



The Air Force's newest C-17 sits on the sea ice off McMurdo Station October 15. The plane was the first of its kind to land in Antarctica. Photo by Aaron Spitzer.

Cutting-edge cargo plane pays visit to McMurdo

By Aaron Spitzer
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Out of a sky brilliant with iridescent polar clouds, a hulking C-17 Globemaster cargo plane made a historic touchdown on McMurdo Station's ice runway October 15.

The Air Force plane was the first of its kind to land in Antarctica. Staged out of Christchurch, the flight was a test of the ability of C-17s to serve the U.S. Antarctic Program.

By all accounts, the operation was successful. From the cockpit following the landing, pilot Maj. Dave Pollmiller gave a proud but understated assessment of the flight. "It was totally uneventful," he said.

Bill Haals, McMurdo's manager of operations and the overseer of the station's ice runway, was equally upbeat. "Absolutely textbook," he said.

For years the Air Force has operated C-141 Starlifters to ferry both people and cargo between Christchurch and McMurdo Station. But C-141s, which date from the Vietnam War era, are slated to be removed from active Air Force duty by 2003.

The newer C-17s will almost certainly take their place flying to the Ice. The October 15 flight gave officials from both the Air Force and the U.S. Antarctic Program a preview of what the future may hold.

Occurring on a warm and nearly windless day, the flight drew dozens of camera-toting onlookers out to McMurdo's airfield, where they watched the glinting craft angle in from the north, touch down

on the icy airfield and send up a plume of snow.

Minutes later, after taxiing to the apron, the airplane was swarmed with cargo crews, who used front-end loaders and sledges to off-load massive cargo pallets from the gaping aft door.

The plane that arrived in McMurdo was on its first major mission. The \$180 million craft—only the 54th built—is the newest C-17 in the Air Force's fleet, having rolled off the production lines in Long Beach, California, earlier this month. When it left its home at McChord Air Force Base in Washington state, it had only 29 hours of flight time.

According to Maj. Jim Curtis, an Air Force flyer who accompanied the plane to McMurdo, the advantages offered by this new breed of cargo planes are dramatic.

The most notable benefit of C-17 Globemasters is their gargantuan carrying capacity. At 60 tons, it's nearly three times that of the C-141s.

Though the C-141s can move more people—156, compared to 102 in a C-17—the Globemaster can carry four pallets of cargo along with a full load of passengers.

The C-17s' massive payload also allows it to fly farther without refueling. Under normal load conditions, the plane can travel from Christchurch to McMurdo

and back without stopping to gas up—eliminating the need for establishing a "point of safe return."

According to Maj. Curtis, the C-17 also offers manpower efficiencies over the C-141.

They require two fewer crew members to operate, he said. "We got rid of the flight engineers. That's due to automation." A C-17 crew is composed simply of two pilots and one or two loadmasters.

Both planes fly at about the same speed, Curtis said. The trip from Christchurch that day took 6 hours, 45 minutes, fighting a brisk headwind.

Special precautions were taken for the plane's historic visit to the Ice. Curtis, a C-141 pilot with years of experience flying to Antarctica, was sent along to familiarize the crew with conditions unique to polar aviation, such as mirages and extreme cold.

Once at McMurdo, extreme heat was more of a concern. According to Bill Haals, C-17s use deflected exhaust to help boost them into flight upon takeoff. In warm environments they have been known to melt asphalt—and melting the ice runway was simply not an option.

Haals said he worked with the Air Force for the last year to prepare for the plane's inaugural visit, to ensure that neither the craft nor the runway suffered damage.

But because the plane departed McMurdo largely empty, with only a load of lucky winterers headed home, "They



Cargo handlers off-load part of the DASI telescopic array, bound for the south pole. The C-17 can carry triple the cargo of its predecessor, the C-141. Photo by Josh Landis.

didn't have to blast it off," Haals said.

The plane used about 3400 feet of the ice runway to get airborne, melting no ice in the process.

Another C-17 visit is slated for November 11, to test the plane's effect on the sea ice later in the summer season. ✨