Introduction

Looking at two famous Apollo spacecraft launches with two starkly different outcomes, the Apollo 11 launch being the most successful space mission in history putting the first men on the moon in 1969 followed by the infamous crash of the Apollo 13 launch. The Apollo 13 disaster is considered one of the greatest engineering failures of the 20th century. The impact of the crash resulted in stricter aerospace standards and procedures to attempt to mitigate future launches follow suit. On the other hand, the aerospace industry upholds the Apollo 11 launch as the greatest success of the last century. Not only did putting an American on the moon have historical and political significance, but it charged NASA to fund following projects, success or failure, for the next 50 years. Walk through a couple artifacts from the launches and get a glimpse of what it took to put people on the moon and speculate as to what caused the engineering disaster in 1979.

Checklist

The checklist's purpose was to service Apollo 11 astronauts in the event of a failure. Fortunately, the checklist was not used as the mission went well and there was no need for an emergency procedure manual. This success could have had an impact on the attitude while planning and executing the Apollo 13 launch, potentially contributing to the inevitable failure. It is highly likely that there was a similar checklist aboard the Apollo 13 launch, however, due to the gruesome crash there was not any recovered.

Landing Collar

During the successful Apollo 11 landing, the landing capsule pictured landed in the Pacific Ocean in July 1969. If the Apollo 13 mission had been successful, a very similar apparatus would have been used upon re-entry to secure the safety of the astronauts inside. Navy seals attached the collar pictured to the landing device to stabilize before enacting procedures to decontaminate and recover the astronauts inside before being flown by helicopter to a nearby recover boat. It is difficult to believe that the landing collar and retrieval process had much contribution to the eventual failure of the Apollo 13 launch.

Machete

This Machete was provided to Apollo 13 astronauts as part of a survival kit. It was transferred by NASA in 1979. Obviously, this knife was not on the Apollo 13 spacecraft in the event of the explosion, however, it is akin to those that would have been on board. Due to the failure of the explosion, not much debris was salvaged. The failure that occurred in 1979 was due to a wire function which resulted in a malfunction in the oxygen supply.