

53rd IAA HISTORY OF ASTRONAUTICS SYMPOSIUM (E4)
History of US Contribution to Astronautics Post WWII (2)

Author: Dr. Hyoung Joon An
Science and Technology Policy Institute, Korea, Republic of, hjan@stepi.re.kr

CREATING SPACE FOR SCIENCE: FROM APOLLO TO SKYLAB

Abstract

Science is believed to make space humanized, as it has been a constitutive element (an integral part) of space missions since the beginning of space exploration. In this paper, I will examine the early history of the Skylab, the first space station of U.S., to capture the process of creating space for science at the border between exploration and science. The story will deal with two most significant traits of Skylab related to scientific practice in space. First, I will look into the unique characteristics of Skylab comparing to traditional concept of laboratory. Historians of science have drawn attention to the locality and spatial situation to understand how scientific knowledge is made and how it achieves credibility. Scientific discoveries should be witnessed by an uninterested party and replicated in a different laboratory, due to the ‘placeness’ of the original laboratory. I will insist that the appearance of Skylab as the start of ‘overnaturalized’ places beyond the modern lab characterized by ‘placelessness/placeness’, in that scientific experiments in Skylab have been justified with the human desire for exotic knowledge, and the efforts for and knowledge of ”permanent weightlessness”, which is overwhelming the experience [experiments] on Earth. Second, I will analyze how Air Force and the Space Science Board competed with each other to control the design, timing, and function for the project. In Adding that, I will examine the process of selecting the scientist-astronaut for Skylab project and investigate the role of scientist-astronaut in conducting experiments; during totally 171days in space, nine crews spent 3,036hrs for experimental performance such as solar astronomy and Earth resources experiments, medical studies, and educational experiments. In sum, I will argue that the appearance of hybrid explorer-researcher, as it were, scientist-astronaut led to persuade the value of man in future explorations of space to the people.