Scientific and Cultural Exchange with the People's Republic of China [and Comments]

Hosley G. Handyside

Pierre Shostal
CHAPTER IX.

SCIENTIFIC AND CULTURAL EXCHANGE WITH THE PEOPLE'S REPUBLIC OF CHINA

_Hosley G. Handyside_*

Within the last year, United States-People’s Republic of China (P.R.C.) relations in science and technology, particularly energy, have intensified. Prior to December 1978, cooperation and exchanges between the two nations were necessarily limited by the absence of normal political relationships. There were, however, a few notable events, demonstrating that a spirit of cooperation could exist between the two countries. Following the historic Nixon visit in 1972, several informal good will exchanges were arranged, especially in the field of high energy physics. The director of the Chinese Institute of High Energy Physics (H.E.P.) led a delegation to the United States in 1973. With the visit to China of Nobel Prize winner Dr. Samuel Ting, the pace of U.S.-P.R.C. relations began to quicken. Dr. Ting’s visit was followed by several delegations of energy experts, and on January 30, 1979, with normalization only one month old, a formal agreement for cooperation in the field of science and technology was signed. On this same day, a second agreement was signed to encourage cooperation with the H.E.P. Subsequent to these agreements, interaction between P.R.C. and U.S. energy scientists increased rapidly.

Several important delegations from the United States were sent to China in the Spring of 1979. Oil company representatives visited China to discuss the research and development of China’s off-shore oil resources while a group of coal industry specialists journeyed to China to explore the commercial development of coal resources. China was host in June 1979 to an eleven member delegation from the National Air and Space Agency and a thirteen member delegation from the U.S. Geological Survey. On June 8, 1979, a U.S. H.E.P. delegation left for China to join their Chinese counterparts in forming the H.E.P. Joint Commission, the purpose of which is to implement a detailed program of research and technical assistance in the H.E.P. field.

In June 1979, the United States was host to a Chinese delegation of solar, geothermal and magnetohydrodynamoe specialists. As guests of the Scholarly Exchanges of the National Academy of Sciences, this group attended a Solar Energy Conference in Atlanta and met with solar and other renewable energy specialists. A second delegation, lead by Vice Premier

* Deputy Assistant Secretary for International Programs, Department of Energy.
Kang Shien, pursued an intensive schedule of visits to energy organizations and facilities as guests of Energy Secretary Schlesinger. The itinerary included trips to coal mining and exploration facilities, off-shore oil installations, gas pipe distribution nets, hydroelectric generating plants and high voltage transmission lines. The head of the Chinese government petroleum organization is expected to sign a number of off-shore oil agreements with U.S. oil companies. Exchanges of this nature will probably continue during the next few months, and there is the possibility that a number of Chinese energy technicians will be trained in the United States.

American-Chinese energy cooperative efforts will take a variety of forms in the future, implemented under the auspices of different government agencies. In the petroleum and natural gas area, the Chinese government and U.S. firms will enter into commercial contractual arrangements. American-Chinese cooperation in the hydro field will be strictly conducted on a government-to-government basis until the Chinese identify their technical needs. Afterwards, U.S. designers, engineers and construction firms may become involved.

The objectives of these scientific and technological exchanges are many. China plans to develop U.S. energy resources in three different areas. First, the Chinese hope to rapidly develop hydro energy, an inexpensive energy source which has not been extensively harnessed up to date. Second, they plan to expand production and utilization of coal to meet growing energy demands. Finally, another energy resource to be developed is oil and gas which will, in turn, stimulate modernization. Whatever the goals, the end result is clear: the growing cooperation between China and the United States in the energy area is both an income source for U.S. firms and a means to expand the total amount of energy available to the nations of the world.

COMMENTS

Pierre Shostal*

Science and technology activities with China had been conducted in private channels since the Nixon visit in 1972, with much of this being channeled through the Committee of Scholarly Communications with the...
People's Republic of China. In July, 1978 Frank Press, the President's Science and Technology Adviser, led a delegation of senior U.S. Government officials to China. A preliminary identification was made of possible areas of government-to-government cooperation. In the fall of 1978, delegations led by the Department of Energy Secretary Schlesinger and Agriculture Secretary Bergland discussed specifics. A senior Chinese delegation discussed space cooperation in the United States and negotiations also took place for the establishment of an exchange of students and scholars. None of the arrangements discussed, however, resulted in formal agreements because relations were not yet fully normalized.

This situation changed with the December 1978 announcement that full relations would be established and the January 1979 visit to the United States of Vice Premier Deng Xiaoping. During Deng's visit, an umbrella science and technology agreement was signed. Since that time, protocols have been concluded under this agreement for cooperation in such fields as oceanography, meteorology, industrial technology and health. Activities under these protocols have proceeded at a brisk pace and science and technology cooperation occupies a key place in the overall U.S.-Chinese relationship.