

Borsa
dell'Innovazione
e dell'Alta
Tecnologia



Focus on Aerospace in Campania



ITALIAN TRADE AGENCY
ICE - Agenzia per la promozione all'estero e
l'internazionalizzazione delle imprese italiane



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Ministero dello Sviluppo Economico

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A. Historical background of the aerospace in Campania

The Campania region has historical traditions in the aviation field: for about 100 years, it has developed these skills, benefiting from mild weather that allowed the processing outside of large aircraft parts made of wood and canvas and good weather for flying.

In recent years, the Campania aerospace industry has grown rapidly, thanks also to the success achieved at the international level by Finmeccanica, including the important collaborations with the two global giants, Boeing and Airbus, for the construction of new commercial aircraft, which led to the birth of a large network of small and medium-sized subcontractors with high quality productions.

The aerospace supply chain plays a leading role in the economic system of the Campania region, representing an element of the development of the territory both for the number of the industrial facilities and for the high levels of technology innovation required by the manufacturing processes.

The Campania aerospace industry is characterized by the presence of the leading companies in the national market, but also present with significant market shares at the international level, such as Alenia Aermacchi (a Finmeccanica Company), MBDA (a Finmeccanica Company), Magnaghi Aeronautica, Dema, Atitech, Geven. These companies are complemented by others, such as Tecnam, Vulcanair, Oma Sud, able to realize great value and high quality finished products and very well appreciated all over the world, or by companies such as K4A that has been able to develop the project of a very innovative new light helicopter.

The Campania region has got a quarter of the national aerospace sector, with an annual turnover that has reached nearly 2 million Euros.

Compared to the national average, the Campania aerospace industry has reached significant levels in terms of number of enterprises and number of employees. In fact, recent statistics show that in Campania about 10.000 employees work in the sector, there are 29 companies with core business in the aerospace with a supply chain of over 100 subcontracting companies. These small and medium sized subcontractors companies are mainly specialized in the manufacture of parts on order or in the execution of specific processes.

The areas in which Campania producers operate are the construction of the complex components of the aircraft, the maintenance and the specialized subcontracting of parts, the machining and the equipment, which are characterized by a strong manufacturing vocation (65%) and by a lesser, but however significant presence, in the field of the technical services (22.6%).

Excellent technological expertise and manufacturing capabilities are present in the field of mechanical engineering, made with traditional technology or numerical control, in the construction tools, in the components assembly or construction, in the construction of special equipment which allow the realization, assembly and maintenance of the panels and of the entire sections of the aircraft, in the sheet metal processing, in the chemical coating of the panels and in the thermal treatment for structural purposes, in the construction of non-structural composite material.

There are also support activities in the field of inspections, maintenance and repairs, while in the engineering field should be highlighted the ability to design, the expertise in the structural analysis, in the prototyping and development of technologies for the aeronautical and space sectors.

The wide variety and quality of the skills is the main strength of the entire regional sector, mainly due to the strong link between SME's and large firms, which over time has allowed the acquisition of a specialized know-how.

The Campania region has conferred great importance to the aerospace sector, supporting different activities able to ensure the development of the industry. Among this, the most important is the constitution and consolidation of the Campania Aerospace Technological District, with a law profile recognized by the European Commission and the National Government, that completes a strong path of regional sharing.



B. The Campania Aerospace Technological District – DAC

The Campania Aerospace Technological District – DAC S.c.a r.l. was born on May 30th, 2012 with a definite goal: stimulate the collaboration between research centres, universities and firms in Campania region for creating concrete business opportunities and continuous occasions of growth and innovation.

In the cluster are involved almost 140 actors: 8 large companies (including Alenia Aermacchi, Magnaghi Aermacchi, Atitech, MBDA, DEMA, Telespazio), 11 research centers (including CNR – National Research Council, CIRA – Italian Aerospace Research Center, ENEA and the 5 Campania Universities) and 125 SME (also including those who adhere to the 8 consortia).

DAC has developed a feasibility study based on 12 strategic programs which was approved by the Italian Ministry of Education, University and Research (MIUR) with the highest score. These projects, to be implemented over three years, are the strategic path (of research, development and training) that the district is following.

For Campania region, the technological aerospace district represents a fundamental step towards the realization and the management of an industrial network able to develop competitive solutions to be properly proposed to qualified national and international customers. As a new model of development, the challenge taken up by the DAC is linked to the consolidation and integration of the competences of all regional excellence in the aerospace industry:

Commercial Aviation, for the development of enabling methodologies and technologies for the design and construction of the new regional aircraft;
General Aviation, for the development of manufacturing and assembly techniques of light aircraft for the Business & General Aviation (B&G Aviation);

Space and Carriers, for the design and development of space platforms such as micro satellites and dual technologies related to carriers and systems for logistic and communications;

Maintenance, Repair and Overhaul (MRO), for the development of methods of maintenance and transformation useful for the new technologies and methodologies planned within the district.

The ability of the DAC to integrate all the regional players of the technological and productive supply chain, putting it in relation with research, is made possible also by the adoption of an innovative model of governance, able to ensure the representation required by each member and at the same time it allows to use a collaborative system of project & knowledge management on which all the partners work independently but with an integrated view. In addition, the transversal actions implemented by DAC to focus efforts and address the regional strategy in the aerospace field, include: vocational training and high education, technology transfer and communication, duality and internationalization.





In this context, the DAC has moved the first major steps. In fact, recently the district has implemented important actions for ensuring its involvement in the most important national and international aerospace platforms. These actions are:

- the membership to ACARE Italy;
- the adhesion to the EACP Network;
- the adherence to the Space Platform SPIN-it.

These actions represent an instrument of development and growth, a catalyst of business opportunities and innovative projects and a further mechanism of technology transfer .

