

The Operational History and Resurrection of Zero-Two-Nine

By John Vadas



An early photo of the new aircraft while assigned to the 62nd MAW. (USAF photo)

C-141A 67-0029 was accepted by the Air Force on December 19, 1967. The first duty assignment was with the 62nd Military Airlift Wing (MAW) at McChord AFB, Washington. It arrived on station December 27, 1967,¹ and would serve with the 62nd MAW until April 15, 1971, when it was reassigned to the 443rd Military Training Wing at Altus AFB, Oklahoma.

67-0029 then served with the 443rd Military Training Wing at Altus AFB, Okla., from April 15, 1971, until June 7, 1974, when the aircraft received a second PCS (Permanent Change of Station) reassignment, this time to the 63rd Military Airlift Wing at Norton AFB, California.

Zero-two-nine would serve with the 63rd MAW from June 7, 1974, until December 1992.

On February 24, 1978, while assigned to the 63rd MAW at Norton AFB, this aircraft was participating in Exercise *Purple Duck*, a MAC directed Container Delivery System (CDS) Combat Airdrop Mission (CAM). The flight had departed Norton AFB at 14:30 PST and had proceeded without incident until approximately one minute from Time over Target (TOT) on the Baghdad drop zone at 29 Palms Marine Corps Air Station (MCAS) in the California desert. The aircraft was stabilized at 600 feet above ground level (AGL) and 160 knots on the final run-in heading. The petal doors were open, the ramp down and the "One Minute Checklist" had been completed, when the left petal door buckled on a vertical line just forward of the

aft petal door hinge. The collapsing door folded inward and upward with the forward hinge and jackscrew failing almost simultaneously. The trailing corner of the left door struck the right petal door about two feet from the end inflicting a 30-inch gash. The left door then fell from the aircraft in two separate pieces, landing about three miles short of the drop zone. As the door separated the Loadmaster called "no drop" and the CDS malfunction checklist was completed. The right petal door and ramp were closed and the mission aborted. The sky was clear with no turbulence, no in-flight controllability problems were experienced during the flight and an uneventful approach and landing were accomplished back at Norton AFB. The cause was ruled delamination and materiel failure of the petal door. The damaged door and door components were shipped back to Warner-Robins Air Logistics Center (ALC) for tear down analysis.²



In markings of the 63rd MAW, October 1980. (Photo by Paul Minert)



C-141B 67-0029 63rd MAW at Norton AFB, November 1982. (Photo by Frank Duarte)

On or about September 18, 1981, the airframe was sent TDY (Temporary Duty Assignment) to Lockheed in Marietta, Ga., for the 'B' model stretch program. This program required the fuselage to be cut in two places, one cut in front of the wing and one behind the wing. Matching "plugs" were then inserted into the cuts that lengthened the fuselage and allowed the aircraft's capacity to increase from 10 to 13 pallets. Also installed during this modification was an in-flight air refueling system. Upon completion of the 'B' model modification and test flight, the aircraft was returned to the 63rd MAW at Norton AFB, arriving back on station on or about December 21, 1981.³

"Aircraft 67-0029 had a bad day at Iwakuni AB, Japan, on January 12, 1987. After landing in blowing snow and high winds, it ran off the runway and the right wing was damaged severely," said Col. Paul Hansen.⁴

"The mission had started at MCAS Iwakuni AB, Japan. The crew had departed for a mission to Kadena AB, Okinawa. Nearing Kadena, the winds were reported out of limits for landing. The crew decided to divert back to their alternate of Iwakuni. The weather at Iwakuni had deteriorated, reported weather included high crosswinds and heavy blowing snow. The pilot elected to use "Approach Flaps" for the landing due to the turbulence and crosswinds.

