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MORRIS and LEE

Dept. SN4A68 1685 Elmwood Avenue, Buffalo, N.Y. 14207 **COMMUNICATIONS**

Mexico meets a deadline

Aiming for the start of the summer Olympics, Mexico is building into a world telecommunications net

On an around-the-clock basis, Mexico is rushing to completion a 100-meter communications tower in Mexico City. Sparked by the coming summer Olympics, it will remain the nerve center of national and international communications and a clearing house for microwave routes—a link with the rest of the world through a satellite communication station, Intelsat III.

The tower is part of the so-called Mexico City Plan to improve worldwide communications in the near future; it is expected to be functioning by June. It is a key link in fulfillment of resolutions adopted at a recent meeting of the World Telecommunications Program in the Mexican capital.

A ground satellite communications station to be built at Tula, Hidalgo, is expected to be ready by August. Japan is providing financial and technical assistance for the ground station, which will cost 80 million pesos (\$6.4 million). Contracts for construction have been awarded to Nippon Electric and Mitsubishi.

Total cost of the giant Mexican communications plan will be at least seven billion pesos (\$560 million) but when completed, the linking of the ground station, microwave and traditional line systems will interconnect all major Mexican cities with each other and the world at large.

Complementing the communications plan is a projected telephone service expansion to 1.8 billion domestic telephones by 1975, as compared with the 815,000 currently in service. Telex, navigational and communications data transmission systems are also to be expanded. Though the program is long range, the pace is accelerating now.

"The tower and other vital segments of the plan will be functioning before the inauguration of the Olympic Games," says Antonio Padilla Segura, minister of communications and transportation.

Eight parabolic antennas topping the tower will transmit continuous radio and television coverage of the games via major networks and all communication channels.

Organizations which have already signed agreements with Mexico include NHK of Japan; Standard Electric of West Germany; ABC of the United States; RTF of France and BBC of England. These firms will occupy various floors of the tower during the games,

in space to be assigned later to sections making up the permanent Mexican Telecommunications Plan. Lower floors will house installations destined for telecommunications while upper levels are reserved for high-frequency equipment, a workshop and laboratory.

A total of 12,000 cubic meters of concrete and 3,000 tons of reinforced steel is being used in the construction which features a quadrangular H-shaped basement and lower floor.

Éngineer Ignacio Ruiz Barra, superintendent of construction, explains that the H-base "advantageously resolves problems of rigidity, circulation and illumination, while permitting better utilization of available space in distribution of electronic and other equipment."

"Furthermore," Ruiz Barra adds, "the H-base construction provides much better stability in the event of earthquakes."

The entire system, including the tower and other key installations, will be completed by 1970, including networks of carrier current, a distribution network linked to the heart of the system in Mexico City and maritime radiocommunications.

According to Padilla Segura, the ground station at Tula will permit telecasts of the Olympics to Western Europe and South America. And the microwave system, linked with Guatemala, will permit transmission of television programs from the U.S. to Central America.

Satellite telecasts of the Olympics will depend on whether Intelsat III (Mexico is a member of Intelsat) is in orbit and working by October 1968. The satellite could be launched in September.

With its own plan well on the way to completion, Mexico is also meeting its worldwide commitments within the framework of the World Telecommunications Program. This calls for integration of satellite and undersea cables into the world communications network, with 75 ground stations projected as operational by 1975 and nine new cables between Europe and America.

Mexico is ahead of its schedule in the world communications network, but other Latin American nations are also working on individual programs, and decisions have already been made to exchange cultural television programs with the world via simultaneous satellite telecasts.

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