It should be noted that the DAC pursues all its objectives by adopting a meta-district vision. In fact, it's one of the founding members of the National Aerospace Technological Cluster (CTNA). In this way, the strategic program of the DAC is part of a largest system, which involves the other Italian aerospace districts and the entire national aerospace industry, with the aim to coordinate the developments and to focus the efforts at national level.

So, the birth of the DAC represents an important step able to give back to Campania region the leading role in the enabling technologies for new products in the Commercial Aviation, General Aviation, Space and MRO.

C. The aerospace research and technological innovation system in Campania

1. The University System

The Second University of Naples

The Second University of Naples was established in 1991: today the students are almost thirty and the Departments are 19.

Particularly involved in the activities of the Campania Aerospace Technological District is the School Polytechnic and of Basic Sciences. The school was composed by the union of: Department of Civil Engineering, Design, Construction and Environment; Department of Industrial and Information Engineering; Department of Mathematics and Physics.

The mission of the School is to ensure the excellence of the teaching in the fields of Engineering, Design and Basic Sciences with an education program that includes several courses of Bachelor and Master.

The educational activities of the School are based on the commitment of its teachers and the high quality of the research of the three departments that compose it. The learning environment that the school provides, with its facilities in the offices located in Aversa-Caserta, is ideal for the study and direct contact with professors and researchers.

- ▶ Website: www.unina2.it

The University of Salerno

The University of Salerno is the home of research groups working in many scientific contexts. It is involved in important national and international research programs and it is also active in the transfer of technology and in the industrial application of the results developed by the scientific research.

The University of Salerno participates in the District through the activities of the following departments:

- Department of Electrical Engineering and Computer Engineering;
 - Department of Industrial Engineering.
- ▶ Website: www.unisa.it



The University of Sannio

The University of Sannio is composed by the Faculties of Economics, Engineering, Mathematical, Physical and Natural Sciences and Economic and Business Sciences.

The Engineering Department of the University of Sannio, particularly involved in the activities of the Campania Aerospace Technological District, was born as a scientific programme for the promotion, organization and management of science and technology to support teaching in the field of scientific areas before the courses organized at the Faculty of Engineering and then also of the mathematical, physical and chemical present in other faculties of the University. It is responsible for the support and verification of the quality of the research activities carried out in-house with the aim of gaining scientific relevance at the national and international level and to cooperate in educational activities related to the teachings in the scientific areas under its jurisdiction , with reference to courses of study, to masters and PhD courses.

With the sponsorship of DAC and other institutions and companies, the University of Sannio is part of the IEEE International Workshop on Metrology for Aerospace.

Following the success of the First IEEE International Workshop on Metrology for Aerospace, it was considered convenient to promote a second edition of this event, which aims at reinforcing and supporting the collaborations among people working in developing instrumentation and measurement methods for aerospace.

Attention is paid, but not limited to, new technology for metrology-assisted production in aerospace industry, aircraft component measurement, sensors and associated signal conditioning for aerospace, and calibration methods for electronic test and measurement for aerospace.

The program is designed to raise the interest of a wide group of researchers, operators and decision-makers from metrology and aerospace fields, by presenting the most innovative solutions in this field from the scientific and technological point of view.

The main topics include, but are not limited to: electronic instrumentation for aerospace, automatic test equipment for aerospace, sensors and sensor systems for aerospace applications, wireless sensor networks in aerospace, attitude- and heading-reference systems, mMonitoring systems in aerospace, metrology for navigation and precise positioning.

- ▶ Website: www.unisannio.it
- ▶ www.metroaerospace.org

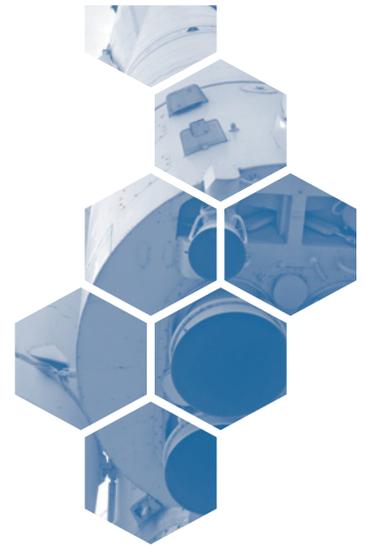
The University of Naples Federico II

The University of Naples Federico II is involved in the District through the following departments:

- Department of Aerospace Engineering;
- Department of Informatics and Systems;



- Department of Biomedical Engineering, Electronics and Telecommunications;
 - Department of Chemistry “Paolo Corradini”;
 - Department of Mechanical Energy;
 - Department of Applied Energy Thermofluidynamics and Environmental Conditioning;
 - Department of Chemical Engineering;
 - Department of Marine Engineering;
 - Department of Electrical Engineering;
 - Department of Materials Engineering and Production;
 - Department of Engineering and Management;
 - Department of Mathematics and Applications.
- ▶ Website: www.unina.it



The University of Naples “Parthenope”

For the University of Naples “Parthenope”, the Department of Applied Science (DSA) is a reference and support for the regional Aerospace activities and operates in the following research areas: Mathematics and Computer Science, Physical Sciences, Chemical Sciences, Earth Sciences Topographic and Geomatics, Air Transport and so on.

The DSA is divided into sections and in research laboratories. The Sections are: Chemistry and Physics, Geodesy, Topography and Hydrography, Computer Science and Mathematics; Navigation. Research Laboratories are: Numerical Models and Parallel computing, Computer Vision and Pattern Recognition; Topography and Photogrammetry, Geomatics and GIS; Cosmic Physics and Planetology; Naval Simulation; Architecture and Systems, Flight Dynamics; Navigation. The Research Laboratories of the Department are equipped with advanced equipment and instrumentation in the fields of scientific research and technology: computer science, navigation, satellite positioning, electron microscopy, space applications, topographic and geodetic surveys, parallel computing, image processing, simulation, naval, aviation safety.

