

100 years of history of AIDAA



Associazione Italiana di Aeronautica e Astronautica

A.I.D.A.A. – APS

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www.aidaa.it

Foundation of A.I.D.A. The Italian Association of Aerotechnics 1920

- **The early years (1920-1950)**

End of first world war: General Maurizio Mario Moris, defined as “the driving force of the Italian Air Force,” who had directed the “Military Higher School of Aeronautical Constructions” of the “Brigade for Specialist Engineers” since 1910, proposed the foundation of a **“scientific society for the progress of aeronautics in which agreement and scientific information among the experts is carried forward with conferences, discussions and periodic meetings.”**



SAPIENZA
UNIVERSITÀ DI ROMA

SDCT

SPACE DYNAMICS AND CONTROL TEAM



Foundation of A.I.D.A. The Italian Association of Aerotechnics 1920

- **The early years (1920-1950)**

On June 29, 1920, the most excellent Italian experts in aerotechnics, under Vito Volterra and Maurizio Moris's initiative, met up at the Aero Club of Rome in Via del Tritone on Friday, July 2 at 9 p.m. and founded A.I.D.A.

In the same meeting, on a proposal by Volterra, Gen. Maurizio Mario Moris was elected President. In 1922 the initial territorial Branches were set up. The first one was the Milan Branch in 1922, then those of Naples, Rome, and Turin in 1923.

After the British Royal Aeronautical Society, founded in 1866, A.I.D.A. is the second oldest aeronautical association globally.



1920



1921



1924



1943

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- **The early years (1920-1950)**

Moris proposed and organized conferences and seminars; during his presidency, the **Journal of the Association** was established. **The first number of the Journal was published in 1921** under Atti **dell'Associazione Italiana di Aerotecnica**. This name was changed in 1925 to become **L'Aerotecnica** under Enrico Pistolesi, a professor at the “Scuola di Applicazione per gli Ingegneri” of Pisa University.

Nine Congresses were organized between 1920 and 1950. They were initially called “Interprovincial Conferences of Aerotechnics,” but later, they took the official name of “National Aerotechnics Congress.”

The Congress's organization is always carried out by the Members belonging to the various Branches distributed throughout the country.

The **Journal L'Aerotecnica, after only ten years, became a monthly journal**; in its heyday between 1930 and 1942, the issues made up an annual volume of over one thousand pages.

Foundation of A.I.D.A. The Italian Association of Aerotechnics 1920

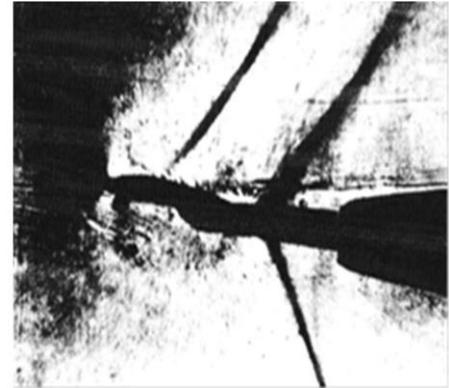
- **The early years (1920-1950)**

A.I.D.A. was at that time the Italian organization best qualified to represent Italian aerotechnics among all the foreign associations. Its Members included the best scientists and the best aeronautical technicians working in universities, industries, and research bodies, among which the Guidonia Experimental Centre.

On the right, the Guidonia Experimental Centre and experimental test wind tunnel: $\alpha = 0$ $M = 0.97$.

During WW II, activity dropped drastically, yet A.I.D.A. continued to operate albeit reduced to such an extent. The Journal L'Aerotecnica continued to be published.

The national congresses re-started in 1948 with two venues: Pisa and Turin.



Foundation of A.I.D.A. The Italian Association of Aerotechnics 1920

- **The early years (1920-1950)**

The Guidonia experience: The Guidonia Experimental Centre with its large plants, wind tunnels, and hydrodynamic pool not only made it possible excellent results in different aeronautical disciplines but also trained many Italian specialists, technicians, and scientists, such as Luigi Crocco, Antonio Ferri, Luigi Broglio, and Carlo Riparbelli. Two of these scientists, Ferri and Broglio, made their mark on world space evolution. After moving to the U.S.A., Antonio Ferri opened the supersonic flights' sector in the 60s; he was one of the NASA experts in the Apollo program's first stages.



On the left, the U.S. delegation of the “Institute of the Aeronautical Sciences” in New York to the Guidonia Experimental Centre:

Manlio Oberziner, Raffaele Giacomelli, Luigi Crocco, Antonio Capetti, Gaetano A. Crocco, Gardner, Amedeo Fiore, Modesto Panetti, Enrico Pistolesi, Wickersham and White.

