Early Bird—The first commercial synchronous Satellite

By far the biggest and best example of the open information policy in relation to the American space effort, or as a cynic might put it 'the most expensive press trip ever', was laid on by the Hughes Aircraft Company of Los Angeles. On 8 March 1965, 38 science correspondents of the leading European newspapers met at London's Heathrow Airport and took flight TWA 703 to Los Angeles at the invitation of Hughes to be briefed about *Early Bird*, the first commercial synchronous communication satellite.

Previous satellites, like *Telstar* for example, had transmitted telephone and television signals across the Atlantic to great steerable parabolic antennae in England and France during the 20 minute period when the satellites in their low earth orbit of a few hundred kilometers, were visible to both the sending and the receiving ground stations. Hughes, however, made use of an idea proposed by the British science and science-fiction writer Arthur C. Clarke in an article published in 1945 in *Wireless World*. He wrote that if three satellites were placed in a geostationary orbit, 36000 km above the Equator of the Earth, they would be able to send and receive continuously from any point on Earth, as they would orbit at the same speed as the Earth below them. They would be stationary in space in relation to a point on the Equator on Earth and thus they were synchronous in relation to the rotation of the Earth.

Hughes had built two such satellites Syncom II and Syncom III for the US Army for their communications with Vietnam and were now ready with Early Bird for commercial communication traffic, offering 240 simultaneous and permanent telephone channels across the Atlantic. This was great news and Hughes were justified in spending \$ 10000 for each of the European science correspondents, to fly them to Los Angeles and keep them in the Beverly Hilton Hotel for five days.

We were all most impressed by the excellent briefing we received from the top scientific and commercial management, from men like Dr Harold A. Rosen and Dr Fred Adler who had been responsible for the research and development of the satellite. Even more breath-taking were the huge test facilities especially built for the purpose, none of which existed for any commercial purpose in Europe. No less generous were the entertainment ideas of Hughes who had obtained 38 tickets at \$ 100 each for the première of the film *Sound of Music*. (I regret that I could not stand the kitsch and left the show at the first interval.)

We wrote many stories for our newspapers, and when soon afterwards *Early Bird* took to its orbit and exceeded its makers' promise, Hughes had gained a lead in this new field and was to manufacture many more synchronous satellites in the following years for the USA and many other countries. Their press extravaganza had proved a good investment!