After touchdown the pilot forcefully held forward yoke pressure to maintain control of the aircraft in the crosswinds. The thrust reversers and spoilers failed to deploy. The pilot attempted to use the brakes, with no effect. The excessive forward yoke forces had lifted the main gear off the runway. With the main gear off the ground, the touchdown relay inhibited the thrust reversers and spoilers from deploying beyond the flight limit. The brakes also were useless until the main gear finally contacted the runway. Believing he had lost normal brakes, the pilot directed the copilot to select emergency brakes, disabling anti-skid protection.

When the main landing gear finally contacted the runway, the thrust reversers, spoilers and brakes all acted at once.

The pilot lost control of the aircraft on the snow-slickened pavement, and the aircraft departed the runway. The landing gear collapsed, the right wing suffered severe damage and the No. 4 engine separated from the wing. The crew and passengers evacuated successfully."⁵ *

Following the accident in 1987, operational control of 67-0029 would transfer from the 63rd MAW at Norton AFB

to the 374th Tactical Airlift Wing at Yokota, which assumed authority for coordinating repairs to the aircraft.

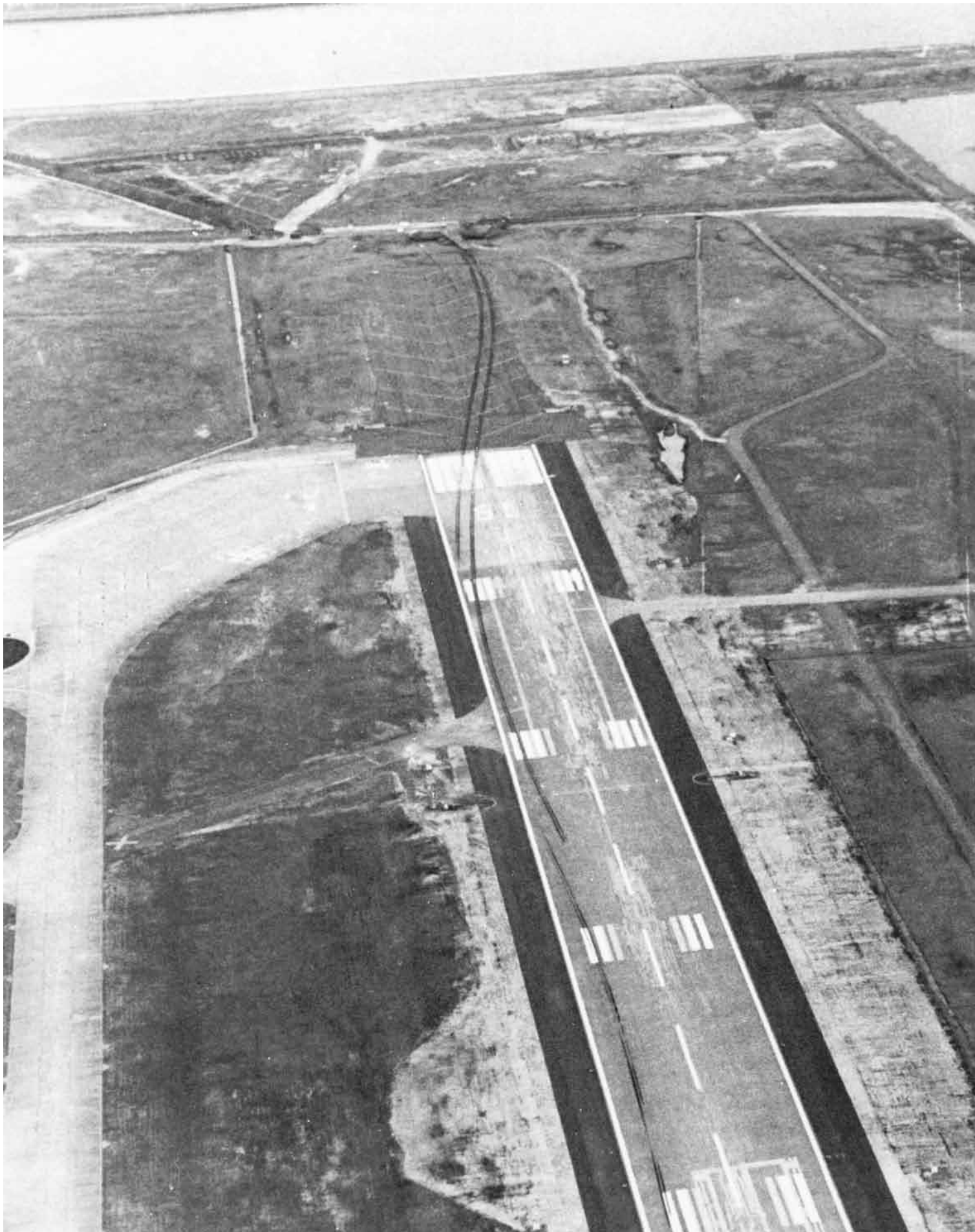
RECOVERY

After the Mishap and Crash Investigation Boards completed their investigation, the director of logistics for the 22nd Air Force asked the Air Force Logistics Command for assistance in removing or recovering the badly damaged airframe. The Center Directorate of Maintenance asked the 2955th Combat Logistics Support Squadron (CLSS) from the Warner-Robins Air Logistics Center (WRALC) to recover the aircraft, assess the possibility of repairing it, and perform the repairs if possible. In March 1987, a seven-member damage assessment team, led by SMSgt. Benjamin Pate, journeyed to Iwakuni to determine if the aircraft could be salvaged and repaired. Though severely damaged, the team decided the aircraft could, in fact, be salvaged and returned to service.

