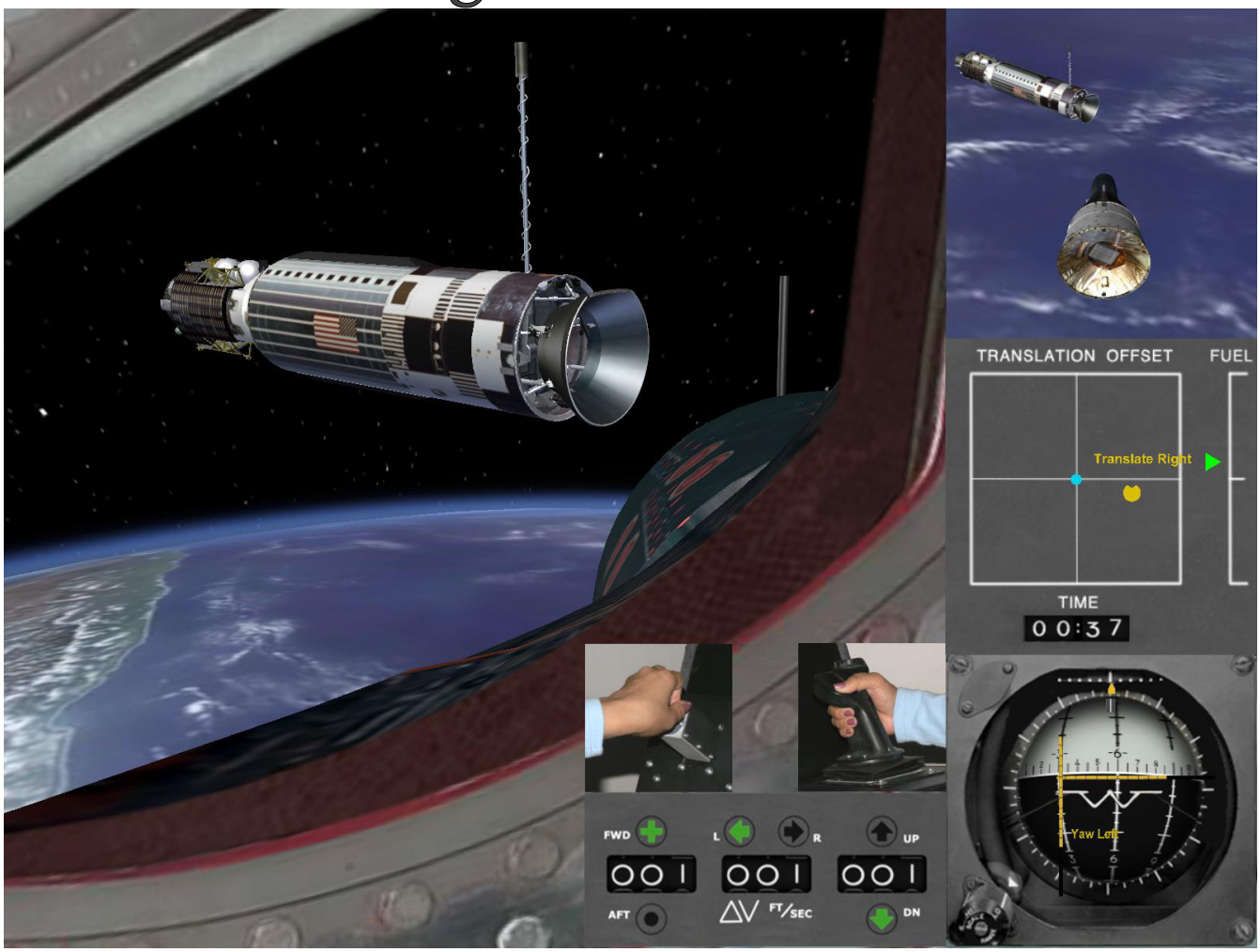
Gemini Docking Simulator V2.0

Simulation Software by
Historic Space Systems



Docking two spacecraft in Earth orbit - it's an essential skill for future crewed space exploration.

And this is where it all began. On four missions in 1966, agile two-manned Gemini spacecraft docked with unmanned Agena Target Vehicles, paving the way for Apollo lunar exploration and today's space adventures.

Give your visitors the thrill of being the first to achieve this vital step. Using controls and displays as in the real Gemini they maneuver their craft, sliding the tapered nose into the waiting Agena docking collar as the Earth rotates below.

Your visitors fly from the viewpoint of the command pilot in the left seat, while their computer "pilot" offers guidance and encouragement.

