During the period from 1937-1971, the United States Marine Corps transformed itself from the amphibious fighting force of the beaches of World War II into the nation's primary force-in-readiness. Much of this transformation was dependent upon its ability to adapt and integrate aviation technology into its organization and warfighting doctrine. The Marine Corps' ability to accomplish this was due in no small measure to the efforts of one of its most prominent aviation officers, General Keith Barr McCutcheon. This dissertation examines not only the contributions of one man to this transformation process but the effect of the process on the organization. It also discusses the forces both internal and external that shaped Marine Corps decisions about the use of technology and the impact of those decisions on the Corps' organization and culture. As a result it is a hybrid history neither fully biography, military or technological history, but a combination of all three which permits a more well rounded examination of how military organizations develop, utilize, and adapt to new technologies.