In May 1987, a second depot field team (DFT) returned to Iwakuni to start the removal and recovery effort. During a three week period in May 1987, the team managed to lift the aircraft out of the mud and onto a special mounting fixture on a 60-ton tractor-trailer rig. Using this rig and two 40-ton K-loaders with air bags they towed the aircraft down the runway to a parking ramp area to await a final repair decision by the logisticians in the Center Directorates of Material Management and Maintenance (WRALC/MM).

Using the project code name "Pacer East," a 10-member repair preparation team led by SMSgt. Ron Copeland went to Iwakuni in November 1987, to begin the repairs. The team placed the aircraft on shoring cradles and wing and tail jacks, leveled the aircraft and performed many alignment checks on the damaged frame. They also removed all salvageable equipment and replaced many of the fuselage bulkhead caps, floor caps and stringers that had been destroyed in the crash. From January 12 to April 26, 1988, the team also inspected all available support equipment and inventoried all crash damage repair kits sent from WRALC. Unfortunately, this inventory showed that many parts, hardware and repair drawings were

**(Authors Note) It is the author's intent to report on the recovery of 67-0029 following the accident, and not to second guess or refute the findings of the accident review board as to the cause of the accident.*



An aerial view of the runway at MCAS Iwakuni showing the landing path of 67-0029.⁶ (USAF photo)



67-0029 where she ended up off the end of the runway at MCAS Iwakuni. (Photo from the Paul Minert collection)



The damage to the right wing and no. 4 engine was extensive.⁷ (USAF photo)



Note the thrust reverser on no. 3 engine is still deployed. (Photo from the Paul Minert collection)



The extensive damage to the right main landing gear assembly is evident in this photo. (Photo from the Paul Minert collection)



A dedicated team preparing the aircraft for movement. (USAF photo from the Dave Grant collection)⁸

missing from the kits. The shortage of fasteners presented a major problem. These had to be ordered from Yokota AB, Japan, and from WRALC.

