Tom is a Freshman. Is it any wonder they are searching for the end of the rainbow??????? From all reports Jerry Shears had a whing-ding of a time in Washington, D.C. the week of August 17th. Jerry likes that city life. The only thing about it is he is afraid to brave the city traffic on his motor bike.

Norma and Dick Brockway arrived back recently from a two week vacation to their cottage in New Hampshire and a visit to Cape Cod, Mass. Also, Mr. and Mrs. Simmons and son, **B**ill, went along for their first trip to New England. The weather was fine, the water was refreshing, the sightseeing was historic, and the vacation was too short.

WE WOULD LIKE TO WELCOME

Charles E. SuttonTelescope OperationsJacqueline K. PlylerComputer GroupMichael L. KaiserComputer GroupSpencer K. Everly, Jr.Telescope OperationsWarren TylerResearch Group

IMPORTANT NOTICE

The Annual General Meeting of the NRAORA is scheduled for Tuesday, September 29, 1964. The time of the meeting will be posted at a later date. Members of the Board of Directors for the fiscal year beginning November 1, 1964 will be elected at this meeting. There is also some important proposed changes in the By-Laws, a minimum of two-thirds of the membership is required to be present at the voting. It therefore is extremely important that all members make a sincere effort to attend in order that the required two-thirds are present.

> John A. Gallagher Secretary, NRAORA

Horner-Wilfong

On August 2, 1964, at 3:00 PM the New Hope Methodist Church near Dunmore was the scene of the wedding uniting in marriage Miss Ruth Viola Wilfong and Mr. Neil Horner both of Dunmore.

The double ring cermony was read by Rev. Clyde Wigner of Harrisville, W. Va., uncle of the groom, in the presence of relatives.

The bride is the daughter of Mr. Charles Wilfong and the late Orpha Lindsay Wilfong of Dunmore.

The groom is the son of Mr. and Mrs. Ray Horner of Dunmore.

A reception was held at the home of the bride following the ceremony after which the couple left for a short wedding trip in Virginia.

The following people are attending the Twelfth General Assembly of the International Astronomical Union held in Hamburg, Germany, August 25 through September 3.

> **Dr.** D. S. Heeschen Dr. T. K. Menon Dr. D. E. Hogg Dr. M. Roberts Dr. S. von Hoerner Mr. Y. Terzian

The meetings are being held on the campus of the University of Hamburg.

Prior to the IAU meetings in Hamburg, Germany, Dr. Heeschen lectured at the N. Copernicus University in Torun, Poland.

Mr. and Mrs. Jamie Sheets and family have returned from a trip to Houston, Texas. In addition to many sights seen in the Lone Star State, they reported visiting Mammoth Cave and My Old Kentucky Home in Kentucky, The Hermitage in Nashville, and returned through New Oreleans.

FOR SALE

1955 Buick Special - Has seen London!!!! \$150 See or call Jamie Sheets for further details

456-4104

facility.

BEARD SCHOOL OF DANCE LODGE HALL IN GREEN BANK

Fall Term Begins the Second Week of September

Schedule Tuesdays 1:30 - 2:30 Pre-school age class (ages $3 \frac{1}{2}$ to $5 \frac{1}{2}$) 2:45 - 3:45 Ladies exercise and ballet classes 4:00 - 5:00 Boy's classes 5:30 -Teen age ballrrom class (5th, 6th, 7th graders) 7:00 - 8:00 Adult ballroom class, followed by 15 minutes of square dancing -free, if enough are interested. Fridays 1:30 - 2:30 Pre-school age class 2:45 - 3:45 Ladies exercise and ballet classes (if enough desire --2 lessons each week 5:00 - 6:00 Large girl's ballet and tap 6:00 - 6:30 Large girl's jazz class 7:00 - 8:00 Teen age ballroom class (large 7th, 8th, & up grades) 8:15 Saturdays 9:30 - 10:30 Beginners in tap etc. 10:45 - 11:45 Above might have to be changed according to children's activities (To be paid before last lesson of each month) Rates \$5.00 per month day classes 2.00 per month for ballroom when taking above classes 2.00 per month extra for jazz, if taking ballet and tap 2.50 per month for ballroom classes, through high school grades 5.00 for 8 lessons in ladies exercise class of 9.00 for 16 lessons in ladies exercise class 9.00 for adult couples in ballroom class 5.00 for single adult (prefer to teach in couples) I am trying to get as many classes in each day, as possible, due to the heating

APARIAR LOVERS!

DESI and LUCY (BALL) (ARNEZ) (BALL)

in



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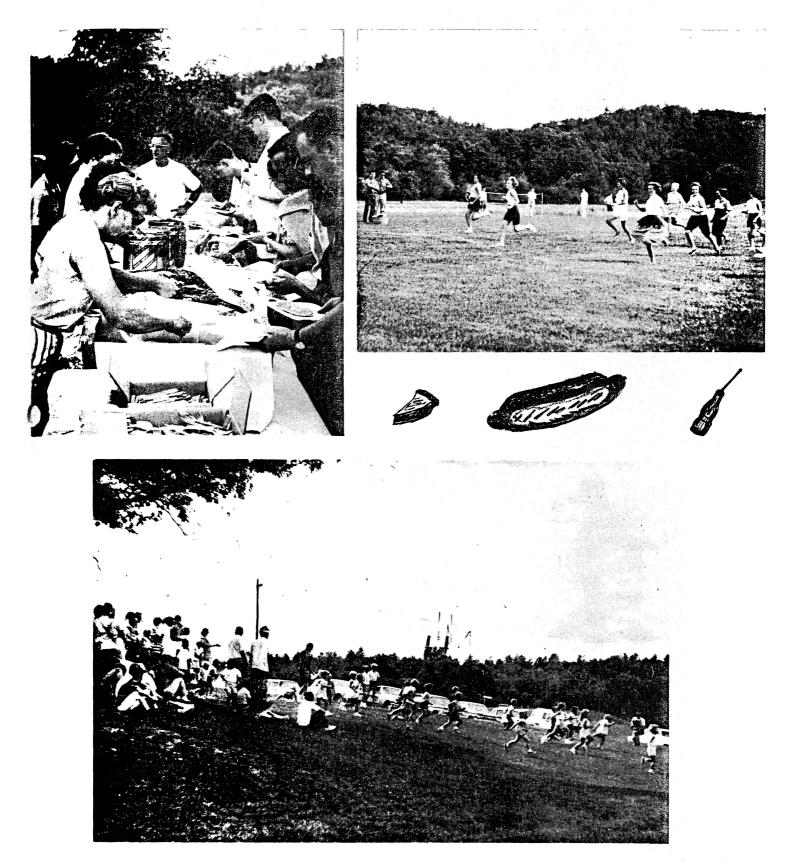
> BRING THE KIDS!

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THE 1964 NRAORA PICNIC IN REVIEW



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Photographed by Melvyn Viner