Important is, also, the Department for Technologies (DiT), the structure of reference of the University of Naples Parthenope for scientific and technological research and teaching support in the area of Information Engineering, Civil and Environmental Engineering, Industrial and Management. The DiT coordinates and carries out research and consultancy, established by contracts and agreements with institutions and public or private bodies, as part of the research areas of its competence and in accordance with the annual research plan.

- ▶ Website: www.uniparthenope.it

2. The centers of industrial research and technology transfer

CALEF CONSORTIUM

The CALEF, was founded in 1998 as a “Consortium for Research and Development of Industrial Applications of Laser e of the electron beam”.

It was founded by Calzoni S.p.A., Costamasnaga S.p.A., ENEA, Ettore Zanon S.p.A. and Rodriquez Cantieri Navali S.p.A., with the intent to carry out and promote research, development and application of techniques for materials processing (cutting, welding, surface treatment) with laser and electron beam and with the aim of transferring the know-how developed for the Italian industry and in particular to SMEs.

In the course of its operations, the Consortium CALEF has expanded the scope and plays a key role in the field of process engineering with R&D on production technologies, innovative materials, new production processes and the methods of production.



Between the beginning of 2007 and the end of 2009, the Consortium has seen a strengthening with the addition of new partners in industries from automotive (ELASIS SCpA), aeronautics (Alenia Aeronautica SpA), in the field of 'innovation and technology transfer (AREA Science Park), in the field of training, research, certification and technical assistance in the field of welding fabrication (Italian Institute of Welding) and in the manufacture of industrial laser systems for marking Nd: YAG laser (LASIT Srl) .

It is one of the strategies of the Consortium to further strengthen the social structure, with the aim to further expand the range of their skills and ability to finalize and strengthen its representative capacity of the territory in which it operates.

For the research activities, the CALEF can use laboratories of all the members of the Consortium. The CALEF also directly manages some laboratories made available by members of the Consortium, the main of which is the "Laboratory Laser" of ENEA Research Center Trisaia, consisting of a technological hall of about 540 m2, with 4 lasers and 4 workstations , a laboratory of metallography and equipped with a mechanical office.

The laboratory in Pomigliano D'Arco granted by Alenia Aeronautica SpA and shared with the Research Institute RTM SpA, both members of the Consortium, occupies an area of about 400 m2 and has a high power laser source for welding and two laser sources for micromachining.

Two electron beam systems are available at the ENEA Casaccia Research Center and the Research Centre ENEA Brindisi, where there is also a high vacuum furnace and high temperature for sintering of ceramic powders.

- ▶ Website: www.consorziocalef.it
- ▶ e-mail: calef@enea.it



CIRA - CENTRO ITALIANO RICERCHE AEROSPAZIALI

CIRA was created in 1984 to manage PRORA, the Italian Aerospace Research Program, and uphold Italy's leadership in Aeronautics and Space.

CIRA is a company with public and private sector shareholders. The participation of research bodies, local government and aeronautics and space industries sharing a common goal has led to the creation of unique test facilities, unmatched anywhere in the world, and of air and space flying labs.

The CIRA is located in a 180-hectar area in the immediate vicinity of Capua, in the province of Caserta, north of Naples. Its has a staff of 320 people, most of which are engaged in research activity within domestic and international programs.

The goals of the Italian Aerospace Research Center are the acquisition and transfer of know-how aimed at improving the competitiveness of existing firms and stimulating the creation of new ones, as well as promoting training and increasing awareness of the aerospace sector.





To reach these goals CIRA develops research projects, domestic and international collaborations and activities to “disseminate” the knowledge and technologies it acquires.

From the study of revolutionary air and space craft, capable of moving autonomously and at speeds eight times greater than traditional airliners, to innovative systems to reduce environmental impact, increase flight safety, make surveillance more effective right up to developing and verifying in its own labs systems to re-enter the atmosphere from space and land on Mars: there is no sector of advanced aeronautical and space research which CIRA, the Italian Aerospace Research Center, is not involved in. CIRA, a unique institution in Italy, plays its role directly or partnering with small and large companies at a domestic, European or global level, and with bodies and institutions ranging from NASA to the European Space Agency, the European Commission and the Chinese Aerospace Academy.

- ▶ Website: www.cira.it
- ▶ e-mail: info@cira.it



CNR

The Italian National Research Council

The Italian National research Council (CNR) is the largest public research institution in Italy, the only one under the Research Ministry performing multidisciplinary activities.

The Mission is to perform research in its own Institutes, to promote innovation and competitiveness of the national industrial system, to promote the internationalization of the national research system, to provide technologies and solutions to emerging public and private needs, to advice Government and other public bodies, and to contribute to the qualification of human resources.

CNR is strongly committed to enhance the results deriving from its research activities by protecting them and by promoting their transfer and their implementation within both national and international productive and social contexts.

In order to pursue the above, CNR operates:

- to strengthen the understanding of its researchers on intellectual property
- to promote the industrial and commercial exploitation of the innovative scientific results
- to translate research results into value-added technology and products by supporting the patents issuing, the creation of start up and spin-off entrepreneurial activities
- to attract investments and participations aimed at fostering high-tech venture capital companies
- encourage contacts between the research community and the national/international entrepreneurial organizations
- to promote the dissemination of innovation favoring the creation of networks grouping together CNR, companies, industry associations and financial organizations.

