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GORDON WOODCOCK, THE ENGINEER WHO HELPED CREATE THE PROFESSION OF SPACE ARCHITECTURE

Abstract

Gordon Woodcock was a brilliant engineer; many say a genius. Over his 57-year career spanning from the Apollo Program to the International Space Station, he created visionary concepts, wrote text books, and authored many technical papers. However, as significant as these achievements were, his formative role in the profession of space architecture is virtually unknown. In 1980 Gordon (Gordy) was the Boeing manager responsible for NASA's early space station studies. As a large aerospace company Boeing is expected to have the engineering resources for space engineer but Gordy's core team was atypical. It included an industrial designer, biologist, and yes, an architect. At that time, there were no space architects which represented a little bit of a hiring challenge. Boeing did not have an engineering skill code for an architect. This didn't stop Gordy. He used the configurator code which, for airplanes, was the skill responsible for the overall integration of the vehicle. From that day on, Gordy's architects were configurators.

The experience of the early space station work positioned Boeing to win the common module and life support portion of NASA's space station. This allowed the space architecture that started in the 1980s to continue throughout much of the space station development. During this time, Boeing decided to seek opportunities in the expanding space market and Gordy was asked to be the technical manager for the new Advanced Civil Space Systems Division. As with the early space station studies, he hired aspiring space architects (configurators) to work on NASA study contracts for lunar and Mars exploration. Gordy was an advocate of publishing technical papers. For space architects, their lunar and Mars work offered opportunities to represent the profession by presenting papers at aerospace conferences. If he were alive, Gordy would not take any credit for his contribution to space architecture, but it is safe to say, that he inspired a whole new profession by hiring architects to work on exciting space projects while earning a paycheck.

In addition to biographical information the paper will include insights on Gordy's leadership style, humor, desktop organization, meeting presence, and passion for running marathons... even when he was in his late 70's. The authors will include first person accounts describing Gordy's intellect, personality, and how he influenced their careers.