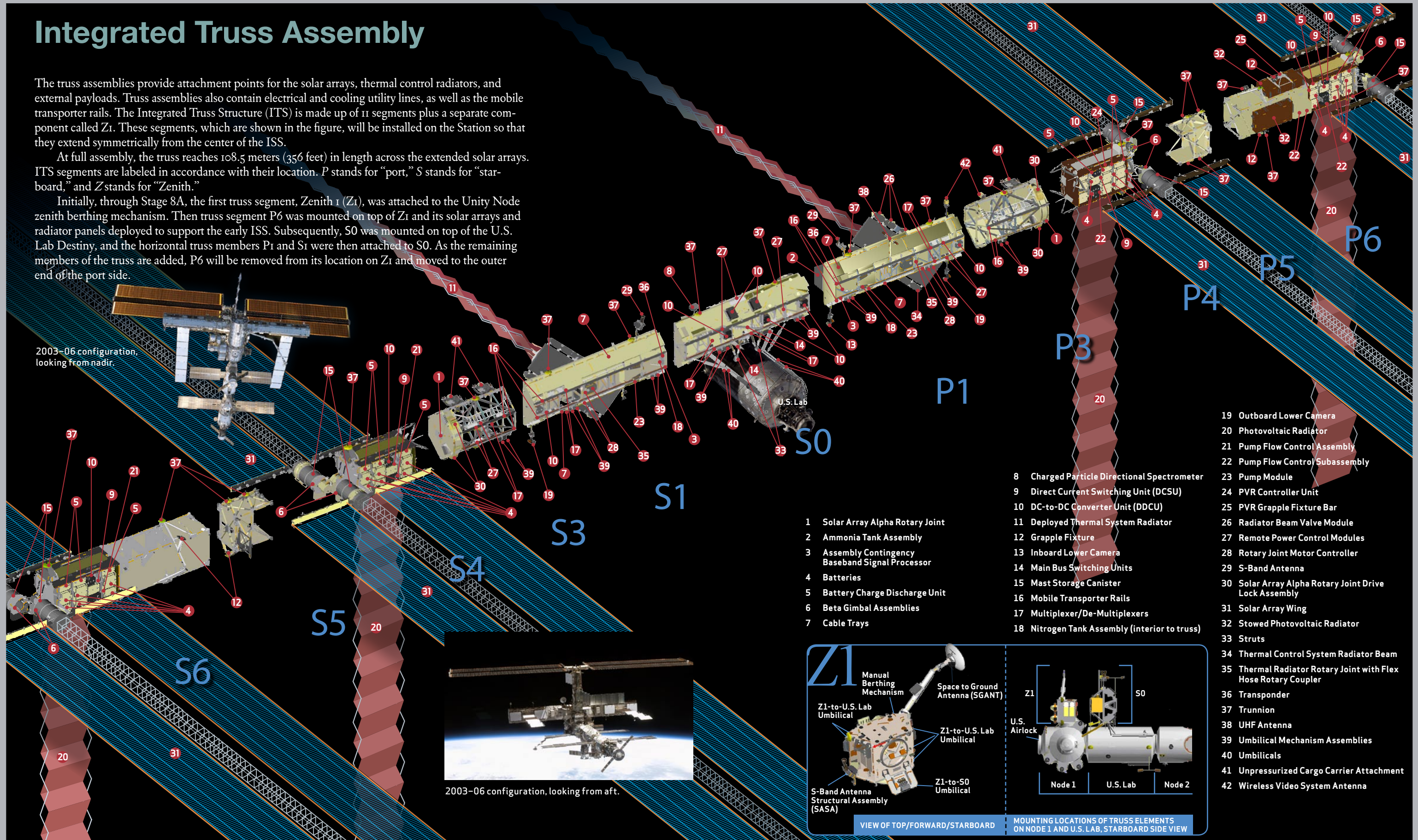


# Integrated Truss Assembly

The truss assemblies provide attachment points for the solar arrays, thermal control radiators, and external payloads. Truss assemblies also contain electrical and cooling utility lines, as well as the mobile transporter rails. The Integrated Truss Structure (ITS) is made up of 11 segments plus a separate component called Z1. These segments, which are shown in the figure, will be installed on the Station so that they extend symmetrically from the center of the ISS.

