

The story of 321

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VX-6's LC-130 aircraft first made it to the ice (and to Pole) in the 1960-61 season. Juliet Delta 321 was the first of these to arrive. This photo shows 321 in front of 319 on the ice runway in November 1960. (photo courtesy PK Swartz, the DF-61 Pole OIC, who took this picture just before his flight to Pole)



On 4 December 1971, the LC-130 aircraft Juliet Delta 321, piloted by LCDR Ed Gabriel, was damaged during takeoff from this site ("D59") 125 miles south of the French station Dumont d'Urville and about 850 miles from McMurdo Station. It had just completed the second of five supply flights to the French Carrefour traverse party, part



of a U.S./French glaciology project. The traverse was on its way to the Soviet station Vostok from Dumont d'Urville. After an uneventful open field landing and resupply, during the takeoff at an altitude of about 50 feet, two JATO bottles (165-pound solid-fuel rocket bottles used for "jet assisted take off" from soft open-field landing sites) broke loose from their attachment points on the left rear fuselage. One went up the tailpipe of the #2 (inboard left side) engine; the other struck the #2 propeller. The propeller went to pieces, and some of the flying debris took out the #1 engine and propeller, with several large pieces entering the cargo compartment. Above left is a photo from Ralph Lewis taken during the rescue; above right is a U. S. Navy photo taken just after the crash (AJ 9/79; when this photo was published there had been plans to recover the aircraft during the 1980-81 season).

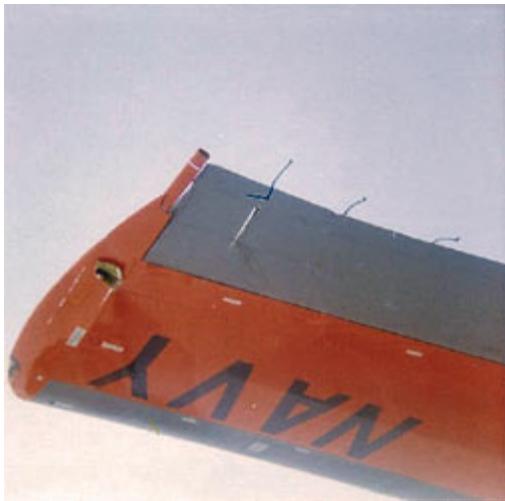


Since they had just gotten airborne, the sudden loss of power from engines 1 and 2 with 3 and 4 still at maximum power caused the plane to yaw hard left with the right wing coming up rapidly. Ed rolled the aileron full right wing down, applied full right rudder, and closed the throttles. He managed to get the plane straight and level just prior to the impact (which collapsed the nose ski. He resisted any urge to power the plane out of the problem, otherwise they would have struck the snow in an extremely left wing down attitude and the aircraft would have cartwheeled itself to pieces, with loss of life. The pilot was awarded an Air Medal for his amazing presence of mind. The photo at right (Ralph Lewis) taken just after the crash shows the JATO mounts on the left side of the aircraft, with the burn marks from the bottles that broke free.



At left, a view of one of the #2 engine propeller blades that punctured the fuselage. And at right, a rather dark view of the end of that propeller blade INSIDE the fuselage. These photos are from Lennie Bourgeois. Below, a few more of his pictures taken during the rescue and recovery mission:





A view of damage to the left wing



One of the French traverse vehicles



Besides pilot LCDR Gabriel, some of the others in the 8-man Navy crew were LTJG Bob Schmucke (copilot), LT Billy Bounds (1st navigator), ENS Brian Paul (2nd navigator), AE1 Virgil Harris (flight engineer), and ABH1 Glenn Schellenberger (loadmaster). There also were two passengers on board. Although no one had been injured, the 10 men had to live in survival shelters for more than 3 days until



the weather improved (left, the survival camp behind the aircraft--Lennie Bourgeois; right, a view of the aircraft from behind the camp--Ralph Lewis). Eventually conditions improved enough to allow a rescue plane to land. The Navy personnel who arrived to inspect the aircraft and investigate the accident determined that salvaging it would be too dangerous and costly; the salvage crew was given only an hour to cut loose the most valuable instruments (and take some of these photographs), and the aircraft was left to get buried. Below, a photo of folks in front of the rescue aircraft (Lennie Bourgeois).