Foundation of A.I.D.A. The Italian Association of Aerotechnics

- **The golden years (1951-1969) Aeronautics**

The activity of A.I.D.A. between 1951 and 1969 underwent notable changes compared with the previous years. The Italian economic recovery after WW II had a great repercussion in the aeronautical sector. All A.I.D.A branches throughout the researchers, designers, and experts contributed with their ideas and their studies to recover the country.

Ermanno Bazzocchi (President of the Milan Branch from 1990 to 1999) was the lead designer of the aircraft manufactured by the Aeronautica Macchi bearing the initials “MB”, Macchi-Bazzocchi.

Giuseppe Gabrielli (President of the Turin Branch from 1946 to 1949) became a leading figure in recovering of all Italian aeronautical activities.

Luigi Pascale of the Federico II University of Naples founded the Partenavia company, today Tecnam.

Foundation of A.I.D.A. The Italian Association of Aerotechnics

- **The golden years (1951-1969) Astronautics**

In this period, it was the missile and space sector that came increasingly to the fore. Within A.I.D.A., many people understood this interest, above all those who had worked in the Guidonia Experimental Centre, such as **Antonio Eula**, **Gaetano Arturo Crocco**, and **Luigi Broglio**.

Broglio was the person who best understood the importance of space; in a very short time, he was able to build up the C.R.A., Centro Ricerche Aerospaziali, in Rome at the Urbe Airport, with experimental installations that at that time were unique in Europe and with hypersonic wind tunnels (Mach 12). Later he created the San Marco Project for the design, construction, and launch of scientific satellites.

The first of the San Marco Project satellites was the San Marco 1, launched on December 15, 1964 from Wallops Island (USA.).

Foundation of A.I.R. The Italian Rocket Association a A.I.D.A Spin-Off

- **The golden years (1951-1969) Astronautics**

The growth of the space sector became more and more significant within A.I.D.A., although belief in its importance was not shared by all association members, even by those from the academic world.

On June 6, 1951, at 7 pm, Eula, Crocco, Abetti, Pistolesi, and Casiraghi met in one of the Accademia dei Lincei's halls in Rome to promote the constitution of a new Association for the development of rocket and astronautical science.

The new Association's primary purpose was to "bring together those persons interested in studying rocket dynamics and their astronautical applications and publicize the culture of the use of rockets and the propagation of astronautical thinking."

The first President was Gaetano A. Crocco, from 1951 to 1959, and the second Antonio Eula, from 1959 to 1967, both Professors at the School of Aerospace Engineering of the Sapienza University of Rome.



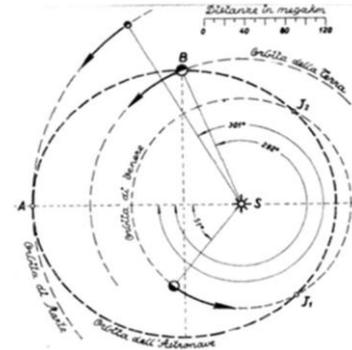
Foundation of A.I.R. The Italian Rocket Association a A.I.D.A Spin-Off

- **The golden years (1951-1969) Astronautics**

In 1951, Prof. Antonio Eula and Eng. Giovanni Casiraghi took part in the II International Astronautical Congress organized by the British Interplanetary Society in London, representing A.I.R. On that occasion, the International Astronautical Federation (I.A.F.) was founded. A.I.R. was among the first founding associations of I.A.F and for many years the only voting Italian Member.

In 1956 A.I.R organized the VII I.A.F Conference in Rome. At that conference, Crocco presented the work “**Year-long exploration tour Earth-Mars-Venus-Earth**” based on exploiting Mars and Venus’ gravitational fields, the well-known gravity assist or gravitational slingshot, to reduce travel times.

In 1960, A.I.R. was also the founder of the International Academy of Astronautics (I.A.A.), and among the members of the founding committee were Broglio, Eula, and Crocco.



Foundation of A.I.D.A.A. The merging of A.I.D.A and A.I.R

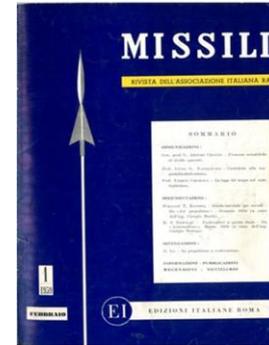
- **The golden years (1951-1969) Aero-Space**

1959 A.I.R. founded its journal “Missili”, later Missili e Spazio after the first Italian satellite entered into space, the San Marco 1.

1957 A.I.D.A. contributed to the foundation of the International Council of Aeronautical Sciences (I.C.A.S.).

1961 the Councils and Assemblies of the A.I.D.A. and A.I.R made the first steps for merging the associations.

