## How I Stuck my Hercules and Unstuck it

I was a U.S. Marine Corps Pilot assigned to the U.S. Navy VX-6 Squadron supporting the National Science Foundation In Antarctica during 1964, 1965 and 1966. We were flying Lockheed C-130 Hercules aircraft equipped with 5600 pounds of skis. In December of 1965 we were setting up a new scientific station at 40 degrees east longitude, 79 degrees south latitude at an altitude of nearly 12,000 above sea level 750 miles northeast of the South Pole and about 1,400 miles from our main base at McMurdo Station. The ice and snow was estimated to be about 10,500 thick.

A party of scientists were planning to spend the winter at their newly named Plateau Station and so we had to haul a considerable amount of material to build the station and a lot of diesel fuel to ensure their survival. The snow surface was soft; as Plateau Station was located in the vicinity of the center where the air is descending from high altitude after traveling from the equatorial regions at high altitude and had not yet gained enough velocity to compact the snow on its journey back to the equator near the earth's surface. We had taken a wide-track Caterpillar D-4 tractor out early in the operation to aid in packing a runway but at that altitude (which was about 14,000 feet pressure altitude) the tractor was not very efficient and could hardly pull itself around. The runway was very rough and had holes so our technique was to land in soft snow alongside the runway and taxi onto the ramp for unloading that the tractor had packed for us.

On a flight to Plateau in December of 1965 I landed beside the runway and reversed thrust to slow down. We heard a loud bang and clatter in the nose wheel well under the cockpit so immediately brought the plane to a stop to investigate. The temperature was about a minus 50 degrees Fahrenheit. We found that a metal cover about the size of a washtub that was over some of the radar components had detached and went clattering down through the nose ski but there was no damage to anything structural.

We did notice that the right ski had dug into the soft snow a bit lower than the left ski but thought nothing of it since we had some of the first C-130s to be equipped with the new 5000 horsepower engines upgraded from 4000 horsepower. After strapping into the cockpit and applying full power to all 4 engines we were dismayed to find that we did not move. We were stuck! We shut down the number 3 engine and grabbed our snow shovels that we always carried in our survival kits and shoveled for a while. We then attached 2 of the 8 JATO rocket bottles that we always carried for just such occasions, started number 3 engine, applied full power, fired the 2 JATO rockets. Jet Assisted Take Off (JATO) are metal tubes closed at the front end and open at the back end, filled with solid propellant, fired electrically from the cockpit and supply 1000 pounds of thrust for about 15 seconds.

They burned out and the plane did not move! We shut down the number 3 engine again, shoveled more snow, opened the rear ramp on the plane and unloaded some of the cargo that we could move by hand, and attached our remaining 6 JATO rockets. After starting number 3 engine again, adding full power on all 4 engines and firing 6 JATO rockets at once we lurched out of the ditch, taxied onto the ramp and unloaded the rest of the cargo with the aid of the tractor and a fork lift and returned to McMurdo. We left the unloaded cargo out in the snow for the tractor to recover at its leisure.

We never did report our stuck situation to our operations headquarters back at McMurdo and swore the crew to secrecy.

> Maurice B. Lynch Major USMC Retired