- ▶ Website: www.cnr.it www.ino.it
- ▶ e-mail: info@ino.it



CORISTA - Consortium of Research on Advanced Remote Sensing Systems

The Consortium of Research on Advanced Remote Sensing Systems is a non-profit consortium. It was formed in Naples in 1988 aiming to promote close cooperation between universities and industry in areas related to aerospace remote sensing. It had, therefore, from the beginning, universities and industrial members which have contributed, each according to their characteristics and attitudes, to make of the Consortium an extremely flexible structure rich in diversified and specialized resources.

It deals with the design, prototype development and application of advanced sensors for remote sensing



that can be installed on ground, air and space platforms (balloons, aircraft, helicopters and satellites). It conducts research and prototype development in the field of remote sensing systems, also including aspects of their control in operation and processing of data. The diagram below summarizes the main activities of the Consortium:

The areas of technical expertise within remote sensing activity range from the definition and simulation of innovative airborne sensors and of prototypes of satellite subsystems to the development of satellite data processing algorithms.

The objectives, to which such research activities are directed, derive from an analysis of the evolution of the sector, consistent with the strategic plans and “roadmaps” developed by the consortium members. In this sense, CO.RI.S.T.A. acts as a link between the objectives of industrial development and those of scientific research of its members. In this process it aims also entering more and more significantly in the fabric of small and medium enterprises in the aerospace sector in Campania, through involvement in research programs, in which the importance is also the possibility of engineering and marketing of the prototypes developed.

It employs its own team of researchers and its laboratory is part of the Register of Research Laboratories recognized by the Ministry of Education, University and Research.

In the international framework it is part of the research centers accredited by the European Space Agency as potential partners in their programs.

- ▶ Website: www.corista.eu
- ▶ e-mail: info@corista.eu



MESE Consortium

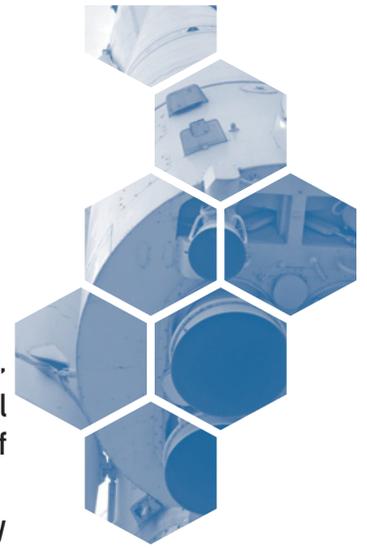
The Intercollegiate Consortium Me.S.E. was founded in November 2006 by the requirement, a group of Italian researchers, to systematize the scientific and technological knowledge and technologies related to the metric measurement on electrical systems, with particular reference to the analysis, determination and measurement of certified and traceable and voltage characteristics of electricity supplied, and their relative quality, and to quantify the cost of non-quality and facilitate their transfer to organizations and industries for enhanced applications.

The Intercollegiate Consortium Me.S.E. was established initially between: University of Cassino, University of Naples – Federico II: Pole of Science and Technology, Second University of Naples and and University of Palermo. Subsequently joined the consortium: the Polytechnic of Milan (in September 2008) and the University of Salerno (June 2009). As is evident, the Consortium is spread nationally and includes the major universities where research is conducted on electrical systems.

The Consortium, which is not for profit, exerts its activity by promoting and coordinating the activity of the research unit operating in the partner universities, in particular (according to the statute):

1. promotes the development and planning of scientific collaboration between the research units and between these and research





- organizations, national and international private companies operating on issues referred to above,
2. promotes and coordinates the participation of units in projects of national and international research,
 3. he is the interlocutor towards the various scientific bodies of national government, regional authorities and other public entities (Regulatory Authority for Electricity and Gas, GRTN – Manager of the National Transmission Network, regulators, standards bodies, inspection bodies regional, etc.),
 4. coordinates the methodological skills of the Units in the creation of centers accredited metrology (SIT – Calibration Service in Italy and SINAL – National System for the Accreditation of Laboratories) in the fields of its competence to service of public and private organizations.,
 5. promotes the placing on the market of such centers in order to support in particular the southern industrial context with the relevant metrological services,
 6. promotes and coordinates cultural activities in the field of interest of the Consortium,
 7. promotes and oversees the training of experts in the field of interest of the Consortium, and coordinates and supports training activities promoted by one or more of the partner universities.
- ▶ Website: www.consortio-mese.it
 - ▶ e-mail: segreteria@consorzio-mese.it



ENEA

ENEA is the name for Italian National Agency for New Technologies, Energy and Sustainable Economic Development.

The Agency's main research issues are identified as follows:

- Energy Efficiency – Support to Public Administration, Information and Training; Advanced Technologies for Energy and Industry;
- Renewable Energy Sources – Concentrated Solar Thermal Energy; Photovoltaics; Biomass and Biofuels; Solar Thermal Energy at low and medium temperatures; Hydrogen, Fuel Cells and Energy Storage Systems;
- Nuclear Energy – Nuclear Fusion; Nuclear Fission;
- Climate and the Environment – Environmental Characterization, Prevention and Recovery; Environmental Technologies; Energy and Environmental Modeling; Marine environment and Sustainable Development; Antarctic Expeditions and Research in Polar Areas;
- Safety and Health – Seismic Protection; Radiation Biology and Human Health; Radiation Protection; Metrology of Ionizing Radiation;
- New Technologies – Materials Technologies; Radiation Applications; Sustainable Development and Innovation of the Agro-Industrial System; ICT;
- Electric System Research – Studies and research, under a Programme Agreement with the Italian Ministry of Economic Development, aimed at innovating the National Electric System to make it cheaper, safer and more environmentally-friendly.

Specifically, the Agency's activities are devoted to:

- basic, mission-oriented, and industrial research exploiting wide-ranging expertise as well as experimental facilities, specialized laboratories, advanced equipment;
- new technologies and advanced applications;
- dissemination and transfer of research results, thus promoting their exploitation for production purposes;
- provide public and private bodies with high-tech services, studies, measurements, tests and assessments;
- training and information activities aimed at broadening sector expertise and public knowledge and awareness.



