Anik C

Some of the most advanced technology in the world went into the construction and launch of the three high-capacity Anik C satellites. They are Canada's first commercial spacecraft operating solely at 14/12 GHz and will remain the most powerful communications satellites available to North Americans until the mid-1980s.

Anik C3 was launched during the first space shuttle mission to send satellites into orbit, in November 1982. Its 16 channels can carry the equivalent of 32 colour television signals, or 21 504 voice circuits—twice the capacity of an Anik A satellite. The combination of its greater power and higher frequency means that the satellite can use smaller earth stations—about one-third the size of 'conventional' receiving dish antennas. Further, because the 14/12 GHz frequency is so far removed from the ones at which ground-based communications systems operate, the antennas can be placed in city centres without fear of radio interference.

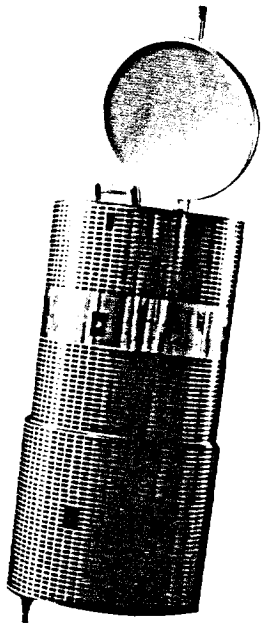
Anik C2 followed Anik C3 into space *via* the space shuttle in June 1983. (The satellites were numbered in the order they were built.) Anik C1 is scheduled for shuttle launch in the spring of 1984. All three Anik C satellites are expected to last ten years in space.

The Anik C satellites are already delivering high-quality TV pictures to antennas only 1.2 metres in diameter. Among Anik C2 users are viewers in the eastern United States who are part of the world's first commercial direct-to-home satellite broadcasting system. The Anik C series of satellites is also providing a wide range of voice, TV and other video, data and facsimile services to Canadian business across the country and residents in rural Canada.

Anik D

The two Anik D satellites were the first to be built by a Canadian prime contractor (Spar Aerospace Limited). They are the biggest Telesat has yet sent into orbit and have the greatest capacity. They are intended to be the backbone of Canada's domestic satellite communications system until the early 1990s.

Anik D1 was launched by Delta rocket in August 1982. It has 24 6/4 GHz channels, together capable of carrying the equivalent of 24 colour TV signals, or 23 040 voice circuits. Anik D2 will be put into space in autumn 1984 from the NASA shuttle. The two satellites will replace the Anik A and Anik B series both in function and position. Anik A1, which is no longer used, was moved into a higher orbit to make room for Anik D1; another non-operational satellite will be moved to make room for Anik D2.



Anik C-1