## **MEETINGS**

## HAPL/HGS JOINT DINNER MEETING— JANUARY 22, 1991

## MAX G. PITCHER—Biographical Sketch



Max G. Pitcher is executive vice president of worldwide exploration for Conoco Inc.

He received bachelor's and master's degrees in petroleum geology from 
Brigham Young University. 
After doing field geology in 
the Yukon and northern 
British Columbia, he 
attended Columbia University in New York where 
he received a Ph.D. degree 
in geology.

Photo by Gittings He joined Conoco in 1963 as a research geologist at Ponca City, Okla., and in 1965 was named director of geologic research.

He moved to Houston in 1968 as assistant to the executive vice president of exploration and production, and the following year was named Rocky Mountain division geologist at Denver. He returned to Houston in 1973 as chief geologist before being named vice president of North American exploration in 1976. He was named vice president of international exploration in 1986 and was named executive vice president of worldwide exploration in 1988.

He has traveled extensively throughout the world and has participated in many geological and exploration symposia on the USSR, Africa and North America.

Pitcher is a member of the American Association of Petroleum Geologists (AAPG) and currently serves on AAPG's Industry Liaison Committee.

## EXPLORATION AND PRODUCTION OPPORTUNITIES IN THE SOVIET UNION

The Soviet Union is number one in both oil and gas production with about 12 million bbl of oil per day and more than 75 billion cu ft of gas per day. In proved reserves, it ranks sixth for oil and first for gas. Although published numbers for undiscovered reserves are not available, the USSR no doubt ranks first for both oil and gas. Of the 2,800 oil and gas fields in the Soviet Union, 182 are classified as giants (reserves of 100 million bbl or 600 BCF or greater). These facts, together with the present situation in the Middle East and the declining production and reserve base in the U.S., show why we need help from the Soviet Union. But why do the Soviets need our help?

Oil production in the Soviet Union has declined the last two years. This hurts exports to the West and reduces the availability of hard currency — at a time when internal economic problems have escalated dramatically. To try to alleviate some of the economic problems, capital has been diverted from the oil and gas industry to consumer goods, food and housing. Thus an already bad situation in regard to oil and gas has become worse. Equipment is in short supply, and much of it is old and in poor repair. Exploration and production technology lags behind that of the West. The funds to correct these problems and, ultimately, to increase production, must come from outside sources. Therefore, the Soviet Union is willing to work with non-Soviet companies. The environment is another concern. The Soviets, along with the rest of the world, have become much more aware of the environment and are demanding that problems caused by oil and gas development be corrected or prevented. Moreover, the Soviet Union has tremendous oil and gas resources in hostile environments similar to our North Slope. Our expertise is needed.

The major oil-producing province in the Soviet Union is the West Siberian basin, which provides more than 60% of the USSR's oil production of 12 million bbl per day. This passive rift basin has a thick sedimentary sequence (15,000 feet or greater in places). The Volga-Urals region, a tensed foreland basin, produces 2.5 million bbl of oil per day. The Peri-Caspian is a modified rift basin which includes the supergiant Tengiz field. Its in-place reserves have been estimated at 25 billion bbl (6-7 billion bbl recoverable). Other oil and gas fields are in the Barents-Kara Sea area, Timan-Pechora and the Sakhalin basin. The Baku area, along the Caspian Sea, has produced oil since 1890. East Siberia is as yet a poorly known area in regard to hydrocarbon potential.

Joint ventures with the Soviet Union are not easy, and were not even possible until very recently. The first hurdle is finding the appropriate agency and/or person with the legal authority to make a deal. The government organization in the Soviet Union and the fifteen Soviet republics assures a lot of work along the way toward finalization of a joint venture. The economic and political changes now taking place, including the republics' demands for more control, complicate an already complex situation. Despite these hurdles, 1,300 joint ventures had been registered with the Ministry of Finance as of February 1990, but probably a third or less are operative. At this writing, only a couple of oil and gas joint ventures are operative, and they involve well stimulation and drilling. However, several announced oil and gas joint-venture efforts are expected to progress to the operation stage.

The Soviets need our equipment, technology and expertise. We need their oil. There are tremendous problems to overcome, but the huge opportunities make the risks worth taking.