ECHO 1

By John Pollock



Figure 1

From a historical perspective the purpose of this short article is to show some interconnecting relationships with a scientific achievement regarding the launching of the Echo 1 satellite, a U.S. postage stamp, and a typical first day cover commemorating that achievement.

On 15 December 1960, the post office issued a 4-cent commemorative stamp called the Communications for Peace Satellite Echo 1, (Scott 1173), see **Figure 1**. The stamp was issued to commemorate the successful launch of what scientists term a passive satellite, one that does not have any electronic parts. The stamp was designed by Ervine Metzl, and is recognized as the first space stamp to show within the design an actual vessel. Printing was done by a rotary press-electric eye operation, perforated, and issued in panes of fifty stamps, with a total of 120 million issued.

The satellite was placed in a low earth orbit by the National Aeronautics and Space Administration (NASA) on 12 August 1960, and became the world's first communications satellite, a pioneer space craft used mainly for experimental purposes, furthering the science of telecommunication. This first real communication satellite performed well, far beyond expectation. It was conceived and designed by William O'Sullivan when he was an employee with the National Advisory Committee for Aeronautics (NACA), before that entity was absorbed by NASA. The satellite was a 100 foot diameter balloon made of thin aluminized Mylar polyester film and remained in space until 24 May 1968, at which time it reentered earth's atmosphere and burnt up. During its time in space, researchers at Bell Labs, a division of

AT&T, utilized it by expanding the satellite functions for the needs of private commercial enterprises, and developing a system to beam radio waves from earth to the satellite that would reflect them back like a mirror to ground stations at different locations of the country. Within a day after launching, the satellite's first communication was made by Bell's engineers and scientists, which was a telephone conversation between New Jersey and California relayed via Echo 1. Today, satellites float in orbit constantly performing as relay stations for telephone calls between nations and for watching television programs beamed from most areas of the world, a great advance and benefit to mankind. Beyond that, the knowledge gained from its success "strengthened NASA's involvement in the field of satellite communications".



Figure 2

Figure 2 illustrates a typical FDC for the Echo 1 stamp, with the first day of issue at Washington D.C. The front of the cover describes the intention of the stamp and notes "World Wide Communications through Space", a notation that the Post Office describes as a Medallion Cancel, (for more information on Medallion cancels, read Ralph Nafziger's excellent article titled, "The Evolution of the First Day Cancellation", published in the June 2014 issue of *FIRST DAYS*). The cover is produced by Cachet Craft and artwork by popular cachet maker Ken Boll. Boll has been a favorite cachet maker to collectors for many years, particularly during the long working relationship with Cachet Craft in coordinating his artistic skills for their covers. Boll's First Cachet was created before the end of WW II, and that was for the 3-cent Roosevelt stamp issued on 27 June 1945, (Scott 932). At that time he was in uniform, and was known as Sgt. Ken Boll. Boll's last United States FDC, according to Rosenthal et al., was cancelled on 16 April 1966 for the 1966 Indiana Statehood Issue (Scott 1308).

It may be interesting to note that during a conversation Dick Monty had with Professor Earl Planty, who's generally known in the American First Day Cover Society as the Dean of first day cover collectors, Planty mentioned to Monty that his favorite cachet was prepared by Cletus Henry, and interesting

enough that cachet was for the Communication for Peace Satellite Echo 1 stamp. Monty, as we all know, passed on recently and will certainly be missed as one of the stalwarts of AFDCS.

References:

Heppenheimer, T. A. *Countdown: A History of Space Flight*, John Wiley & Sons Inc. 1997.

Gasper, Wayne. First Days February 1984.

Monty, Dick. *First Days* April 1984.

Rosenthal, Dr. Michael R. & Speer, Dr. Marvin. First Days July 1995.