

Communist and U.S. Exchanges

The Department of State will begin negotiations next month with the Russians for a new and more ambitious exchange agreement to succeed the present one, which expires the end of this year. A Department spokesman called the present educational, cultural, and scientific exchange program "elementary." He said the hope is that the new agreement for 1962-63 will extend the term of exchange visits and expand the subject areas as well as increase the numbers of persons involved.

The exchanges began in 1958. Soviet interest has been primarily in scientific and technical fields and in cultural exchanges, and these have proceeded smoothly.

To date, Soviet scientists have attended 12 conferences of international organizations here, while Americans have attended six such conferences in the U.S.S.R. In addition, there was a special and separate exchange of delegations in the fields of high-energy physics and controlled thermonuclear reactions. About 300 Soviet scientists are scheduled to attend meetings in the United States next month. In August, 800 American biochemists will attend the international meeting on biochemistry in Moscow. There also have been several exchanges, arranged with little or no difficulty, in industry, agriculture, medicine and public health, and economics.

But Russian distinterest and even aversion have been plain when it came to exchanges in areas involving political and social ideas. In these areas the program has been marked by friction. This has prevented, thus far, an agreement for a reasonably free exchange of books, magazines, or newspapers. The Russians have restricted the circulation of the U.S. publication *Amerika* to 52,000. No restriction is placed, in the United States, on the circulation of the Soviet magazine *USSR*. There has been no exchange of professors, as called for in the agreement. Such an exchange would involve teaching visits of an academic year or longer. The Russians prefer short-term exchanges. Where there have been educational exchanges—to study language teaching, technical education, and art—they have not exceeded 4 weeks. The Russians also have opposed U.S. exhibits in the U.S.S.R., mainly by making the cost prohibitive. Recently, however, after long delay, arrangements were made for three American traveling exhibits to visit

seven cities. These will be exhibits on plastics, medicine, and transportation, again emphasizing the Soviet interest in technical, industrial, and scientific information. Television and radio are areas that also reflect Soviet reluctance to be exposed to American ideas.

Exchanges with communist countries other than the U.S.S.R. have been extremely limited, with the exception of Poland, where the exchanges, particularly those involving political and social ideas, have been markedly freer than those with the Soviet Union. The magazines *Ameryka* and *Poland* are on sale in the respective countries without limit. Poland has received a large number of American motion pictures, television films, books and periodicals, and has imposed very little censorship. And since 1957, Voice of America programs have been received in Poland twice daily without jamming or interference.

The Polish program, again in sharp contrast with the U.S.S.R.'s, has included many academic visits of a year or more to this country by Poles, most of them under private auspices. Last year over 100 Poles were in the United States for study; and since 1956 more than 1000 have come here, over 200 under Ford and Rockefeller Foundation grants. Ford grants have been primarily in the humanities, but with a growing emphasis on science. To date there have been far more Polish visits to this country than American visits to Poland. Recently completed negotiations for exchanges with Poland have expanded the program both ways.

As to other iron curtain countries, during 1960 Czechoslovak specialists attended 15 conferences in this country. Americans attended 11 conferences in Czechoslovakia. Only a very few Czechoslovak scientists came to this country last year, all under private auspices.

There has been no exchange agreement with Hungary since 1956, although there have been a limited number of private exchanges of individual visits, including teachers and scientists. This is also true of Bulgaria. However, since diplomatic missions were reopened last year, the prospects appear favorable for increased exchange activities.

On 9 December 1960, negotiations began for a limited U.S.-Rumanian exchange program for 1961-62, in education, science, industry, arts, publications, radio-television, exhibits, motion pictures, and sports. Two American graduate students are in Bucharest and

four Rumanian students are at American universities for the 1960-61 academic year.

Cost of Space Exploration

Last week, Senator Warren G. Magnuson (D.-Wash.), chairman of a Senate Appropriations Subcommittee, told officials from the National Aeronautics and Space Administration (NASA) that "a lot of missionary work" had to be done with both the American public and Congress before a decision could be reached on the multibillion dollar request for getting a man on the moon.

Present estimates are that it will cost the United States \$20 billion and take 10 years to put a man on the moon. As a recent Gallup poll made clear, the public is not convinced that getting a man there is worth this investment, and they have been letting their Senators and Congressmen know it.

Hugh L. Dryden, deputy director of NASA, has asked the subcommittee for an extra \$549 million this year to initiate the accelerated space program urged by Kennedy to get to the moon ahead of the Russians. Dryden said that the space effort would yield new technological developments that would strengthen the nation's economy by providing jobs and new industries.

The results of materials research in ceramics, metals, and plastics for use in space are now finding their way into industry and to the public. The values of new fuels, new methods of power generation, and supersonic transportation are clear. By studying the effects of radiation in outer space, better methods may be discovered to protect man on earth from the possible risks involved in advancing industrial nuclear power. These are benefits that the average man can understand, but they are not what the scientist is aiming for in his reach toward the moon.

Homer E. Newell, deputy director of NASA's office of Space Flight Programs, last week listed the scientific goals in an address before a meeting of AMVETS in Washington. "Out of the scientific research will come knowledge; knowledge about the universe and its laws; knowledge about the earth upon which we live, its atmosphere, the sun, and the sun's influence on the earth; knowledge about physical life, its origins and fundamental nature. . . . Past experience has shown that the most important benefits of our research are probably unforeseen."