

## Theodore von Kármán — and AGARD

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**A**LWAYS looking to the future von Kármán pondered in 1945 over the uneven distribution of scientific capital between the nations of the world resulting from six years of war. He was concerned in particular about the nations of Europe; the status and destination of scientists; the facilities and organisations for the pursuance of research; the need to arrange for the exchange of scientific personnel and the outlook of ruling authorities on sponsored research. Who were the people to contact, where could they be found and how could they be rallied?

A prior consideration in the pursuance of these matters was the dissemination of scientific knowledge and in 1945 von Kármán set up in London a small documentation group (later transferred to Wright Field, Dayton, U.S.A.), which, under his direction developed into the Armed Services Technical Information Center, more widely known today as ASTIA. However, the more difficult problems bothered him and they continued to do so until 1949 when the North Atlantic Treaty Organisation was signed. This event created the opening for which he sought and by perseverance and with help from his scientific colleagues he converted the American authorities to his way of thinking.

Von Kármán first suggested a multi-national Scientific Advisory Board for NATO but this was considered premature and his second suggestion for an Advisory Group for Research and Development was thought to be too broad. The American authorities agreed that NATO would need a scientific advisory group but suggested that its cover should not extend initially beyond the aeronautical sciences. This paved the way for a meeting in Washington of the aeronautical research directors of the NATO Nations at which von Kármán presided. Later, in 1952, an Advisory Group for Aeronautical Research and Development (AGARD) was formed and who else but von Kármán could have forged such strong bonds of friendship and loyalty to a common purpose between scientists and technologists of so many different countries and lead them first to the "Learned Society" stage and then to qualify as scientific advisors to the Military of NATO.

Last year the tenth anniversary of AGARD was celebrated by a General Assembly of invited guests, National Delegates of AGARD, technical panel members and permanent staff. Senior officials of all NATO nations both military and scientific attended the gathering, and of the many highlights two only are here mentioned. First, there was the address by the Secretary General of NATO and his presentation to von Kármán of a gold medal for his outstanding leadership of AGARD, and secondly, the eulogies of praise showered on von Kármán by eminent officials of the NATO nations. These contributions form part of the evidence of his untiring efforts to promote goodwill through collaboration. But those who have been nearest to the work of AGARD, namely, National Delegates and Technical Panel members, now 250 strong, and representing all NATO nations, know that without von Kármán's magnetism and guidance, coupled with his knowledge of the state-of-the-art in all branches of science, AGARD could never have attained its present

strength and status as an advisory group to NATO.

Some NATO nations, lesser informed in the aeronautical sciences in 1952, have emerged as leaders in these fields and all nations are capable now of making contributions to NATO's scientific capital and AGARD, that is von Kármán, has done much to help this turn of events.

Through von Kármán's inspired leadership this multi-national novelty of 1952 has grown into a main pillar of NATO's strength and AGARD and von Kármán have become synonymous terms. Yes, AGARD was Kármán and Kármán was AGARD! But others will say that the International Congress of the Aeronautical Sciences and Kármán are synonymous, likewise the Training Center for Experimental Aerodynamics, the Academy of Astronautics and the Applied Mechanics Congress.

How has it happened that one man should have initiated so many international events and by universal acclaim have retained leadership of them, though so full of years? The answer to this may never be disclosed but it probably lies in the relationship of Kármán the scholar and teacher, Kármán the student and Kármán the international humanist and co-operative seeker.

Von Kármán never forgot a student and no student forgot von Kármán because wherever he was, at home or in a hotel room, his door was open at all times and whether struggling or eminent, advice to all who consulted him was freely given. Similarly, he never lost interest in anything he had initiated personally or jointly with others, and in consequence and against general practice he became more active and necessary the older he became. "He who knows and knows that he knows is a wise man, follow him", and this is precisely what his students knew and did. His family extended through the scientific communities of the world and on his arrival in any capital city the "boss is in town" was quickly passed around and from breakfast to dinner he was in conference. To learn so that he could advise was his life.

I have a closely typed document of 12 pages listing the places he has taught, the degrees, decorations and awards he has received, his memberships of scholarly societies and his published works. History will place him in due course among the few, librarians will stock his works and students will read of what he did, but those who have worked closely with him will not remember him only because of what he did, but of how and why and because of his attractive personal characteristics.

Von Kármán was kindly, considerate and generous to degrees seldom found among the great, and he never required anything explaining to him—you merely had to tell him. He was a master of questioning in that he always asked the right ones and a favourite story of his was that of the Monk who told the Abbot that smoking helped him to concentrate and could he have permission to smoke while he prayed. Later this Monk was surprised to see another Monk smoking during meditation. "How did you get the Abbot's permission to smoke while you pray?" "I didn't", was the reply, "I got permission to meditate while enjoying a cigar".