

The task of building ground forces better-equipped and trained than any in the world is a monumental responsibility that must be met if our Nation is not to be outperformed in that specialized field. "The Soviet Army," according to a Senate subcommittee report, "has been completely modernized and reequipped since World War II." Likewise, the task of defending our Nation against enemy missile-launching submarines is truly gargantuan when one considers the exposure of our continent to oceans, the much larger numbers of Communist submarines, and the degree of invulnerability attributed to undersea craft.

The Air Force believes that each Service's requirements for aerospace forces (using aircraft, missiles, and spacecraft) are justified to the extent they enhance that Service's ability to perform its assigned functions—and to the extent they cannot be provided for that purpose by the Service with the primary function in aerospace.

Our Nation cannot afford the alternative to this procedure; that is, it cannot permit each Service to be self-sufficient in all the forces for land, sea, and aerospace warfare. For the sake of operational effectiveness and to avoid wasteful duplication, each Service must (1) stick to its specialty, (2) become outstanding in that specialty in relation to the potential enemy threat, and (3) assist the other Services in an interdependent team effort.

During the past 20 years the broadest base for current U.S. programs in aerospace has been largely developed by the Air Force—plus the aerospace industry, research institutions and Government agencies, such as NACA and NASA, which have helped make the Air Force the world's leading aerospace arm. The know-how and facilities that have sprung from this military effort are a national resource of immeasurable value not only to free-world survival, but to scientific and technological advances for the welfare of mankind.

The deadly Soviet-free world competition for military aerospace supremacy has given urgency to the Air Force's efforts to advance in aerospace achievements. However, its funds for this purpose have had to compete for priority with other national requirements.

There is not space in this letter to give more than briefest mention of the people, facilities, and achievements that demonstrate the Air Force's unparalleled competency to assume an even more strongly supported role in gaining and maintaining general aerospace supremacy for our Nation.

USAF ACHIEVEMENTS IN AEROSPACE: Development of an aircraft and missile force able to deter war through capability to destroy enemy military forces that could otherwise destroy us. (This, primarily, has provided the umbrella of security under which the Nation could engage in many pioneering aerospace developments—and could move toward matching and surpassing the Soviets in the launching of heavy payloads so essential to other significant advancements.)

Development of the Atlas ICBM, which became operational in 1959 after five years of intensive efforts. The Titan ICBM, now near the end of its test phase, will become operational in 1961. Minuteman, to be a "mass produced" ICBM, will begin deployment on moving railway cars and in numerous underground sites in 1962. The Air Force-developed Atlas ICBM and Thor IRBM have boosted most of the Nation's successful military and nonmilitary space vehicles to date. The Air Force Thor has boosted more successful payloads than all other U.S. boosters combined.

The combination of Atlas with the Agena-B rocket gives the Air Force a launching vehicle for future satellite systems of substantial size, carrying either men or instruments.

During the past 10 years the Air Force became the Nation's primary high-thrust propulsion developer (see Policy Letter of 1 December 59). Rocket engines developed from initial Air Force contracts with North American Aviation are used in the Thor, Atlas, Jupiter and Redstone ballistic missiles. A version of the North American Aviation Rocketdyne engine is being clustered to boost NASA's Saturn vehicle. NASA now has been assigned responsibility for development of very large thrust boosters.

As of September 1959, the official responsibility for launch and development of military space boosters was assigned by DOD to the Air Force. Also, for all practical purposes, the launch capability for the civil space program, directed by NASA, rests with the Air Force.