C-141B 65-0246

On October 15, 1986, three months prior to the landing

accident involving 67-0029 at MCAS Iwakuni, a reserve crew was returning at night to Travis AFB, Calif., from a short stateside mission flying C-141B 65-0246. While on approach to Travis, the crew was advised that there had been a bomb threat in the passenger terminal. Upon landing, they were directed to park in a parking spot normally reserved for tow-in



The weight of the aircraft is almost off the wing jacks and onto the truck trailer. (USAF photo from the D. Grant collection)⁹



67-0029 being moved from the accident scene to the parking ramp. (USAF photo from the Dave Grant collection)¹⁰



The extensive damage to the right main landing gear assembly is evident in this photo. (Photo from the Paul Minert collection)

Awaiting repairs minus the engines and landing gear. (USAF photo from the Dave Grant collection)¹²



The remains of 65-0246 after striking a light pole at Travis AFB on the night of October 15, 1986.¹⁴ (USAF photo)

parking. The aircraft commander twice deplaned the scanner to complain about the marshalling procedure. Finally, convinced by the lead marshaler, and with a wing walker on each wing and a pilot in the left window, they followed the marshaler's instructions. While starting a hard right turn, the crew felt a bump. The left wing had struck a light pole which ruptured the no. 1 main fuel tank. Fuel ran down the light pole and into a high voltage junction box at the base of the pole, igniting a fire that spread back up the pole and onto the wing. The crew and passengers evacuated out through the crew entrance door. The fire department was able to contain the fire to the left wing.¹³ After the accident investigation was completed, the wings were removed and the fuselage was used as a ground trainer at Travis AFB.

It was decided that the right wing from 65-0246, which had been in storage for a year and a half, would provide a suitable replacement for the damaged wing on 67-0029 and put at least one of the aircraft back in service.

During early April 1988, an 18-member replacement team led by MSgt. Billy W. Goudeau visited Travis AFB, Calif., en route to Iwakuni to prepare the replacement wing from 65-0246 for shipment. On April 18, the team loaded the wing on to a C-5 Galaxy for the trip across the Pacific. They arrived in Iwakuni on April 22. From April 25 to August 28, 1988, this team completed much of the fuselage work, removed and supervised the shipment of the main landing gear pods to WRALC and removed what remained of the damaged right wing.

A new relief team led by SMSgt. Benjamin Pate arrived at Iwakuni during August 1988. From August to October of that year, they installed the new right wing on the aircraft, installed the aircraft's main landing gears and engine

pylons, and finished work on all the electrical and fuel systems. They also completed the mechanical flight control operational checks. On October 17, the team applied electrical power to the aircraft for the first time since the accident. Due to the lack of parts and materials, the team returned to WRALC on October 21, 1988. They brought with them a final list of parts needed to fly the aircraft back to the WRALC for a complete programmed depot maintenance inspection and repair.

During December 1988, a three member team led by SSgt. James Lema deployed to Travis AFB to remove, pack and ship needed avionics and hydraulic system parts from the damaged 65-0246 at Travis AFB. The parts were shipped to Iwakuni on December 21, 1988.

On January 27, 1989, an advance team from the 2955th CLSS arrived in Iwakuni to begin completing the work on the aircraft. Team leader, CMSgt. Stephen Booe, and the remainder of the team would arrive on February 10, 1989. On January 31, 1989, the director of logistics for the 22nd Air Force requested the director of maintenance, 63rd MAW at Norton AFB to provide four jet engines with the personnel to install them, an Auxiliary Power Unit (APU), updated technical data, a complete set of job guides, avionics support and other items to complete the recovery. An eight-member team from Norton AFB left for Iwakuni on February 10, 1989; and, by February 22, all four engines and the APU had been installed. The team also activated hydraulic systems one and three as well as the fuel system and flight controls.

As the repairs were nearing completion a flight crew from the 2875th Test Squadron at Warner-Robins AFB, augmented by a three crew members from the 63rd MAW at Norton AFB, arrived at Iwakuni during the week of March 13, 1989. Their plan was to complete a Functional Check Flight (FCF) en route to Yokota AB, Japan, where any last minute maintenance problems could be corrected before proceeding across the Pacific Ocean and on to Warner-Robins AFB. The aircraft would not carry any cargo or passengers on this trip.