The Agency's multidisciplinary competences and great expertise in managing complex research projects are put at the disposal of the Country system.

- ▶ Website: www.enea.it
- ▶ e-mail: rso@enea.it



INAF - ISTITUTO NAZIONALE DI ASTROFISICA

National Institute for Astrophysics

The INAF – National Institute for Astrophysics – plays a fundamental role in the promotion, implementation and coordination of the technological and scientific research activities in the fields of Astrophysics and Cosmic Physics, in collaboration with universities and other public and private (national and international) actors, paying particular attention to the synergies with scientific centers and other realities that operate in the South Italy.

A great many results have been obtained by INAF researchers in diverse fields within astronomy and astrophysics, and using various instruments. For example, the all Italian satellite, AGILE, that through its Italian leader has led to important results on the high energy Universe and the study of black holes (like Cygnus X-3). Amongst AGILE's discoveries, also the fact that our own atmosphere, under certain conditions (super-cell tropical thunder storms), can produce phenomena such as terrestrial gamma-ray bursts. "Lightning" of such high energy as to render the Faraday cage which protects aero planes from normal lightning insufficient. For this reason INAF and ASI are in contact with ENAC to look into this potentially destructive phenomenon. Here we have then, a satellite designed to study the Universe, that makes a discovery concerning our own home planet. Amongst the international collaborations that INAF can claim, one of the most important is related to the LBT (Large Binocular Telescope), the largest of its type, and amongst the most advanced in the world. Thanks to it's new adaptive optics system, developed by researchers at INAF's Arcetri Observatory, the LBT has been able, at optical wavelengths, to exceed the image sharpness of the Hubble Space Telescope, a milestone in observations of the Universe and something considered impossible until recently for a ground based telescope. VIMS and VIRTIS are two instruments designed and built by INAF; the first operates on the Cassini probe that has been revealing the mysteries of Saturn and its moons since 2004. VIRTIS is busy on ESA's Venus Express probe, designed particularly to study the greenhouse effect on this planet, something that is fundamental for our understanding of how climate change and non-reversible effects could result from careless behavior on our own planet. ESA's Planck satellite, thanks to its LFI instrument built by a team of researchers coordinated by INAF, has made the best map ever of the cosmic background radiation, emitted 13.7 billion years ago. This is a critical step in understanding how the Universe formed and is evolving. INAF doesn't work only on data from its own instruments, but also on those of others, such as the telescopes of ESO, a European organization of which Italy is a member. Thanks to these telescopes, our researchers



have discovered that Mercury shows signs of recent volcanic activity and that galaxies grow not only by merging with each other but also by swallowing hydrogen. One could continue with the discoveries made on supernovae, pulsars and black holes, on gamma ray bursts and extra-solar planets, on the cosmic background radiation and the evolution of the Universe.

- ▶ Website: www.inaf.it
- ▶ e-mail: info@oacn.inaf.it



D. The business system



ALENIA AERMACCHI

Alenia Aermacchi is the Italian leader in aeronautics and among the world's top players in the design, development, manufacture and support of commercial and military, trainers and unmanned aircraft systems.

Through its robust experience in advanced materials, Alenia Aermacchi plays a primary role in the leading of international civil programs, for which it manufactures complex aero-structures.

The Alenia Aermacchi mission is to lead the Finmeccanica aeronautics business with a vision that capitalises on changing global scenarios to create a stream of competencies, to leverage technologies and to enrich the range of proprietary and collaborative products in strategic markets and emerging business areas.

Alenia Aermacchi will uphold the Italian aeronautics manufacturing base to reinforce its role as active participant in an international network of key players, both through its own aircraft and participation in global partnerships.

Alenia Aermacchi will deliver products of superior quality and performance to build up a portfolio of assets including competencies in technology, management and entrepreneurship throughout its own business and its main international joint ventures and consortia including ATR, Eurofighter, SCAC and Superjet International.

Technology is the key element allowing Alenia Aermacchi to achieve its goals by providing reliable and cost-effective solutions to the most difficult problems.

The entire Alenia Aermacchi team is committed to increasing the company's intellectual property portfolio, in order to ensure its position on increasingly competitive international markets. The company is a world leader in the use of composite materials and carbon fibers for civil and military applications.

Materials developed for military and security applications, or in the framework of specific research projects, provide the so-called dual technologies, or ready-to-use solutions applicable to the civil sector. In the same way, the roots, experience and processes used in the development of new military products can often be traced to leading civil projects.

Safer, more efficient, cleaner: this is the future of flight that Alenia Aermacchi contributes to bring about through its research and development programs, applied to both its traditional areas of excellence and the new technologies that are just beginning to appear on the market.

Alenia Aermacchi research programs, carried out in collaboration with the industry's leading players and European, Italian and local institutions, tackle challenges that range from enabling conventional and unmanned aircraft to share the same airspace (as in the MIDCAS program) to the integrated use of different types of unmanned air systems (SMAT), to organizing airspace more effectively (SESAR) and to developing systems to monitor large maritime areas (SEABILLA). The output of these programs does not consist in hardware but rather in technologies and solutions that will affect how we live and fly in the 21st century.

- ▶ Website: www.aleniaaermacchi.it
- ▶ e-mail: communication@alenia.it



ALI – Aerospace Laboratory for Innovative components S.c.a r.l.

ALI – Aerospace Laboratory for Innovative components S.c.a r.l.– promotes research, development, manufacture and marketing of all product of the associated companies as well as of activities and/or direct marketing/production within ICT, TLC and Aerospace.

