

He completed 19 tasks in a 2-hour 9-minute EVA. He performed such fundamental space work as: activating an experiment, tightening and untightening bolts with an Apollo torque wrench, making electrical connections, and cleaning up his work area.

In all, Gemini amassed 12 hours, 22 minutes of EVA experience. It included space walking, standup EVA for photography, and space work.

Gemini EVA has given us assurance that man can work and explore in the vacuum of space, whether that work be on the Moon or on orbiting space stations.

The Gemini program provided depth in both flight and ground crew proficiency.

It trained a staff of flight controllers skilled in handling complex missions.

It was therefore quite logical that a Gemini flight director was at the same console for the first Apollo flight.

The experience of many other Gemini controllers will also be utilized by Apollo.

We came to take for granted the work of the crews at Cape Kennedy who successfully launched 12 Gemini vehicles.

In addition, they demonstrated a dual launch capability. Four Agena target vehicles and one augmented target docking adapter were launched successfully.

Recovery personnel of the Department of Defense and NASA reduced the number of recovery ships 50 percent between Gemini IV and Gemini XII.

At the same time, they increased spacecraft retrieval efficiency by 50 percent.

The record of the flight crews is, of course, better known. When the last spacecraft splashed down, Gemini had logged 1,940 man-hours. Almost 40 times as great as Mercury.

In cooperation with the scientific community, Gemini flew 52 experiments.

Participating were scientists such as Dr. E. P. Ney, director of the institute of physics at the University of Minnesota.

Over 2,400 synoptic weather and terrain photographs were taken. Two thousand of these supplied useful information to scientists.

The aerial mapping potential of manned flights is best illustrated by the Gemini IX-A flight over Peru.

In one pass, Gemini IX-A mapped 80 percent of the country. It took just 3 minutes.

These photographs were supplied to the Peruvian Government.

Commercial uses have been many. This Texas coastal area shows the larval distribution of shrimp.

One commercial fisherman reported that he learned more by studying this photograph than by fishing the gulf for 25 years.

Weather photographs have been equally rewarding, enabling us to study the vortex of storms, and buildup of storm regions in successive photo passes.

Gemini has also photographed sources of air pollution over cities, channels of rivers, and the flow of jet streams. The International