

Apollo Boilerplate #1207

As part of the Apollo program, NASA built non-flight Command Modules known as “boilerplates” (BP) to test equipment, develop procedures, and use in training with the Department of Defense who supported the recovery operations of the NASA manned spacecraft programs. These boilerplates were used to simulate various configurations, loads, and handling characteristics of the spacecraft and to avoid the risk of damaging the more expensive actual spacecraft during testing and training.

Apollo BP-1207 was one of the 1200 Series of Command Module boilerplates designed in-house at NASA-Houston and built in Clute, Texas by Ace Fabricating. The 1200 Series boilerplates did not have internal equipment since they were designed to simulate the weight and external physical characteristics for water tank and open water/ocean testing and training and to be used by Department of Defense around the world for recovery training (See Photo #1). They were fabricated of low-carbon steel, sandblasted, and coated with Dimetcote, an inorganic zinc primer for corrosion control, before they were painted. Of the approximately 30 BP-1200's built, there were a small number (<10) initially built in Block I configuration (Earth orbital missions) before being converted to Block II configuration (Lunar missions) at Norfolk Naval Shipyards.

BP-1207 was assigned to the Patrick Air Force Base for support of the Eastern Test Range for use in Apollo Launch Site Recovery training prior to missions. For the Apollo Program, the primary training would take place at Kennedy Space Center (KSC) during the week before each launch. The Launch Site Recovery team was composed of Air Force Aerospace Rescue and Recovery Squadron (ARRS), Patrick Air Force Base command and fire, NASA-KSC, and NASA-Houston personnel, who trained for every KSC recovery location scenario including ocean, surf, beach, swamp, and land. The launch site recovery team was also supported by ARRS helicopters and Navy/Coast Guard ships. For Apollo 13, the Launch Site Recovery team used BP-1207 the week before the launch in April, 1970, in training for various rescue scenarios following a launch abort (See Photos #2, #3, #4, #5).

After the Apollo/ASTP/Skylab Programs use of the Apollo Command Module ended, NASA dispositioned program hardware in 1976, and BP-1207 ownership was transferred to the Smithsonian Air & Space collection (References #1 & #2). BP-1207 was subsequently loaned by the Smithsonian to various institutions in Florida before being transferred in March, 2013 from the Discovery Science and Outdoor Center (<http://mydiscoverycenter.org/>) in Ocala, Florida to the New Mexico Museum of Space History (<http://www.nmspacemuseum.org/>) (Reference #3). In 2015 the boilerplate was restored beautifully (Reference #4) in partnership with Holloman Air Force Base and returned to the museum (See Photo #6) (Reference #5) for eventual display in the museum's Astronaut Memorial Garden.

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Photos



Photo #1: 1200 Series Boilerplate during DoD recovery training in Atlantic Ocean on February 22, 1966, for AS-201 mission (Photo Credit: NASA S66-22690).



Photo #2: USAF ARRS, Patrick AFB, and NASA personnel participate in Apollo 13 Launch Site Recovery training with BP-1207 in April 1970 (Photo Credit: NASA 108-KSC-370C-96/15).



Photo #3: USAF ARRS, Patrick AFB, and NASA personnel participate in Apollo 13 Launch Site Recovery training with BP-1207 in April 1970 (Photo Credit: NASA 108-KSC-370C-96/8).



Photo #4: USAF ARRS, Patrick AFB, and NASA personnel participate in Apollo 13 Launch Site Recovery training with BP-1207 in April 1970 (Photo Credit: NASA 108-KSC-370C-96/20).



Photo #5: USAF ARRS, Patrick AFB, and NASA personnel participate in Apollo 13 Launch Site Recovery training with BP-1207 in April 1970 (Photo Credit: NASA 108-KSC-370C-96/21).



Photo #6: BP-1207 returning to New Mexico Museum of Space History following restoration at Holloman Air Force Base (Photo Credit: Tara Melton — Daily News).

References

1. NASA/JSC. *Apollo/Skylab ASTP and Shuttle Orbiter Major End Items*, NASA JSC-03600, dated March 1978; page 18 (http://klabs.org/history/history_docs/mit_docs/1690.pdf).
2. Smithsonian Air & Space Museum Collection. *Boilerplate, Command Module, Apollo, #1207* (<https://airandspace.si.edu/collection-objects/boilerplate-command-module-apollo-1207>).
3. Space.com. *Space Capsule Lands in New Mexico Space Museum*, dated March 6, 2013 (<http://www.space.com/20098-apollo-capsule-new-mexico-museum.html>).
4. New Mexico Museum of Space History. *The Apollo Boilerplate Capsule* (BP-1207 Restoration video), dated September 11, 2016 (<https://www.youtube.com/watch?v=L3tH7zhFDF4>).
5. Alamogordo Daily News. *NASA Boilerplate Returned To Museum*, dated September 23, 2015 (<http://www.app.com/story/news/local/holloman/2015/09/23/nasa-boilerplate-returned-museum/72736672/>).