The accident investigation revealed that painters at Aero Corp, the company that did the last overhaul, had completely painted over the slider mechanisms on the latches. This could cause binding and jam the release mechanism. This was the first year Aero was doing overhauls, prior to that Lockheed did all the reworks and no paint was applied to these parts. One result of the investigation was a modification to the JATO mounts (and the JATO bottles used on the ice) so that the bottles could no longer be jettisoned in the air. (Here is the [Antarctic Journal](#) article about the crash, but it is rather brief compared to the above detailed description from Jim Landy who was around for the accident investigation. Jim was aboard the last JATO mission on 321 before the crash, and they had problems with the JATO latches on the left side, two of the bottles failed to release...)



In 1977-78 VXE-6 mounted an assessment/survey mission to evaluate the feasibility of recovering 321 (at left is Richard Horton's picture of the excavation, at right is his view of the tail section). The four engineers recommended recovery, which was originally planned for the 1979-80 or 1980-81 austral summers, but budget restrictions cancelled the project.

The crash site was directly south of Dumont D'Urville on an annual traverse route, so the aircraft location was a landmark on these trips. In 1982-83 Mike Savage accompanied one of these traverses as part of the NSF automated weather station (AWS) project. He was probably the first American to visit 321 since 1977-78...below are two of his photos of what was visible as he passed by.



The right hand picture shows Gerd Wendler of the University of Alaska contemplating the tail.

Perhaps as a result of Mike's pictures and report submitted to Brian Shoemaker, planning for the recovery of 321 started again, and in 1986-87 a team set out to travel to the site, build a camp, and dig out the aircraft. On 25 December of that season 321 was pulled to the snow surface. The details of this effort are best described in this [Antarctic Journal article from March/June 1987...](#)

At left below is a view of 321 before the excavation started. At right is what things looked like a few weeks later (U.S. Navy photos from the VXE-6 decom CD)





Some of the ITT/ANS crew taking a rare break. From left: Jim Mathews (project manager), Didier Simon, from Expeditions Polaires Francaises, Dan Cheek, heavy equipment operator, and Russ Magsig, heavy equipment mechanic. Not pictured: Roger Biery who designed the excavation pattern, cook/medic/radio operator Michael Brashears, and project engineer George Cameron (this and the next three photos are from Jim Mathews).

At right, a view of the excavation in progress.



At left, digging out the wings of 321.



The four engines and three propellers were removed and shipped out for rehab; this salvage effort alone more than paid for the entire recovery effort. At the end of the season 321 was parked on the surface 300 feet downwind of the camp.

In 1987-88 the team returned to complete the project. Unfortunately, before the recovery could be completed, another LC-130 (131) crashed at the recovery site on 9 December 1987, with two deaths and a total loss of the aircraft. Killed were LCDR Bruce Bailey and AK2 Donald M. Beatty. The Antarctic Journal article about the crash is [here](#). Nevertheless, the project continued to completion, and 321 flew back to McMurdo on 10 January 1988. Thence it went

to ChCh for further rehab, it returned to VXE-6 service a couple of years later. This is the [Antarctic Journal article](#) about this historic flight.

Back to the future...in 1993 Jim Mathews stopped by Point Mugu to see if 321 was around, and so it was. Here he is in front of it. The aircraft first returned to the ice on 27 October 1993 after a number of mechanical aborts (and the landing at McMurdo was on 3 engines due to a prop fluid leak). A few years later in 1998 Jim flew from Pole to McM aboard 321. After the decom of VXE-6, 321 was mothballed at Davis-Monthan AFB near Tucson, AZ, perhaps awaiting refurbishment for future use...



[Acknowledgements...this section could not have been completed without help from PK Swartz, Bruce Raymond, Jim Landy, BillyAce Baker, Richard Horton, Marty Diller, Lennie Bourgeois, Ralph Lewis, Jim Mathews, Mike Savage, and Joe Hawkins. For more aircraft photos from the VXE-6 decom CD and elsewhere, check out [this section](#) of Joe's site]