1969 in a Joint A.I.D.A. and A.I.R. Extraordinary General Assembly, the merging of the two Associations was approved, and the name of the new Association was chosen, **A.I.D.A.A.**



A.I.D.A.A.

- **The later years (1970-2020)**

The first President of A.I.D.A.A. was Prof. Antonio Eula, elected in 1969, the person who more than anyone else experienced the story of the Association in all its evolution, historical and cultural. **He was, over time, the President of A.I.D.A., A.I.R., and A.I.D.A.A.**

Eula resigned in 1972 for health reasons, and Oscar Cinquegrani, of the Aerfer company, was elected President; in turn, he resigned in 1976 and was replaced by Prof. Paolo Santini of the Aerospace Engineering School of Rome.

The scientific journals, A.I.D.A.'s *Aerotecnica* and A.I.R.'s *Missili e Spazio* merged in what is still today the only Italian aero-space journal, *l' Aerotecnica Missili e Spazio*. Prof. Luigi Napolitano was the first editor.

A.I.D.A.A.

- **The later years (1970-2020) Seventies and Eighties A.I.D.A.A. members space activities**

Naples: Prof. Napolitano and his research group work in aerodynamics, supersonic propulsion, and the study of microgravity.

Milan: the SIRIO Project starts up under Prof. Francesco Carassa: the satellite for the experimentation of the highest frequencies for telecommunications launched from Cape Canaveral in 1977.

Padua: Giuseppe Colombo studies Tethered Satellite Systems to generate energy in space using the conductive wire exploiting the Earth's magnetic field.

Rome: Broglio continues the activities of the San Marco Project launching satellites from Malindi Polygon in Kenya.

In 1988, the Italian Space Agency (A.S.I.) was founded.

The first President was Prof. Luciano Guerriero; Prof. Carlo Buongiorno, Member of the Rome Branch of A.I.D.A.A., was the first General Director; Prof. Sergio Vetrella, a member of the Naples Branch, was the President of A.S. I. from 2001 to 2006.

A.I.D.A.A.

- **The later years (1970-2020) International Activities of A.I.D.A.A**

Within A.I.D.A.A., Santini and Napolitano pushed the international activities of the Association within the context of the two worldwide associations, I.A.F. and I.C.A.S.

Prof. Napolitano was the President of I.A.F. in two periods, 1967–1968 and 1973–1974

Prof. Santini was the I.C.A.S. President from 1990 to 1994.

A.I.D.A.A. organized the XXXII I.A.F. Congress in 1981 in Rome at the Engineering Faculty of the Sapienza University.



Paolo Santini and Luigi Napolitano

A.I.D.A.A.

- **The later years (1970-2020) Nineties' A.I.D.A.A. activities**

A.I.D.A.A. organized the XX I.C.A.S. Congress in Sorrento in 1996 with the contribution of Prof. Giovanni Maria Carlomagno, who was a member of the Executive Committee of the I.C.A.S. from 1996 to 2008.

A.I.D.A.A. opened to the industry. In 1991 Eng. Ernesto Vallerani, President of Alenia Spazio (now Thales Alenia Space), was elected the President of the Association.

Vallerani's objective was to broaden A.I.D.A.A.'s relations with the European associations: the French A.A.A.F., the German D.G.L.R., and the English R.Ae.S.

In 1992 A.I.D.A.A. joined the Council of European Aerospace Societies (C.E.A.S.), which brings together the aerospace Associations of the leading European nations.

In 1995 Vallerani was appointed President of C.E.A.S.

A.I.D.A.A.

- **The later years (1970-2020) Nineties' A.I.D.A.A. activities**

In 1997 during Vallerani's presidency **A.I.D.A.A. organized the XLVIII Congress of the International Astronautical Federation** in Turin at the Lingotto Congress Centre. The Congress was a great success; the President of the Italian Republic, Oscar Luigi Scalfaro, took part in the Opening Ceremony.

The Presidency of Vallerani continued for 12 years, from 1991 to 2003, and certainly left its mark and characterized the Association's life. His successor, who continued along the same route, was Eng. Fausto Cereti from Alitalia, who remained in that position until 2007.

A.I.D.A.A.

- **The later years (1970-2020) The new millennium**

After two presidents from industry, there came an alternating succession of presidents from the academic world:

Prof. Vittorio Giavotto and Prof. Amalia Ercoli Finzi belonging to the Milan Branch;

Prof. Franco Persiani of the Emiliano-Romagnola Branch;

Prof. Leonardo Lecce from the Naples Branch;

Prof. Erasmo Carrera from the Turin Branch.

In the last twenty years, international participation and involvement within C.E.A.S., I.C.A.S., and I.A.F. and other organizations were fostered.

A.I.D.A.A. will organize the XXXIV International Congress of I.C.A.S. in Florence in 2024.