The company does not have any profit and aims in particular to:

Promote the design, prototyping and implementation of aerospace innovative components;

Study and research in the fields of aerospace and advanced computing;

Develop system of remote control of aerospace platform;

Develop and implement HW/SW applications in aerospace and advanced computing;

- Develop management SW and supervision of automatic plants;
- Create automation systems and process control in aerospace, in particular the Knowledge Management, Health Monitoring & Management;
- Promote the design and precision mechanics;
- Certify the mechanical components;
- Promote and organize events in the field s of aerospace and advanced computing.

The companies of ALI S.C. a r.l. are: Aermec Sud S.r.l.; Astro Industry S.r.l.; Atm – Advanced Tools and Moulds S.r.l.; Avio Import S.p.A.; Canale Otto S.p.A.; Euro.Soft S.r.l.; Form & Atp S.r.l.; FoxBit S.r.l.; ITS Lab S.r.l.; Fabbrica S.r.l.; Lead Tech S.r.l.; Naos S.p.A.; Powerflex S.r.l.; Serco S.p.A.; SRS Engineering Design S.r.l.; Techno System dev. S.r.l., Telespazio S.p.A.; TeS S.r.l..

The team also relies on the corporation of existing centres of excellence on the Campanian territory such as: CIRA, for technological aspects, University of Naples (DIAS - Aerospace Engineering Department - and Earth Science Department) and the CNR (National Research Centre) for scientific aspects. ALI participates in the following projects:

- IRENE – Italian Re-Entry Nacelle phase 0 (ASI)
 - Regional Program – DEMETRA project (Data fusion for Enviroment Monitoring – Earth observation and TRAsmission platform)
 - SANDRA project – Space Advanced Nacelle with Deployable Structure for Reentry Applications (waiting for approval)
 - FIT (Technological Innovation Funds) – Experimental development programme: “Technological Developments for the realization of a prototype of a deployable structure for use as a lifting body re-entry capsule from space” (waiting for approval).
- ▶ Website: www.aliscar.it
▶ e-mail: info@aliscar.it





ANTARES

The ANTARES Consortium was established in January 2005 in San Giorgio del Sannio (BN) and it has offices in different regions of Italy.

ANTARES consists of a significant group of companies, with complementary expertise, from Campania region and non, with "Compagnia Generale per lo Spazio" as reference company.

ANTARES is a SME part of OHB Group focused on development and integration of complete space systems. The main scope of the Consortium is to promote innovation and development of SMEs in the space sector and to project and produce components and technologies for satellites applications and services, for telecommunications and remote sensing.

ANTARES Consortium works in different fields:

- Research, Development and Industrialization of Satellite Technologies;
- Remote Sensing and Telecommunication Services;
- Design and commercialise turn-key solutions that exploit and apply new technologies developed by space research, offering innovative integrated products and services for ground based services.

The associated companies, thanks to the experience and system support collaboration, accumulated in the space sector, have been able to implement the initial developments of both the attitude control equipment and the energy subsystem, as well as commercial satellite telecommunications. Through this situation, the Consortium members have also acquired the technologies and resources necessary to produce a new generation of small satellites.

- ▶ Website: www.consortioantares.it
- ▶ e-mail: cgs@cgspace.it



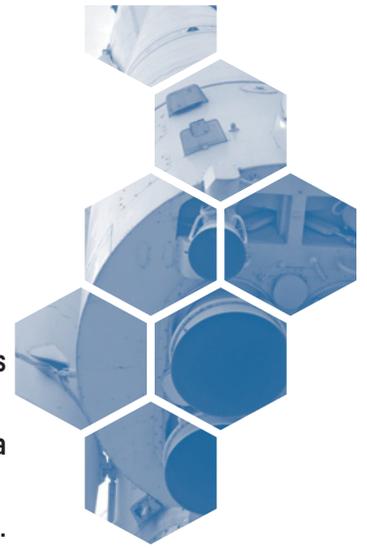
CALTEC CONSORTIUM

The Caltec Consortium was established in 2008 by OMI, REDAM, HPD (Hirpiania Power Development) and LFI (Line Final Irpinia) and Inter Consulting. The Consortium has double orientation: Aerospace and Energy.

The OMI (Officine Meccaniche Irpine S.r.l.) was established in February 1981 as a mechanical construction and maintenance of industrial plants agency. In a few years it has been able to establish a successful working relationship with major local and national actors, specializing itself in the construction of mechanical machines and equipment for small and medium size enterprises. The OMI, in particular, builds equipment and machine components for the aerospace industry, military and space. At the same time it has developed competences in the field of maintenance of industrial plants.

The Management of O.M.I. is aware that the Company's success is closely linked to the achievement and continuous improvement of an high standard in the field of protection of the Environment and Quality of product/service. Therefore, in accordance with the UNI EN ISO 9001, UNI EN ISO 9100 UNI EN 14001, relating to the Management for Quality and Environment, the Department is committed in implementing and maintaining an active Integrated Management System (IMS) . The Integrated Management System of O.M.I. S.r.l is realized through the Manual SGI "MSGI OMI," Operating Procedures, Internal Standards, all applicable documents and records that describe the structure and organization. These documents indicate how management and operational are related to the implementation, maintenance and continuous improvement of the SGI.

- ▶ Website: www.omi-mf.it
- ▶ e-mail: info@omi-mf.it





CAMA Consortium

C.A.M.A. S.c.a.r.l. is a consortium founded by firms with multi-disciplinary skills and related to the field of aircraft maintenance.

Main consortium's activity is to coordinate and develop with the consortium's partners (Atitech S.p.A, AeroSekur S.p.A, Arethusa S.r.l., Desà S.r.l., Software Design S.p.A., Neatec S.p.A.) research and development activity to be carried out in the Campania Aerospace Technological District.

