

Shuttle Discovery arrives at space station

April 7 2010, By MARCIA DUNN , AP Aerospace Writer



This TV image provided by NASA shows the Space Shuttle Discovery passing over China as it approaches the space station for docking early Wednesday morning April 7, 2010.

(AP) -- Space shuttle Discovery successfully docked at the International Space Station early Wednesday, its astronauts overcoming a rare antenna breakdown that knocked out radar tracking.

Shuttle commander Alan Poindexter and his crew relied on other navigation devices to approach the orbiting outpost.

"You guys are looking beautiful," Japanese space station resident Soichi Noguchi radioed as the shuttle drew within 660 feet, loaded down with supplies.

The two spacecraft came together 215 miles above the Caribbean,

precisely on time.

It was only the second time that a shuttle had to dock with the space station without any radar; the first was 10 years ago.

Poindexter trained for just such an event two weeks ago. As he closed in on the final 150 feet, he radioed, "It's a lot of fun."

One of the first matters of business for the 13 space fliers - once the hatches swung open - was transmitting detailed laser images of Discovery to Mission Control in Houston.

Astronaut Stephanie Wilson pocketed the computer hard-drive holding all the wing and nose images that were collected Tuesday, and handed it over as soon as she crossed the station's threshold. The antenna breakdown prevented their immediate relay to experts on the ground for analysis.

[NASA](#) needs to scrutinize the data to make sure Discovery suffered no launch damage that could jeopardize its re-entry on April 18.

On a lighter note, Discovery's arrival also meant that the world finally got to see the seven shuttle astronauts in space.

The failure of Discovery's [dish antenna](#) shortly after Monday's [liftoff](#) prevented the astronauts from sending and receiving big packages of information during their first two days in orbit. Video shots also fell by the wayside.

The orbiting crowd includes a record-setting four women, three of whom arrived on Discovery. There are eight Americans, three Russians and, for the first time ever together in space, two Japanese.

The two crews embraced and shook hands as they greeted one another.

An hour before the linkup, Poindexter guided Discovery through a slow backflip so the station crew could photograph the shuttle belly, using zoom lenses. About 300 close-up pictures were hustled down to Mission Control so experts could hunt for any signs of damage.

A thermal tile apparently broke off the rudder-speed brake seconds after liftoff. Mission managers were not overly concerned because that area experiences little heating during re-entry. They hoped the laser images and backflip pictures would provide additional insight into what happened.

In addition, about three small pieces of foam insulation came off the fuel tank, too late in the launch, though, to pose any danger to Discovery.

On Thursday, the [astronauts](#) will move a giant cargo carrier from Discovery's payload bay and anchor it to the space station. That will make it easier to unload the several tons of supplies, spare parts and science experiments.

Then on Friday, two of the shuttle crew will perform the first of three spacewalks to replace an old ammonia tank outside the space station.

The space station is nearly completed; only three shuttle missions remain after this one to wrap up its outfitting.

©2010 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

Citation: Shuttle Discovery arrives at space station (2010, April 7) retrieved 24 April 2024 from <https://phys.org/news/2010-04-shuttle-discovery-space-station.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.