

NEWS

THE OVERSEAS
TELECOMMUNICATIONS
COMMISSION
(AUSTRALIA)



Head Office : 32-36 Martin Place, Sydney, 2000, N.S.W. Box 7000, G.P.O., Sydney, 2001. Phone 2 0333. Telegrams "Telecom" Sydney. Telex AA20591.

AUSTRALIA'S MAJOR COMMUNICATIONS COMMITMENT FOR APOLLO 11

Today's man-on-the-moon telecast is only a small portion of the huge volume of Apollo 11 communications handled by the Overseas Telecommunications Commission (Australia).

These communications provide the Apollo mission controllers with instant information on the performance of the Apollo 11 spacecraft and the condition of the three astronauts.

The information arrives in Australia from the spacecraft in a variety of different ways: through the Aria tracking aircraft while the capsule is in earth orbit; through the NASA tracking stations at Carnarvon, Honeysuckle Creek and Tidbinbilla; through the C.S.I.R.O. radio telescope; and from the NASA tracking installations in the Malagasy Republic.

This incoming information is then relayed through the O.T.C. earth station at Moree and the INTELSAT III Pacific satellite to the United States or through the SEACOM/COMPAC coaxial submarine cable systems.

The flow of data is two way - commands and information also flow back through the Australian telecommunications network from the Mission Control Centre in Houston, Texas to the spacecraft.

Australia, because of its strategic position in the world, handles almost all of the Apollo communications in the southern hemisphere.

The O.T.C. has provided a total of 49 data transmission circuits to NASA for the Apollo 11 project.

These circuits will remain in service for most of July, in fact, some of them have been leased by NASA on a permanent basis.

These communication lines include five voice data circuits, two voice circuits and four telegraph circuits on the COMPAC cable to Hawaii and the United States mainland; three voice data, three voice and four telegraph circuits on the SEACOM cable to Guam and South East Asia; ten voice data and four voice circuits through

the INTELSAT III Pacific satellite via the Moree earth station; six voice data and two telegraph circuits through the INTELSAT III Pacific satellite via Carnarvon earth station.

There are also high frequency radio links: one voice circuit and one telegraph circuit from Tananarive in the Malagasy Republic through the O.T.C. Bassendean radio station in Western Australia and three voice and one telegraph circuit through the O.T.C. radio stations at Doonside and Bringelly, Sydney, linked with the Aria tracking aircraft in the Australian area.

These circuits, which represent Australia's largest ever communications commitment for an Apollo mission, are all being carried on existing commercial facilities, giving some idea of the reserve capacity which O.T.C. now has, particularly in the sphere of satellite communications.

These circuits carry a continuous flow of information on both the crew and the spacecraft of Apollo 11 - telemetry transmissions on the spacecraft's systems, biomedical information regarding the crew's welfare, masses of data from the spacecrafts' computers, the courses and positions of the capsules and the monitoring of life-support systems.

O.T.C. has been contributing to the American space effort ever since it monitored the signals from Explorer I, launch into orbit early in 1958.

This has given the Commission a wide technical grounding in advanced space and international telecommunications methods and this is one of the reasons - along with its geographical position - why Australia is now playing a major role in the Apollo 11 mission.