At full assembly, the truss reaches 108.5 meters (356 feet) in length across the extended solar arrays. ITS segments are labeled in accordance with their location. P stands for "port," S stands for "starboard," and Z stands for "Zenith."

Initially, through Stage 8A, the first truss segment, Zenith 1 (Z1), was attached to the Unity Node zenith berthing mechanism. Then truss segment P6 was mounted on top of Z1 and its solar arrays and radiator panels deployed to support the early ISS. Subsequently, S0 was mounted on top of the U.S. Lab Destiny, and the horizontal truss members P1 and S1 were then attached to S0. As the remaining members of the truss are added, P6 will be removed from its location on Z1 and moved to the outer end of the port side.



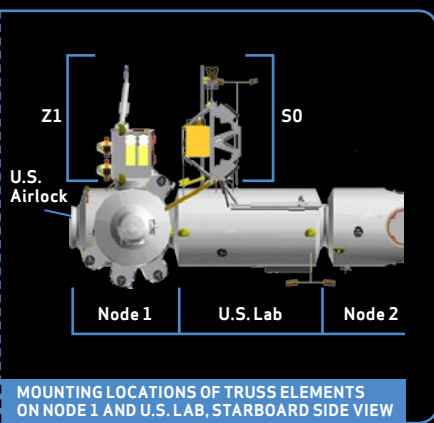
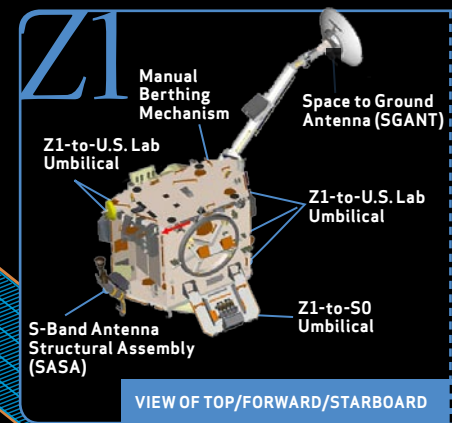
2003-06 configuration, looking from nadir.

2003-06 configuration, looking from aft.

- 1 Solar Array Alpha Rotary Joint
- 2 Ammonia Tank Assembly
- 3 Assembly Contingency Baseband Signal Processor
- 4 Batteries
- 5 Battery Charge Discharge Unit
- 6 Beta Gimbal Assemblies
- 7 Cable Trays

- 8 Charged Particle Directional Spectrometer
- 9 Direct Current Switching Unit (DCSU)
- 10 DC-to-DC Converter Unit (DDCU)
- 11 Deployed Thermal System Radiator
- 12 Grapple Fixture
- 13 Inboard Lower Camera
- 14 Main Bus Switching Units
- 15 Mast Storage Canister
- 16 Mobile Transporter Rails
- 17 Multiplexer/De-Multiplexers
- 18 Nitrogen Tank Assembly (interior to truss)

- 19 Outboard Lower Camera
- 20 Photovoltaic Radiator
- 21 Pump Flow Control Assembly
- 22 Pump Flow Control Subassembly
- 23 Pump Module
- 24 PVR Controller Unit
- 25 PVR Grapple Fixture Bar
- 26 Radiator Beam Valve Module
- 27 Remote Power Control Modules
- 28 Rotary Joint Motor Controller
- 29 S-Band Antenna
- 30 Solar Array Alpha Rotary Joint Drive Lock Assembly
- 31 Solar Array Wing
- 32 Stowed Photovoltaic Radiator
- 33 Struts
- 34 Thermal Control System Radiator Beam
- 35 Thermal Radiator Rotary Joint with Flex Hose Rotary Coupler
- 36 Transponder
- 37 Trunnion
- 38 UHF Antenna
- 39 Umbilical Mechanism Assemblies
- 40 Umbilicals
- 41 Unpressurized Cargo Carrier Attachment
- 42 Wireless Video System Antenna



VIEW OF TOP/FORWARD/STARBOARD

MOUNTING LOCATIONS OF TRUSS ELEMENTS ON NODE 1 AND U.S. LAB, STARBOARD SIDE VIEW