The life of the remarkable genius of aerospace, warm-hearted, brilliant Theodore von Karman, came to a quiet close last month. His contributions to the science of flight and to the defense of his adopted country were monumental...

'TOWARD NEW HORIZONS'

Dratsing for AIR FORCE Magazine by Art Brewster

THEODORE VON KARMAN: IN MEMORIAM.

"WHAT I can do in the rest of my life I do not know, but so far as I am in good health, I will try to be grateful for this country."

With these words, uttered haltingly in the English that he never perfectly mastered, Dr. Theodore von Kármán, premier aerodynamicist, working prophet of the aerospace age, and scientific patron saint of the US Air Force, thanked President Kennedy last February after the Chief Executive, at a White House ceremony, awarded him the first National Medal of Science.

Last month, on May 6, Dr. von Kármán died in Aachen, Germany, of a heart attack at the age of eighty-one. His passing truly marked the end of an era. No individual had contributed more to the science of flight or to the defense through aerospace power of the free world.

Dr. von Kármán’s list of scientific achievements and contributions to the strength of his adopted country—he settled permanently in the United States in 1930—is so full as to be overwhelming. The list of anecdotes illustrative of his Gemütlichkeit and warm humor will be a challenging task for his biographers. (See "Dr. Theodore von Kármán—Gemütlicher Genius of Aeronautics," AIR FORCE, October ’57.)

A native of Hungary and a child prodigy who developed early into an outstanding mechanical engineer, Theodore von Kármán turned his attention at the age of twenty-six to aerodynamics after viewing the first powered flight of an airplane in France in 1907. The reason, scientific curiosity. Newtonian physics should have made the flight impossible. Yet the Frenchman flew.

That predawn flight stirred the young Hungarian toward a new career. After further study and research in Germany, von Kármán produced "the von Kármán..."
theory of vortex streets," the sound mathematical foundation and formulae on which aircraft designers have depended ever since. By 1912, he was running Germany’s newly established Aeronautics Institute at Aachen and was taking flying lessons on the side. His flying career was cut short early. He walked away unhurt from a crash but was fined for making an unauthorized landing in a potato patch. The flying enthusiast went back to theory.

World War I came along, and he made major contributions to the infant art of aerial combat as a scientific adviser to the Austro-Hungarian Air Force. One of the ideas he worked on was the concept of an aircraft that would fly straight up. He foresaw the significance of the airpower that had already helped decide World War II’s outcome, asked Dr. von Karman to serve as first chairman of the Army Air Forces Scientific Advisory Group. This top-level panel was charged with looking into the future twenty years... When he submitted his report. He was to go ahead... According to World War II rocket achievements.

Dr. von Kármán capped his distinguished career by conceiving and forming the Advisory Group for Aeronautical Research and Development (AGARD). AGARD was established in May 1952 to coordinate a cooperative R&D effort in support of NATO, with the US Air Force designated executive agent. Dr. von Kármán served as its chief from AGARD’s beginning until his death.

With his colleagues, men like Edward Teller and John von Neumann, encouraged by resolute Air Force Secretariat civilians such as Trevor Gardner, the Hungarian-born genius helped shape a future that never surpassed his own amazingly limitless vision. He will be uniquely missed.

---W.L.