Man can assemble vehicles by docking and by tether.

He can maneuver them with propulsion burns of spacecraft already in orbit.

He can maintain a fixed orientation of space stations without expending maneuvering fuel.

In short, we can assemble an Orbital Workshop and conduct scientific investigations in it for periods up to a month.

Controlled reentry was an objective on all flights. We are looking at the glowing air in the wake of spacecraft reentry. The command pilot controlled reentry on the first eight manned flights. On the final two missions, the computer alone automatically controlled the descent. (Of course, the pilot was available for backup control.)

On the first three manned flights, Gemini III through V, our landing accuracy was only 57.5 nautical miles from the planned impact point. This distance soon improved.

Wally Schirra landed Gemini VI–A within 7 nautical miles of the planned impact point.

Gemini VIII, despite an orbital abort, landed within 1.1 nautical miles of the planned secondary impact point.

Although it came down 8,000 miles from the primary target area, it achieved the second best landing accuracy.

Tom Stafford shaved that distance to four-tenths of a mile on Gemini IX–A, establishing a remarkable record. Overall, the average miss distance of the last seven flights was 3.6 nautical miles.

This gives us confidence in planning Apollo. Crews will be returning from the Moon at about 25,000 miles an hour. To land safely within a 3,200-mile footprint, they must hit a reentry corridor within 2° of the planned flight path.

The sheer act of a man opening the Gemini hatch and going into space made extra vehicular activity unique among the program objectives.

Ed White completed a successful 22-minute space walk during Gemini IV. He experienced no disorientation. He maneuvered well with the handheld maneuvering unit. And his physiological reactions were very close to what had been predicted from ground tests.

Four additional EVA flights were flown as Gemini progressed from relatively uncomplicated space walking to meaningful space work by an EVA pilot.

On three flights, Gemini IX–A, X, and XI, the pilot faced problems of body control and workload. Two answers evolved:

A new underwater training program for crews and the increased use of body restraints during work sessions.

Astronaut Cernan had nine pieces of body restraint equipment during in his Gemini IX–A flight.

We progressively developed and refined restraint equipment until 44 pieces were flown on Gemini XII.

We also added underwater simulation of zero gravity conditions to train the prime and backup crews of Gemini XII.

This gave them a greater continuity of training than is possible in the parabola of aircraft flight.

Buzz Aldrin put to work the experience gained from four flights and underwater training.