The major scientific and technological associates of C.A.M.A. ,related to the aeronautical field, are:

Atitech S.p.A.: a proved and expert Repair Station located in Europe, providing heavy maintenance services to Alitalia. Atitech is fully capable to support third party customers, strong with its "8 bays" facilities, 1 painting bay, workshops and its owned inventory, almost unsurpassed in western Europe. Atitech is today one of the greatest MRO in Europe on MD80, B737 and A320F. Airbus A320F experience started in 2003 and more than 300 heavy maintenance checks have been performed in Naples facilities. Such experience includes: Heavy checks for Italian Scheduled Carriers, Italian Air Force and Charter Airlines; A321 Rib5 replacements; A320F Wing top skin corrosion SSB embodiement; Cabin Interiors Refurbishment; Engineering; Part 21, Subpart J (DOA Approved); Aircraft Painting; NDT.

AeroSekur S.p.A.: specialist supplier of safety systems and advanced flexible materials to the global aerospace and defence markets. The core competency is the design and development of advanced engineered structures using flexible materials. Aero Sekur products are: Flotation Systems; Fuel Tanks; Repair & Overhaul; Parachutes; Ground defence; Space, R&D; Satellite;

Arethusa S.r.l.: Arethusa is structured with the following lines of business separate but complementary to each other: engineering services; (2) maintenance engineering; (3) service environment and safety; (4) energy management service.

■ **Desà S.r.l.:** design company operating in various sectors such as aeronautics, railway and space. The main Desà activities are: engineering consultancy and project management services ; airframe design and analysis services; CAD/CAE; manufacturing engineering; parts, tools, jigs manufacturing; after sale customer support;

■ **Neatec S.p.A.:** Neatec is a design company operating in the field of software design and development, technology and application consulting and training;

■ **Software Design S.p.A.:** engineering, realization, assistance and maintenance of IT Systems (Airport systems and solutions), software and hardware products marketing. Design and disbursement of IT training courses.

▶ Website: www.atitech.it

▶ e-mail: consorzioicama@gmail.com





CHAIN - Campania Helicopters and Airplane Industry Network

CHAIN - Campania Helicopters and Airplane Industry Network - is a consortium established in 2007, currently counting 40 partner enterprises and more than 2.000 staff units.

The partner enterprises operate in the transport sector, mainly in aerospace, maritime, automotive and railway fields.

Chain supports enterprises to face the current economic threads and challenges. The Consortium carries out activities and services aimed to face usual issues regarding SMEs, in particular by providing: a gate to several services to the companies dedicated to the transport field, technologies and products, know-how exchanges, tools for credit and Fund raising, high education programs, internationalization activities, support to promote agreements among companies.

The consortium's associates are: A. Abete S.r.l.; ADV.TE.SYS. S.r.l.; ALA S.p.A.; AVIONET S.r.l.; Blue Group S.p.A.; Delva S.r.l.; Fox Bit S.r.l.; GMA S.r.l.; High Tech Tools S.r.l.; K4A S.r.l.; Kiranet S.r.l.; Koiré S.r.l.; Lead Tech S.r.l.; MG S.r.l.; Mecadeco S.r.l.; Migma S.r.l.; MTA S.r.l.; MTA Cebra S.r.l.; Netgroup S.r.l.; Nikura S.r.l.; Nuovo Mollificio Campano S.r.l.; Oma Sud S.p.A.; Precision Mec S.r.l.; Protom Group S.p.A.; P.R. Trading S.r.l.; SIA S.r.l.; Spacial Tools S.r.l.; Tecne Sistemi S.r.l.; Tekno Sud Group S.r.l.; Tesi S.r.l.; TI&A S.r.l.; TM S.r.l.; La Gatta S.r.l.; Wind S.r.l.

- ▶ Website: www.chainscarl.it
- ▶ e-mail: info@chainscarl.it



DEMA – Design Manufacturing S.p.A.

DEMA – Design Manufacturing S.p.A. has been operating in the aerospace industry since 1993 as an innovative company with the capabilities to offer a complete, integrated product. DEMA has the ability to offer a wide variety of up-to-date products and to perform as an integrator for other suppliers and their customers.

Dema's mission is to be a Tier-1 Supplier for the Aeronautical Supply Chain, as an integrator between International customers and the network of qualified SME providing an integrated offer that includes engineering, manufacturing engineering, as well as manufacturing and assembly of complex aerostructures.

Dema's core competences are: 1) Aerostructure design, industrialization, manufacturing and assembly; 2) Sheet metal forming and fabrication, machining, composites; 3) Innovative processes and materials.

Dema's capabilities are:

Engineering

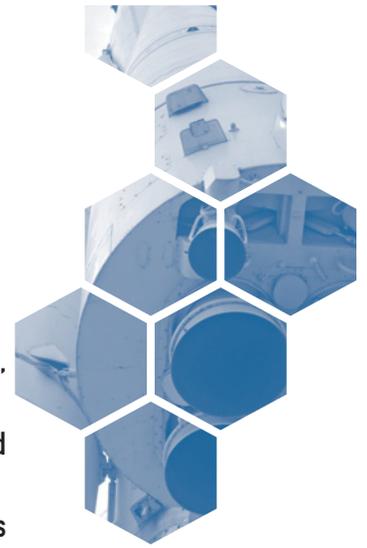
- Transport aircraft and helicopter's primary and secondary structure, with conventional materials and composites
- Airborne system installations and components design
- Static, fatigue and damage tolerance analysis
- Certification documentation
- Structural testing definition and planning

Manufacturing Engineering

- Manufacturing operational definition and instructions
- Tool and jig design
- Numerical control programming and simulation testing
- Definition of methods and work process

Manufacturing

- Tool and jig fabrication
- NC machining fabrication
- Sheet metal stretch forming and fabrication





- Heat and surface treatments of aluminium alloys and steels
- Manufacturing of composite components (Kevlar, Fiberglass, Carbon Epoxy)
- Quality control and non-destructive testing Aerostructure assembly
- ▶ Website: www.demaspa.it
- ▶ e-mail: info@demaspa.it



FOX BIT S.r.l

Fox Bit S.r.l. is a private engineering company specializing in Aerospace, Space and Defense. It offers a number of services related to the design and production of mechanical parts specific for the aerospace sector. The company is certified ISO 9100 by UNAVIACERT n. 092A and is a MIUR (Italian Ministry of Innovation and Research) qualified Innovation Laboratory since 1998.

