

# Theodore von Karman's Visit to Turkey in 1955 and Its Reflections on Local Press - Part 2



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Based on the first part published in the previous edition, we are progressing with introducing the newspapers reporting of Theodore von Karman's visit to Turkey in 1955 in chronologic order.<sup>1</sup>

As a guest of the Turkish government von Karman arrived in Ankara on the 9th of January with his staff, met the officials and discussed national defense issues of Turkey. Later he gave a guest lecture at Istanbul Technical University, where he received an honorary doctorate degree, and discussed the progress in aerospace research with Turkish scientists. In one of the interviews, he even claimed that the Turks used to invent rocket technology in previous centuries. The significant questions of the reporters were on the disasters of jet fighters and the scientific collaboration of NATO countries. He also visited the new wind tunnel facility in Ankara, which was apparently under construction at that time, and insisted

to include it into actual research activities as soon as possible.

The second part of this investigation contains related Turkish newspaper articles from the 13<sup>th</sup> and 14<sup>th</sup> of January 1955.

## Hürriyet, 13.01.1955

**The father of modern aeronautics is in our city: Prof. von Karman who said "Planes are approaching missile speed" will deliver a lecture today at the Technical University**

Prof. Theodore von Karman who is known

as "the father of modern aeronautics" and his staff arrived in our city after his conference with the members of the Scientific Advisory Committee to National Defense Ministry. Prof. von Karman's visit is interpreted by related circles as a very important factor in the future of the Turkish aircraft industry.

### How to overcome airplane disasters

"The father of modern aeronautics" who is originally Hungarian and went to the United States in 1926 and then became a U.S. citizen, said the following when he was

about airplane disasters throughout the world: "When Stevenson invented the locomotive he named it rocket and for safety he made a signal officer run in front of the engine. Today, hundreds of years after its invention, we find a tremendous development and improvement in locomotives. Airplanes are the same. As soon as our knowledge about them is complete, the number of airplane disasters will also decrease".

### The reason for jet disasters

When he was reminded of frequent jet disasters in the Turkish Air Force and other countries, Prof. von Karman added "First of all, the number of jet disasters is decreasing as our technical and especially experimental knowledge is increasing. These disasters are also frequent in the United States and other NATO countries. One of the reasons for these disasters might be material failure. As you may know, jet planes require high temperature resistant materials".



Cumhuriyet, 13.01.1955: In the Future a Tremendous Underground Air Base Will Be Constructed in Turkey

<sup>1</sup> Cal Tech Archives, von Karman Collections, TVK 156.11, TVK 156.12: Articles Which Appeared In Turkish Press During Dr. Theodore von Karman's Visit to Turkey

Some minor changes are applied into the text by author. The original archive file does not contain the sub-article "The Aerodynamic Facility in Ankara" in Cumhuriyet, 13.01.1955. This part is added by the author.

### Concerning missile speed

The American scientist has indicated the prominent future of the aircraft industry, the vast progress in the technical point of view, and also said that flights beyond sonic speed have created social problems such as the disturbing effects of pressure waves and noise. At present several scientists are working on these problems. Today Prof. von Karman will deliver a lecture on rockets at the Technical University at 5:30 p.m.

### Cumhuriyet, 13.01.1955

In the future a tremendous underground air base will be constructed in Turkey

It is believed that American Aviation Pioneer Dr. von Karman Has discussed this topic in Ankara

Prof. Theodore von Karman who is a worldwide authority in rockets and guided missiles, Chairman of AGARD and Chairman of the Research and Development office of NATO arrived in our city yesterday from Ankara at 3:30 p.m. with a staff of five persons.

Prof. von Karman was met by General Kazım Demirkan at Yeşilköy Airfield when some newspaper men questioned him, he said: "Someday flying saucers and cigars might be a reality". His opinion in this respect is quite interesting since he has vast knowledge on this topic. Prof. von Karman who is the inventor of jet planes indicated that he is interested in everything that flies and said:

"Today flying saucers and cigars are considered as a topic in psychology and there is no scientific explanation yet. These

might be the reflections of the sun's rays from the ionosphere, unclaimed radar or observation balloons, or perhaps optical illusions or fantasies of the wind. But the claimed theories are very incomplete and unproven. I do not think that these are secret weapons of the United States or Soviet Russia as it was rumored by a French newspaper."