Using controls and displays as in the real Gemini, your visitors steer their nimble craft to dock with the Agena. A bird's eye view helps keep them oriented. Displays include a Translation Offset display (not in the real Gemini), a fuel gauge, a Flight Director Indicator, and an Incremental Velocity Indicator. Labeled gauge needles and handle images suggest the right moves, while a timer shows the time remaining for their docking.

- High fidelity graphics for the ultimate in realism.
- Translation and rotation controls for full six-axis control of the Gemini.
- Training segment explains docking maneuvers and shows the visitor how to use the controls and displays.
- Accurately reproduces the appearance of the Gemini 8 and Agena spacecraft, referencing over one hundred McDonnell Aircraft engineering drawings.

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exhibits that launch imaginations *(tm)*

The detailed computer graphics and realistic controls give visitors a feel for flying the real spacecraft. The graphics are superb!

- John Zwez, Manager
Neil Armstrong Museum, Wapakoneta, Ohio

visitors learn docking lingo

The Gemini Docking Simulator includes a training segment that teaches your visitors about spacecraft maneuvers such as yaw, roll and pitch. Training segments include:

- How Gemini and Agena docked, including historic NASA images.
- Maneuvers needed to dock two orbiting spacecraft.
- Use of the controls and displays to make a successful docking.

Any training segment may be easily bypassed as needed.

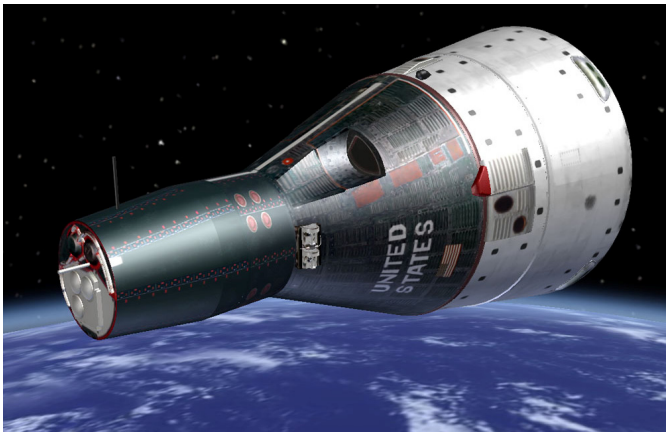
During the simulation, limited time and fuel conspire to challenge the skills of your student astronauts. Using space terminology, a companion astronaut helps your visitor succeed with prompts such as, "We need to yaw right."

When successful, your visitor is greeted with fanfare and congratulations. If unsuccessful, they are encouraged to try again later.

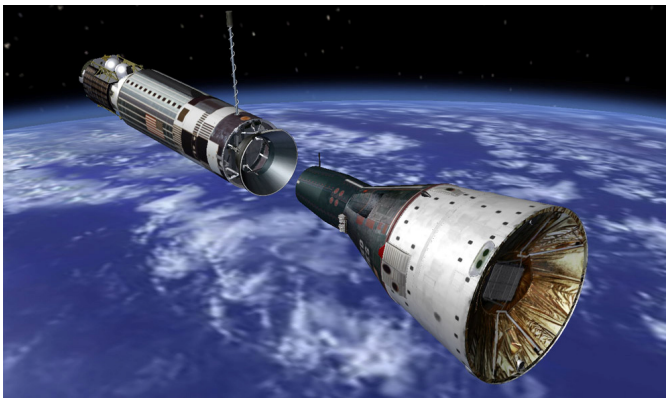
fully integrated package

The Gemini Docking Simulator software is sold as part of a complete exhibit built by ***Historic Space Systems,*** or integrated into your enclosure. You may choose to operate the exhibit as a simple kiosk. Or you may want the added realism of a Gemini cockpit.

Supplemental information could also be added about the Gemini spacecraft and program. Contact ***Historic Space Systems*** to discuss your needs.



View of the Gemini spacecraft modeled in the simulation. The command pilot is seated below the hatch at center, facing forward (left). The simulation views through the hatch window. Note the black Velcro patches on the white adapter section as used on Gemini 8 through 12 to aid space walking astronauts.



Details on the Agena Target Vehicle include the primary and secondary propulsion systems, realistic markings, antennas, and a highly detailed docking system.

The Gemini Docking Simulator may be enclosed as a simple kiosk such as this exhibit at the Coca-Cola Space Science Center. Or you may choose to simulate a portion of the Gemini cockpit as well.

Historic Space Systems specializes in realistic historically accurate reproductions of US manned spacecraft.

Our designs reference actual spacecraft engineering drawings and other original sources in our extensive archive.

We also have a collection of spacecraft artifacts available for rental to museums and schools.

Visit our web site for more information on our exhibits and to learn more about US manned spacecraft.

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