From: Susan Burgess Saturday, October 27, 2007 5:27 PM Sent: To: Clay T. Whitehead Subject: RE: Satellite research The AT&T connection to Telesat came from your initial question: "When did AT&T?s first satellites go up? Telesat 1, 2? Τn particular, what did they have up before the Open Skies initiative in 1970-71? If they did have satellites up before that time, were they low-earth or geosynchronous?" Initially I looked up the dates of the Telesat launching, assuming that you were telling me that Telesat 1 and 2 were AT&T's. I interpreted your question to read, "When did AT&T's satellites Telesat 1, 2 go up?" Only after your second email asked me to confirm that AT&T created Telesat did I examine whether there was a connection. Now that I'm rereading your initial question, I see that it could've been asking me "Were the names of AT&T's first satellites Telesat 1 and 2?" Sorry if I misunderstood! Let me know if you have any other questions. ----Original Message-----From: Clay T. Whitehead Sent: Sat 10/27/2007 3:35 PM To: Susan Burgess Subject: RE: Satellite research So what is the AT&T connection to Telesat that appeared in your earlier email? ----Original Message-----From: Susan Burgess Sent: Saturday, October 27, 2007 3:26 PM To: Clay T. Whitehead Subject: RE: Satellite research The primary contractor for the Intelsat 1, 2, and 4 series was Hughes – T could not confirm who the primary contractor was for the Intelsat 3 series. The first Early Bird was launched in 1965, not earlier. (Perhaps you

know of an earlier version of the Early Bird that was created, but never launched?) I haven't found any confirmation that AT&T shared the Telesat/Anik satellites. Maybe you're thinking of TELSTAR? Telstar I, created by ATT, was launched 7/10/62. Telstar II was launched 5/7/63. Or maybe you're thinking of the COMSTAR series? "In early 1976 AT&T and COMSAT launched the first of the COMSTAR series. These satellites were used for voice and data, but very quickly television became a major user." COMSTAR was also manufactured by Hughes. Does this answer your question? As far as the "coverage of the AT&T satellites," I'm not sure if this answers your question, but Telstar's typical orbit was 958 x 8222 km, 43.7 deg inclinaton. I haven't been able to find any other information about its coverage. Let me know if you have other questions. Sources: http://www.tbs-satellite.com/tse/online/sat telstar 1.html http://www.corp.att.com/history/history3.html http://www.hq.nasa.gov/office/pao/History/satcomhistory.html http://www.astronautix.com/craft/telstar.htm Thanks. Do you have the manufacturers? I think all were Hughes except the 4 series. Also, wasn't there an early bird earlier than 1965? 1963? And what was the coverage of the AT&T satellites? The Anik sat were Canadian; maybe AT&T shared them?? ----Original Message-----From: Susan Burgess Sent: Saturday, October 27, 2007 11:31 AM To: Clay T. Whitehead Subject: RE: Satellite research

Hi Tom, You asked me for a timeline of Intelsat's satellite launchings during the 60s and early 70s. I've listed a timeline below. Please let me know if you have any questions. You also asked me about AT&T's first satellites. Telesat 1 (a.k.a. Anik 1) was not launched until 11/10/72, after the Open Skies initiative. Anik 2 was launched 4/30/73. Both satellites were geosynchronous. http://www.astronautix.com/project/anik.htm Let me know if this answers your questions or if there's anything else I can do to help with your interviews. My cell phone is working again so you should be able to reach me with no trouble today and tomorrow (though I will be getting my hair cut between 1-2:30 today so I may not answer then). I look forward to hearing about the interviews! \_\_\_\_ Intelsat satellite history 60s-early 70s http://www.tbs-satellite.com/tse/online/mis\_telecom\_geo.html 1965 4/6/65 Intelsat I (Early Bird) – geostationary orbit above Atlantic Ocean -Delta D rocket 1966 10/26/66 Intelsat 2A unusable due to orbit failure 1967 Intelsat 2B (Pacific 1) 1/11/67 Intelsat 2C (Atlantic 2) 3/23/67 9/28/67 Intelsat 2D (Pacific 2) 1968 12/19/68 Intelsat 3F2 1969 Intelsat 3F3 2/6/69 Intelsat 3F4 5/22/69 7/26/69 Intelsat 3F5

1970 1/15/70 4/23/70 7/23/70	Intelsat 3F6 Intelsat 3F7 Intelsat 3F8
1971 1/26/71 12/20/71	Intelsat 4F2 Intelsat 4F3
1972 1/23/72 6/13/72	Intelsat 4F4 Intelsat 4F5
1973 8/23/73	Intelsat 4F7