to reach orbit. A backup mission utilizing Augmented Target Docking Adapter (ATDA) as the target, scheduled for June 1.

The ADTA was placed into orbit on June 1 with an Atlas booster, but inability of Gemini spacecraft to receive final guidance information caused postponement of Gemini launch to June 3 when spacecraft was launched into 45-revolution orbital flight by its modified Titan II booster. Rendezvous with ATDA achieved on third orbit. Crew confirmed that shroud covering the docking collar had failed to separate and docking was canceled. Two additional rendezvous performed as planned, one using visual techniques and the last from above the ATDA. EVA delayed from June 4 to June 5 due to crew fatigue. After 1 hour of EVA, Cernan's visor accumulated fog and communications between Stafford and Cernan were poor as Cernan checked out the Astronaut Maneuvering Unit (AMU) in the adapter section of the spacecraft. Planned use of the self-contained life support and propulsion systems to maneuver with the AMU was canceled. Total 2 hours, 7 minutes EVA. Radio polarization and photographic experiments were conducted in addition to micrometoroid collection. Controlled reentry to 0.42 miles of target. Duration—72 hours, 21 minutes.

Launch date: July 18, 1966.
Designation: Gemini X.
Crew: John W. Young and Michael Collins.

Remarks: GATV-Atlas booster combination launched 100 minutes before Gemini spacecraft launched into orbit by modified Titan II booster. Rendezvous and docking with GATV accomplished in fourth orbit of 43-revolution flight. GATV engine used to propel the docked combination to record altitude, then proper orbit to rendezvous with GATV from Gemini VIII. After separation from GATV, Gemini IX–A effected rendezvous with the passive target. First period of stand up EVA was terminated at 50 minutes when both crewmen suffered eye irritation. Second EVA period, after rendezvous with passive GATV, consisted of Collins on umbilical moving to GATV and recovering micrometeorite experiment package. Umbilical EVA terminated after 39 minutes to conserve maneuvering fuel. Of 14 scheduled experiments, data was obtained on 12. First rendezvous with two different spacecraft, first extensive test of docked spacecraft, first postdocking maneuvers using propulsion unit and fuel of target vehicle, first crewman to touch another spacecraft. New altitude and speed (17,700 statute mile per hour) records for manned space flight. Duration—70 hours, 47 minutes.

Launch date: September 12, 1966.
Designation: Gemini XI.
Crew: Charles Conrad, Jr., and Richard F. Gordon, Jr.

Remarks: GATV–Atlas booster combination launched 1 hour 37 minutes before Gemini spacecraft launched into orbit by modified Titan II booster within 2-second launch window. Rendezvous accomplishes on first orbit of 44-revolution flight using on-board information exclusively. Docking at 1 hour 34 minutes after launch. Docking accomplished twice by each crewman. During umbilical EVA, Gordon removed the nuclear emulsion experiment package and