

tremely interested in the possibility of a channel's opening on the VHF band.

The New York ETV station, which is to go on the air within a few months, is expected to become the anchor of the budding "fourth network" of approximately 50 ETV stations now in operation in various parts of the country. These stations, linked by exchanges of films and tapes, rather than through electronic ties, are supported by contributions from their home states and localities, foundations, business firms, and individuals. The addition of the wealthy and populous New York area to the network is likely to have a significant effect on the scope of the network's programming. Los Angeles is being viewed with interest by the FCC and others because of the resources it could bring to the ETV network, and because of the vast audience within range of its transmitters.—D.S.G.

### West Ford: A Little More Data

The quest for what went wrong with the controversial Project West Ford has produced a few scraps of additional data, but none of it adds up yet to a definitive answer.

The object of West Ford was to establish in space a band of 350-million copper filaments to serve as an artificial ionosphere in communications experiments. The filaments were sent aloft embedded in naphthalene, which was expected to sublime in space, slowly releasing them as it moved in orbit. Previous radar sightings indicated the presence of the cylindrical naphthalene and wire body, but there has been no evidence that the filaments have been released from the naphthalene.

The latest findings involve radar returns at Millstone Hill, in Westford, Massachusetts, which indicate the presence of several small objects, considerably larger than individual filaments, in the area where the orbiting package was expected to be. This suggests the possibility that the naphthalene package may have broken into several pieces. The data is regarded, however, as offering no insights on how to avoid failure the next time.

A spokesman at the Lincoln Laboratory in Lexington, Massachusetts, said that a number of theories for West Ford's failure are under consideration, including some that are regarded as rather unlikely. These include the possibility that ultraviolet light or cosmic rays may have had some effect on the

naphthalene and prevented it from sublimating, or that the naphthalene did sublime but some force is preventing the dispersal of the wires.

The project stirred considerable opposition from radio and optical astronomers, who claimed the orbiting wires would interfere with their observations. The Administration, on the basis of several reviews by scientific panels, rejected these fears as unfounded. There is no sign of eagerness, however, to go ahead with another shot until all efforts have been exhausted to determine what went wrong with the first. As one scientist associated with Project West Ford commented: "Probably the surest way to get needles in the first package to disperse is to send up another package." —D.S.G.

### Exchange Pact: Renewal Delayed

Negotiations for renewal of the Soviet-American exchange agreement remained uncompleted at the agreement's 31 December expiration date. State Department officials, however, discount major differences as the cause, and attribute the delay to a lack of urgency for concluding a new agreement and, possibly, to the impending arrival of a new Soviet ambassador in Washington.

It is tacitly assumed, they point out, that the expired agreement will govern existing exchanges as well as those that remain to be carried out, pending completion of negotiations. The agreement ran for 2 years and governed cultural, educational, scientific, technical exchanges.

The negotiations will be conducted in Washington, thus making the Soviet ambassador at least the nominal head of his nation's delegation. State Department officials speculate that the new ambassador, who is expected to arrive shortly, could extract a measure of good will by starting his tour of duty with the speedy completion of a new agreement.

American proposals for renewing the program were submitted in October following Soviet-American discussions last summer. The Soviet reply has not yet been received. The principal differences involve the American desire to expand our cultural activities in the Soviet Union, principally in the dissemination of American publications, and the Soviet desire to concentrate on scientific and technical exchanges. —D.S.G.

## Announcements

A reference **directory of U.S. science information services** has been published by the National Science Foundation. The 530-page book contains descriptions of 427 scientific and engineering information centers, types of information services provided, and publications issued by each. (Superintendent of Documents, Government Printing Office, Washington 25, D.C. \$1.75)

Physicians are requested to refer patients with **chronic myelogenous leukemia** to the National Cancer Institute. Referrals of patients with high white-blood-cell and platelet counts are needed for studies of newer chemotherapeutic agents, and as a source of white cells and platelets for *in vitro* and *in vivo* study. Accepted patients will be hospitalized for approximately 8 to 12 weeks. (Paul P. Carbone, Chemotherapy Service, NCI, Bethesda 14, Md.)

A brochure describing the U.S. Public Health Service's **research training programs in the basic medical and biological sciences** is available from the National Institutes of Health. (Information Office, Division of General Medical Sciences, NIH, Bethesda 14, Md. PHS No. 865)

Researchers who are interested in the potential effects of **ionizing radiation on vegetation** are invited to utilize the facilities of Brookhaven National Laboratory's recently established program in radiation ecology. A limited number of postdoctoral appointments are available. (G. M. Woodwell, Biology Dept., BNL, Upton, N.Y.)

The facilities of the **Biophysical Society's placement service** will be available free of charge during their annual meeting (Washington, D.C., 13-16 Feb. 1962). The service has listings of positions open in the several areas of biophysics, as well as candidates for positions in these fields. (Biophysical Society Placement Service, Box 668, Frederick, Md.)

### Grants, Fellowships, and Awards

Recent college graduates are eligible to apply for scholarships in **naval architecture and marine engineering**, available for the 1962 academic year. The scholarships, sponsored by the So-