67-0029 undergoing a wing replacement at Iwakuni AB. The inner portion of the right wing would be crated and sent to AMARC for storage. (USAF photo provided by Dave Grant)¹⁵



67-0029 in 164th AW, Tennessee ANG markings. (Photo from the Paul Minert collection)

During a final operational check of the main landing gear system, the right actuator yoke assembly snapped. A replacement was sent from WRALC to Yokota AB where technicians planned to replace it. The aircraft left Iwakuni for Yokota AB on March 17, 1989, with its landing gear securely locked down. Within a week, technicians had replaced the yoke assembly and performed final operational checks on the landing gear. Plans were made to have an escort aircraft with tools, equipment and personnel on board to support zero-two-nine during its flight to Warner-Robins AFB.

67-0029 left Yokota AB on March 25, 1989. After intermediate stops at Hickam AFB, Hawaii, and Norton AFB, Calif., the resurrected C-141B arrived at Warner-Robins AFB on March 27, 1989. It was placed in the Unprogrammed Depot Level Maintenance (UDLM) program for repairs and replacement resulting from the accident. When the technicians completed these repairs, plans called for placing the aircraft in the PDM facility for regularly scheduled maintenance. The aircraft was scheduled to return to regular active service with the 63rd MAW.

This recovery project had a number of “firsts” for the Air Force: the first time a complete C-141 wing was transported by air, the first time a wing was installed on a C-141 other than during manufacture, and the first time a repair of this magnitude was completed on a permanent basis outside of the WRALC. In addition, the recovery project came in almost one million dollars under budget.¹⁶

Zero-two-nine continued to fly with the 63rd MAW until December 1992, when it was reassigned to the 155th Airlift Squadron, 164th Airlift Wing of the Tennessee Air National Guard at Memphis International Airport. While assigned to the Tennessee ANG, the aircraft was converted to a C-141 “C” model with an upgraded glass cockpit and instrumentation. The aircraft continued to fly airlift missions with the 155th Airlift Squadron for almost 12 more years.

After 36 years of service, 67-0029 was sent to the Aircraft Maintenance And Regeneration Center (AMARC) in Tucson, Ariz., on March 18, 2004, from the 164th AW, and was given the inventory storage number AACR0202.¹⁷ It was subsequently scrapped at AMARC with 34,714 flight hours and 18,992 total landings on the airframe.¹⁸ →

About the Author



John Vadas retired from the Air Force in 1983 after a 20-year career. The next 21 years were spent as a Loss Control Manager and Safety Director with three different transportation companies. He retired from corporate life in 2004 and he and his wife Dorothy currently reside in Georgia.

Endnotes

- 1 USAF Historical Records, 67-0029, Pg. 1, Warner-Robins AFB Historical Office, Unclassified
- 2 DD form 173 completed by Major C.W. Wells, dated March 2, 1978, Unclassified
- 3 Projected Dates
- 4 C-141Heaven website, information provided by Col. Paul Hansen
- 5 C-141Heaven website, information provided by Col. Paul Hansen
- 6 Photo courtesy of Dr. William Head, Warner-Robins AFB ALC/History Office
- 7 Photo courtesy of Dr. William Head, Warner-Robins AFB ALC/History Office
- 8 Courtesy of C-141Heaven website
- 9 Courtesy of C-141Heaven website
- 10 Courtesy of C-141Heaven website
- 11 Courtesy of C-141Heaven website
- 12 Courtesy of C-141Heaven website
- 13 Accident narrative provided by C-141Heaven website
- 14 Photo courtesy of Dr. William Head, Warner-Robins AFB ALC/History Office
- 15 Courtesy of C-141Heaven website
- 16 Robert J. Boots, Col., USAF, Chief, C-141 System Program Management Division, History of the Warner-Robins Air Logistics Center, Fiscal Year 1989, Volume 7, Published May 4, 1990, Unclassified
- 17 MASDC & AMARC Online Database
- 18 USAF Historical Records