

NASA downplays space station air leak

NASA is playing down concerns raised in a report about a long-running air leak that has plagued the International Space Station for five years, saying they have recently reduced the leak rate

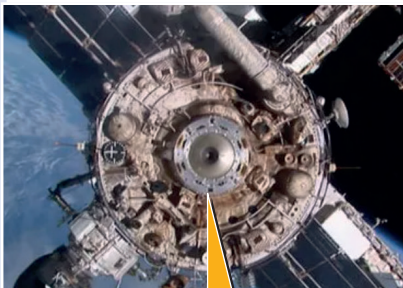
■ **Jul 2000:** Russian space agency, **Roscosmos**, docks **Zvezda** with two-element ISS already in orbit. Service Module is third oldest segment of space station

■ **Sep 2019:** Crew find 22mm-long crack on starboard side of Zvezda's hull. **NASA observes doubling of leakage to about 0.54kg air/day**

■ **Oct 2020:** NASA and Roscosmos identify three leak sources and seal two. **Leak rate rises to 0.77kg air/day**

■ **Mar 2021:** Crew repair crack and apply sealant to second suspected leak site. Discovery of multiple cracks and leaks continue in Service Module transfer tunnel

■ **Apr 2024:** Leak grows to nearly **1.7kg air/day**



Air leak: In *PrK* transfer tunnel that separates docking port from Zvezda.
Sep 27: Repairs reduce leak rate to about 1.13kg air/day

RUSSIAN MODULES OF ISS

Soyuz or Progress

Leak in transfer tunnel

Zvezda
Service module
(delivered 2000)

MRM2
(*Poisk*)
(2009)

Zarya
(1998)

Soyuz or Progress

Pirs: Provides airlock for cosmonaut spacewalks. Also serves as docking port for transport and cargo vehicles

U.S. / EUROPEAN / JAPANESE MODULES

Unity
(1998)

Destiny
(2001)

Kibo
(2008)

Rassvet (2010)
Cargo storage and fourth docking port on Russian segment

Soyuz or Progress

Truss and solar arrays not shown