

NASA and DoD - Partners in Recovery

by Jerry Hammack

Early on, NASA decided to have water landings for space capsules (capsules in the early days, then spacecraft as we became more sophisticated) both because water would provide a softer landing and Earth is more water than land. But who was going to recover the capsule? The Navy had most of the ships and the Air Force, and indeed the Army, to assist in this vital part of the mission.

It did not take much persuasion by NASA to get the DoD to become a partner in this vital area of space missions. As things evolved, the DoD set up a single point of contact (the commander of Patrick Air Force Base) through which NASA would levy recovery requirements for each mission. For recovery activities, I was his NASA counterpart. My division, the Landing and Recovery Division (LRD), was composed of about 100 people, most of whom were engineers. We developed flotation collars and locator beacons, coordinated various recovery hardware on the development of the capsule, and most important, worked out the mission operations recovery phase of the mission. That phase included training the astronauts in a tank and in open water. The open water part of the training was the most fun. LRD procured its own vessel (an LSD) from the Army, modified it with a handsome bridge, and sailed out into the Gulf of Mexico. After putting the astronauts in a capsule in open water, the flotation collar would be deployed, and the helicopters would fly in to recover the astronauts from the side of the capsule and hoist them up into the helicopter. Then a specially designed davit crane would lift the capsule from the water onto the deck of the ship. After several such exercises, the good ship Retriever, as it was called, would return to port trailing many fishing lines.

The DoD requisitioned ships and aircraft from line units and assembled a recovery task force. In the early days, a typical recovery task force consisted of four ships and several dozen aircraft: helicopter and fixed-wing. The primary recovery ship (usually an aircraft carrier) would be stationed at the primary landing point and three secondary landing points were covered by other type ships (such as destroyers, minesweepers, escort ships). The aircraft would be uprange and downrange of the primary landing point and at contingency landing points throughout the world. The ship requirements were passed to two Navy commanders..one in the Atlantic and one in the Pacific..who each led a Commander Task Force (CTF). The Atlantic unit was CTF-140 and the Pacific unit was CTF-130. The commanders were usually two-star admirals with collateral duties. (For example, the CTF-130 commander was also the commander of Pearl Harbor Naval Station.) Each commander had a staff of officers to plan the support details. Aircraft search requirements were passed to the Air Force Rescue Command where search and rescue aircraft such as the C-130 were assigned.

(Excerpt from *Suddenly Tomorrow Came... A History of the Johnson Space Center*, NASA SP-4307, NASA-JSC:1993; p. 161)