

Breaking the Pressure Barrier: A History of the Spacesuit Injection Patch

The space suit assembly has a fascinating and complicated history dating back to the early 1930s. Much has been written on this history from an assembly, and to a lesser extent, component perspective. However, little has been written or preserved specifically on smaller, lesser-known aspects of pressure suit design. One example of this is the injection patch – a small 2” diameter disk on the leg of the Apollo suit that facilitated a medical injection when pressurized - and the only known implementation of such a feature on any suit. While many people are aware this feature existed, very little is known of its origin, its design, its use, and the fact that the Apollo flight suit was not the only time such a feature was implemented. This paper serves to tell the story of this seemingly “afterthought” of a feature, as well as the design considerations heeded during initial development of later suits.