On the other hand, according to rumors in the Turkish and American circles, Prof. von Karman came to Turkey to discuss the problem of the construction of a very large underground air base for planes carrying hydrogen and atomic bombs. This underground base will increase the strategic importance of Turkey in the NATO chain, since this base will be very close to Soviet Russian industrial centers. And it will also be out of danger from being destroyed by the largest bombs.

As you may recall, it was discussed in the recent NATO meeting that this organization will consider the use of atom and hydrogen bombs in case of aggression from the USSR. Although Prof. von

Karman has avoided making any comment regarding the construction of this underground air base, it is persistently rumored that he and Ethem Menderes, the Minister of National Defense, have discussed this problem in Ankara.

Prof. von Karman and his staff will leave for Paris tomorrow at 10 a.m. in a private plane.

### The wind tunnel facility in Ankara

Prior to his departure to Istanbul, Theodore von Karman, the Chairman of the Advisory Group for Aeronautical Research and Development of the United States Air Joint Chiefs of Staff and Chairman of the Aeronautical Research and Development of NATO, made a visit at 9.30 a.m. to the aerodynamic test facility which is currently constructed on the plot between Gazi Teacher's College and the Faculty of Science of Ankara University, among the visitors were Engr. Col. Dane, Engr. Col. Fuat Uluğ and engineer Turgut Özkan. During visit which lasted over 2 hours, Dr. von Karman made some inspections and suggested to complete the construction and make the wind tunnel operational as soon as possible. He also explained the necessity of developing this facility into an important research center and introduced his willingness to provide any kind of support by related authorities.

Ankara'da Aero dinamik rüzgâr tünelli  
Ankara 12 (s.a.) — Amerika Birleşik Devletleri hava erkânı harbiyel umumiye risayeti ilmi istiyare kuru ve ATO havacılık araşturma ve geliştirme grubu başkanı Theodre Von Karman İstanbul hareketinden önce bugün saat 9,30 da beraberinde albay yüksek mühendis Dane, albay yüksek mühendis Fuad Uluğ ve yüksek mühendis Turgud Özkan olduğu halde Gazi Eğitim Enstitüsü ile Ankara Fen Fakültesi arasında inşa edilmekte bulunan aero dinamik rüzgâr tünelli gezmıştır.  
İki saatten fazla bu tesiste tetkikler yapan Dr. Theodre Von Karman tesisin bir an evvel ikmal edilerek çalıştırılmasının çok yerinde olacağını, bu hususta gerekli kanallardan ner türlü yardımların yapılmasının kabil olacağını ve bu tesisin mütevazi ve faakt çok önemli bir araştırma merkezi haline getirilmesi lüzumunu ifade ve bilhassa tavsiye etmiştir.

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Cumhuriyet, 13.01.1955: The Aerodynamic Facility in Ankara

### Hürriyet, 14.01.1955

According to Professor Th. von Karman Turks Invented Rocket Systems

Yesterday, during his lecture at the Technical University in front of an audience of 1,500 the father of modern aerodynamics and the inventor of jet planes, Professor Theodore von Karman said that Turks used rocket systems in the 13th century for the first time in history.

The great scientist showed a picture of an arrow propelled by gun powder which was taken from an old Turkish Weapon's book; on the picture there was Arabic script. The propellant was located at the tip of the arrow. Professor Karman indicated that the propellant might have been used for purposes of both propulsion and setting the target on fire.

#### *The Rocket of Hasan Çelebi contained gun powder*

From the lecture it is deduced that after the 13th century the Poles had also worked on rockets. During the years 1620-1630 a Turk named Hasan Çelebi made a rocket using black gun powder. The rocket of Hasan Çelebi contained about 70 kg of black gun powder. With regards to the rocket of Hasan Çelebi, Prof. Karman said:



"The interesting part of the whole situation is the fact that the person who built the rocket also tried to fly with it" and he continued "after the year of invention, rockets were used effectively as a weapon from the year 1865 and on. During the First World War rockets were used but not very effectively. They were used as anti-aircraft weapons during the Second World War, as by this time their production cost was low enough. Rockets were used before and during the Pacific landings."

