

Shayler

Linking the Space Shuttle and Space Stations

Early Docking Technologies from Concept to Implementation

How could the newly authorized space shuttle help in the U.S. quest to build a large research station in Earth orbit? As a means of transporting goods, the shuttle could help supply the parts to the station. But how would the two entities be physically linked? Docking technologies had to constantly evolve as the designs of the early space stations changed. It was hoped the shuttle would make missions to the Russian Salyut and American Skylab stations, but these were postponed until the Mir station became available, while plans for getting a new U. S. space station underway were stalled. In *Linking the Space Shuttle and Space Stations*, the author delves into the rich history of the Space Shuttle and its connection to these early space stations, culminating in the nine missions to dock the shuttle to Mir. By 1998, after nearly three decades of planning and operations, shuttle missions to Mir had resulted in:

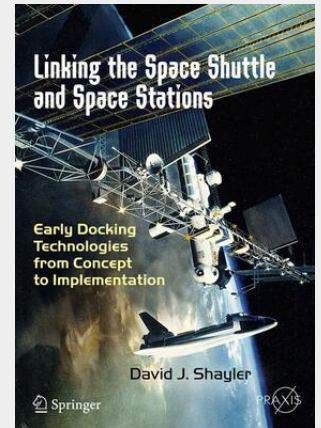
- A proven system to link up the space shuttle to a space station
- Equipment and hands-on experience in handling tons of materials
- An infrastructure to support space station assembly and resupply

Each of these played a pivotal role in developing the skills and procedures crucial to the creation of the later, much larger and far more complex International Space Station, as described in the companion volume *Assembling and Supplying the ISS: The Space Shuttle Fulfills Its Mission*.

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