NEWS

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EXPLORER 1 RETURNS

The first United States satellite in space, Explorer 1, reentered the Earth's atmosphere early today over the South Pacific ocean.

Explorer 1 returned just a little more than 12 years after it was launched January 31, 1958, on a Jupiter-C rocket from Cape Canaveral, Fla. (Cape Kennedy).

Commenting on the satellite's reentry today were three men who led teams responsible for Explorer 1's success: Dr. Wernher von Braun, then director of the Army Ballistic Missile Agency and now Deputy Associate Administrator of the National Aeronautics and Space Administration; Dr. William H. Pickering, Director of the Jet Propulsion Laboratory, Pasadena, Calif.; and Dr. James A. Van Allen of the State University of Iowa.

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Dr. von Braun:

"By today's standards Explorer 1 was a feeble, first step in space. But in its day it was an astounding accomplishment, done on short notice to place the free world in the space race.

"Explorer 1 made a scientific discovery that still stands as one of the most significant findings of the space age--the presence of the Van Allen radiation belts circling the Earth.

"We have come a long way from that tiny Explorer, demonstrated by the fact that the Saturn V we are now flying can place in Earth orbit about 10,000 times as much payload as the little Jupiter-C that launched Explorer 1."

Dr. Pickering:

"When Explorer 1 was launched in 1958, our very real concern was in obtaining an orbit that would last at least a few weeks.

"Now 12 years later, we cannot help feeling a little sad that our first satellite which lasted beyond all expectations has finally come back to Earth. Explorer 1 was a simple mission by today's standards and yet, at the time, all of us were ecstatic with the achievement.

"And it was quite an achievement! Data from this first flight established the presence of the Van Allen Radiation Belts around the Earth, a major scientific finding which is still one of the most important in helping us to understand the Earth-Sun relationship.

"And so, Explorer 1, which began it all has finally disappeared in a flash of meteoric flame. But those of us who worked on its creation can never forget the hectic days of stress and strain before Explorer 1 marked the birth of the U.S. space age."

Dr. Van Allen:

"The successful orbiting of Explorer 1 is one of the landmarks in the technical and scientific history of the human race. Its instrumentation revealed the existence of radiation belts around the Earth and opened a massive new field of scientific exploration in space. It inspired an entire generation of young men and women in the United States to higher achievement and propelled the Western World into the space age."

Before taking its final plunge back to Earth the 30.8 pound satellite had completed more than 58,000 revolutions of the Earth.

Its original orbit was 224 by 1,573 miles. The spacecraft's low point kept dipping closer and closer to the planet, pulled in by gravity over the years, until it encountered enough air drag to capture it finally and return it to Earth. Explorer's orbit shortly before reentry was 90 by 130 miles.

Explorer 1 was launched only 84 days after orders were given for the mission.

Total length of the satellite, including the burned-out rocket case to which the instrument section was attached, was 80 inches. It was six inches in diameter and weighed a total of 30.8 pounds including the rocket case. The satellite portion weighed 18 pounds.

The Jupiter-C was 68 feet tall including the satellite perched on top. Today the mighty Saturn V stands 363 feet tall and is capable of placing 280,000 pounds in Earth orbit.

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