#### *Concerning Nuclear Rockets*

Prof. Karman also indicated that today's rockets are propelled by either liquid or solid propellants; however, in the years to come it is imaginable that rockets

will utilize propulsion by means of nuclear power.

Prof. Karman and his staff will take off by plane for Rome this morning.

### Yeni İstanbul, 14.01.1955

**In Ankara new and important decisions are made in regard to our air defense**

**Prof. Theodore von Karman said that the news about the construction of "Underground air bases" is nothing but pure imagination**

Yesterday Prof. Theodore von Karman, Chairman of the Advisory Committee for Research and Development to the United States Air Forces Joint Chiefs of Staff, delivered a lecture at the Technical University. On the other hand there was a rumor

in one of the Istanbul morning newspapers that the visit of Prof. Theodore von Karman, who is the guest of the Ministry of National Defense, is related to the construction project of the secret underground air bases for airplanes carrying atom and hydrogen bombs. In regard to this rumor, when information was requested, Prof. von Karman said the following: "This is completely untrue and unsound news and the project of this category is pure imagination and ridiculous".

#### *The content of the lecture of Prof. von Karman:*

Yesterday at 5:30 p.m. Dr. von Karman delivered a lecture on the subject of "Problems in Rocket Combustion" at Istanbul Technical University. Prof. von Karman, who indicated that rockets are the oldest and the simplest means of propulsion, said:

"Rockets are the oldest, because they were used as early as the 13th century. They are the simplest because there is no need for their propulsion".

Dr. von Karman also indicated that the Turks used arrows propelled by the same principle during those days and he highlighted his point by the pictures in an old Turkish book written in Arabic. The Professor also said that during the reign

of Emperor Murat IV, Hasan Çelebi actually built rockets.

After the lecture Prof. von Karman said to one of our friends the following: "I have come from Paris as a guest of your government. I have come in contact with officials in Ankara. There were very important decisions made with regard to defense problems. The success of joint military and scientific work will depend on the outcome of these decisions. From now on I think there will be frequent occasions for me to visit your country. I like very much your language and food. I am going back to Paris tomorrow".

Prof. von Karman went to the United States in 1930 and became the Director of the Guggenheim Laboratory at the California Institute of Technology. For 19 years he worked on very important research there. He is especially famous for his work on supersonic speed. In 1951 he was appointed to his post in NATO and settled in Paris.

After his lecture the Professor received an honorary degree "Doctor Honoris Causa" during a ceremony in his honor at the university. Prof. von Karman, whose scientific and technical contributions are well known the world over, indicated his gratitude and promised his personal help to the students who are seriously interested in studying in the United States. After the ceremony, a cocktail party was held and Prof. von Karman met various faculty members 🗨️



### Milliyet 14.01.1955

#### The inventors of rockets are 13th century Turks

The chairman of the NATO AGARD, Theodore Von Karman, claims that the arrow used by the Turks is the most primitive form of jet planes.

Speaking at a conference held at the Technical University yesterday, the chairman of the NATO Advisory Group for Aerospace Research and Development Prof. Dr. Theodore Von Karman, who was in our country as a guest of the Ministry of National Defense, explained the history of rockets and said the following: "A kind of arrow, which was among the weapons of the Turkish Army in the 13th century and used to start fires, can be considered as the most primitive form of today's jet aircraft. According to the literature we have, rockets were developed and used later during the reign of Murad IV. These rockets were powered by 70 kilograms of gunpowder and consist

of seven turbines. It is believed that they were invented by a Turk named Hasan Çelebi, and he even made demonstrations by riding these rockets from time to time."

#### Inventor of rockets

Professor Karman subsequently gave scientific explanation about jet planes by mentioning the development of rockets until today.

The conference was followed with great interest by the Governor, the commander of the 1st Army, generals, admirals, high-ranking officers, professors, and a large group of students.

Professor Theodor von Karman also met with Governor Gökay yesterday morning to discuss the positive scientific progress and psychological research in Turkey.