

Advertisement



How Much Are You Overpaying for Auto Insurance

Compares Rates Instantly & Save....

Zip Code: Do you currently have auto insurance? Yes No

USA TODAY

Marketplace

[Cars](#) • [Jobs](#) • [Travel](#) • [Business Opportunities](#) • [Franchises](#) • [Real Estate](#) • [Tickets](#) • [More](#)

- Home
- News
- Money
- Sports
- Life
- Tech
- Weather

Tech

[E-MAIL THIS](#) • [PRINT THIS](#) • [SAVE THIS](#) • [MOST POPULAR](#) • [SUBSCRIBE](#)

Posted 6/30/2004 2:32 AM Updated 7/1/2004 6:45 AM

Search

powered by **GO**

ISS crew makes successful repair in second spacewalk

By Marcia Dunn, Associated Press

CAPE CANAVERAL — The international space station's two astronauts hustled through an unusually risky spacewalk and successfully replaced a bad circuit breaker Wednesday — a sweet victory following last week's failed attempt.



Expedition 9 Commander Gennady Padalka, left, and astronaut Mike Fincke, right, listen to congratulation remarks from mission control during a televised spacewalk .
NASA via AP

Shouts of "hurray!" and "great!" emanated from space after American Mike Fincke and Russian Gennady Padalka learned their effort had paid off. (Related video: [Space station makes repairs](#))

"Great job, you guys," Mission Control radioed.

"We're glad to be able to be of service," Fincke said.

It was a long and potentially dangerous haul to the work site — and back to the hatch after the repairs were made.

Fincke and Padalka had to cross nearly 100 feet to get to the fried circuit breaker — a grueling distance for spacewalkers over difficult terrain. Then they managed to pry off the cover for the row of circuit breakers; it was stiff and incredibly hard to move.

The two were ahead of schedule the entire time, and flight

- Tech Investor
 - [Investor home](#)
 - [Internet 50 index](#)
 - [Ask Matt](#)
 - [Kevin Maney](#)
- Tech Reviews
 - [Reviews home](#)
 - [Edward C. Baig](#)
 - [Jinny Gudmundsen](#)
 - [Marc Saltzman](#)
- Columnists
 - [Columnists index](#)
 - [Andrew Kantor](#)
 - [Kim Komando](#)
 - [Eric J. Sinrod](#)
 - [WonderQuest](#)
- More Tech
 - [Hot Sites](#)
 - [Tech briefs](#)
 - [Wireless Center](#)
 - [Shareware Shelf](#)
 - [Ask Kim Komando](#)
 - [Music and Tech](#)
 - [Talk Today](#)

- [Travel](#) >
- [Cars](#) >
- [Jobs](#) >

Advertisement

Save time and money

Travel special
and deals

CLICK NOW

USA TODAY.com | Travel

Today's Top Tech Stories

- [Studios eye new anti-pir](#)
6:21 PM
 - [Nortel stock sinks after r](#)
6:09 PM
 - [China to keep tabs on m](#)
[messaging](#) - 5:39 PM
 - [Internet technology test](#)
[radio interference](#) - 5:31 F
 - [Oracle trial presents con](#)
[industry](#) - 3:45 PM
- [Add USATODAY.com hea](#)
[site](#)

E-Mail Newsletters

Sign up to receive our free newsletter and get the lat Hot Sites & more in your ir

E-mail:

Select one: in

controllers kept urging them to take their time and be careful. The warnings came more frequently as the men made their way back from the work site.

Less than six hours after venturing out, the men were safely back inside.

Last Thursday, they barely made it out the hatch when their spacewalk was aborted, just 14 minutes after it began. An oxygen-flow switch on Fincke's suit did not lock into the proper position and oxygen gushed out of his tank, prompting flight controllers to order the spacewalkers back inside.

