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The Sputnik Reaction

There is no question that the American reaction to the launch and orbit of Sputnik on October 4, 1957 was more than unnerving; it even caused fear and foreboding in some. While the satellite was just a 23-inch diameter sphere weighing 184 lbs. that simply went “Beep Beep,” it was the first satellite in orbit. More disturbing was the fact that the upper stage of the R-7 booster rocket weighing over 7 tons was also in orbit. If the Soviets could put that much mass into orbit they could clearly launch a nuclear weapon. If you didn’t believe the news, you could go outside and see it (the upper stage, not the satellite) moving across the night sky; a phenomenon that no one had ever witnessed before.

While the United States was trying to digest what had just happened, the Soviets launched a second Sputnik on November 3rd in what was effectively “a slap in the face” or at least a “take that.” This spacecraft weighed 1,120 lbs. and carried a dog named “Laika.” That indicated the vehicle must possess a life support system; albeit just for a dog. President Eisenhower tried to “spin” the event by saying that our satellite program was not being conducted as a race against other nations. The Soviets, however, had considered it a race for at least two years. Terms like “missile gap,” “arms race,” and “space race” were now everywhere in the media.

To add to the Nation’s embarrassment, the first attempt to launch the Vanguard rocket and a “grapefruit” size payload from Cape Canaveral on December 6 in front of a world press and on TV ended in an ignominious explosion. These three launches took on a new meaning within the Washington bureaucracy, within the Department of Defense, and within the missile contractor industry. There are books written about this period of space history. Here is what subsequently happened within NACA/NASA and the Space Task Group.

The Air Force made overtures to NACA Director Dr. Hugh L. Dryden to collaborate on their Dyna-Soar program. This seemed only natural to the Air Force, as they had worked with NACA for 40 years on aeronautical issues. But Dr. Dryden knew that NACA Langley wanted to work on a manned “capsule” of their own. He also knew that only the Air Force and the Army could provide the requisite launch vehicles. NACA wanted to add astronautics to their traditional role of aeronautics. The last “A” in NACA is “Aeronautics,” but

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NACA wanted a leadership role in the new field of manned spaceflight. NACA engineers weren't waiting for approval, they had been working on aspects of aerodynamic flight that were also applicable to spaceflight.

During the last three months of 1957, there were scores of committees from all the federal agencies concerned, discussing what should be done and who should undertake it. There were meetings in the Pentagon, in Congress, at NACA Headquarters and its field laboratories, in the National Academy of Sciences, in the National Science Foundation, in universities, and within industrial corporations. Even the American Rocket Society was ready to offer input.

But, as concerns the STG, it was the NACA Lewis Flight Propulsion Laboratory, headed by Associate Director Abe Silverstein, that produced a bold plan called "A Program for Expansion of NACA Research in Space Flight Technology." The impact of this report will feature in later chapters.

The Birth of NASA

The Work of the Space Task Group, America's First True
Space Pioneers

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