NASA was anxious to replace the circuit breaker to restore power to one of the gyroscopes that keep the 225-mile-high outpost steady and pointed in the right direction. The circuit breaker conked out in April, leaving the space station with just two good gyroscopes, the bare minimum. With a new breaker in, the idled gyroscope checked out fine Wednesday night and was expected to be up and running within a day.

The spacewalk was considered riskier than most.

The space station is down to just two crew members, instead of three, because of the grounding of the shuttle fleet since the Columbia disaster. As a result, no one was left inside to watch over everything during the spacewalk — a situation NASA never tolerated until this year.

The men also used Russian suits not intended for this type of hand-intensive, U.S. repair work. A cooling failure in the space station's American spacesuits a month ago forced the switch to the stiffer, more-pressurized Russian suits.

After floating through the Russian hatch Wednesday — a half-hour early — Fincke and Padalka cranked open an extendible boom to traverse the station, and made it to the work site all the way over on the U.S. side without incident about 1½ hours later.

Within minutes, they removed the old circuit breaker — a rectangular box about the size of a dictionary — and pushed in the spare. Flight controllers immediately ran a series of electrical tests and confirmed that the swap was good.

Using the Russian suits meant an exit from the Russian hatch — 80 feet to 100 feet from the broken circuit breaker — and an excursion over treacherous terrain, including antennas and jagged edges that could tear a spacesuit. The 50-foot extension boom helped close the gap, but the crew still had a considerable amount of hand-over-hand walking to do and an assortment of safety tethers — both Russian and American — to hook and unhook.

At one point, the cables were so numerous and dense that it sounded as though the spacemen were making their way through a jungle.

NASA expected the work to be more fatiguing because of the stiffer gloves and suits and because of the extra distance. Going out the U.S. hatch would have entailed a 30-foot hike.

The distance was so great that communication blackouts were anticipated; Fincke and Padalka planned to resort to hand signals, if necessary. But the radio links held up fine and the spacewalkers even pulled off a few maintenance chores.

Another first on this spacewalk: Prime responsibility for the job was divided between the two Mission Controls, in Moscow and Houston, depending on what side of the station the astronauts were on at any given moment.

The first shift in control came 50 minutes into the spacewalk and appeared to be seamless. It was obvious to anyone listening in; the conversation abruptly switched from Russian to English. Everything reverted to Russian, near the end.

Copyright 2004 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

RELATED ADVERTISING LINKS	What's this?
<p><u>Replica Space Suits</u> Our Shuttle, Lunar & Pumpkin Space Suits are Fantastic! www.spacetoy.com</p>	
<p><u>Astronaut Costumes</u> NASA space suits for kids! Shipped year round. www.buycostumes.com</p>	
<p><u>Nasa Space Shuttle</u> Find Current Space Science Topics Get Individual Article Access Today www.kluweronline.com</p>	
<p><u>Astronaut costume</u> Costume Store for Every Occasion Great Selection. Buy Online/Phone www.allcostumes.com</p>	
<p><u>Astronaut Costume</u> Compare prices on Toys & Games at Pricetool! www1.Pricetool.com</p>	



AD Meet 40+ singles; as low as \$10/month
SeniorFriendFinder.com
IT'S NEVER TOO LATE TO FALL IN LOVE - OVER 500,000 MEMBERS

FIND LOVE
I am a
seeking a **GO!**
Zip

USATODAY.com partners: [USA Weekend](#) • [Sports Weekly](#) • [Education](#) • [Space.com](#)

[Home](#) • [News](#) • [Money](#) • [Sports](#) • [Life](#) • [Tech](#) • [Weather](#) • [Travel](#) • [Job Center](#)

Resources: [Mobile News](#) • [Site Map](#) • [FAQ](#) • [Contact Us](#)
[Email News](#) • [Jobs with Us](#) • [Terms of service](#) • [Privacy Policy](#) • [Media Kit](#) • [Press Room](#)

[Add USATODAY.com headlines to your Web site](#)

© Copyright 2004 USA TODAY, a division of [Gannett Co. Inc.](#)