For the aerospace area, Fox Bit is specialized in the engineering and manufacturing of metallic aircraft structures and tools and is capable of offering a complete service package comprising special processes and treatments by qualified suppliers and partners. In the past fifteen years Fox Bit participated in significant international projects that were aimed to create new airplane models for both commercial and military application.

Examples are: ATR, A340, A380, Boeing 787, BOMBARDIER C- Series , EFA 2000 Typhoon, Boeing KC 167 and F35 JSF.

Since 1999, Fox Bit has created a brand-new Business Unit, extending the traditional competencies of the Company to the computer sciences and electronics. Its know-how has been used in several projects in the Space and Defense sectors as well.

For the Space sector, Fox Bit is specialized in the development of ground-segment (Test Equipment) part of satellite equipments. For the Defense market, the Company has designed and produced signal processing digital units for radar systems. The Company's Industrial Plan for the next three years contemplates a thorough effort in the establishment of the above-mentioned activities, boosting on the transformation from a mere services supplier to an integrated systems producer.

- ▶ Website: www.foxbit.it
- ▶ e-mail: info@foxbit.it



GEVEN S.p.A.

Geven S.p.A. was founded in 1984 as an interiors manufacturer for aviation and shipping/marine businesses. So far Geven SpA has been successfully managed by its founder, thanks to his long experience in the air transport industry and his notable knowledge of the very complex and competitive seating and interiors segment supply chain.

Since the beginning, Geven, in consideration of its strong and deep aeronautical heritage, has concentrated all its efforts on the aviation business, manufacturing seats and interiors for various aircraft applications.



During the past years the production line has been developed including an even wider range of seats and interiors as well as the production of aircraft Thermal-Acoustic Insulation System and most recently a/c Floor Panels.

Geven is logically very close to the most important Italian leading players in the world aviation business such as Alenia Aermacchi (aero-structures manufacturer), Vulcanair and Tecnam (a/c manufacturers) and many other smaller players acting as specialised subcontractor, components supplier or engineering services provider. During more than 30 years of experience and market presence, the company has undergone a continuous and constant process of development not only in terms of product features and market share but also including the technical aspects of the production, quality requirements, design skills, engineering tools and products improvement policies. Geven has today 220 highly skilled staff.

The structure is shaped in accordance to the stricter prescription for the EASA/FAA Approved Production Organizations and includes:

- Design Engineering Department;
- Quality Department;
- Operations & Production Department;
- Test and Certifying Laboratories.

In addition to the above, the usual corporate and staff functions such as HR, Marketing & Sales, Program Management, Accounting, Finance & Control, ITC are carried-out with a flexible approach in a lean organization always allowing promptness in responding to the external solicitations.

- ▶ Website: www.geven.com
- ▶ e-mail: technical.assistance@geven.com



MAGNAGHI AERONAUTICA S.p.A.

MAGNAGHI AERONAUTICA S.p.A.

Magnaghi Aeronautica S.p.A. is part of the INVESCO Group, which also includes “Salver” and “Metal Sud” (supplier of a wide range of surface finishings) companies.

Magnaghi Aeronautica S.p.A. is involved in all aspects of landing gear, starting from the design to development, right through to the manufacture of fully integrated systems for several types of aircraft and helicopter.

Magnaghi Aeronautica S.p.A. was set up in 1936 in Naples and with 70 years of solid experience in manufacture and design of landing gears and hydraulic components, the company is fully able to take on demanding collaborative roles in military and civil projects for fixed and rotating-wing aircraft. Through the years Magnaghi Aeronautica has built its Know-how and to day the company can offer the powerful skills and resources as specialist in landing gear system with large experience on a range of aircraft from regional jet to business jet, helicopters, military aircrafts.

Magnaghi Aeronautica offers a leading edge capability for the production and processing of complex precision machine components in high-strength steel, light alloy included titanium alloy. The Manufacturing Department features the most advanced CNC machining equipment as Mill-Turns and horizontal milling machines, sophisticated 5-axis multi pallet machines, special deep drilling and vertical honing machines.

Magnaghi Aeronautica invests continuously in Research and Technology focusing on new material and process, electrical actuation, simulation and modelling, health monitoring and management.

New innovative applications on landing gear components have been investigated and some of them applied. They include the use of advanced titanium alloy, structural composite material and electrical actuation both for lowering and for steering actuators.



Environmentally friendly surface treatments are incorporated into the parts design of new equipments replacing the chromium plating process with HVOF process. Crash simulation and tests on CFRP composite device, integrated in a shock absorber, have been carried out at the aim to improve landing performance in crash impact and with benefits in terms of weight, maintenance and reliability.

Magnaghi Aeronautica Design Department offers a fully comprehensive service that covers initial concept through final design using state of the art technology and cutting edge engineering skills.

All technical activities are carried out in accordance with the requirements ensuring high reliability product, performances, weight saving, cost effective solutions and low levels of maintenance.

- ▶ Website: www.magnaghiaeronautica.it
- ▶ e-mail: info@magnaghiaeronautica.it



MBDA - Missile systems

MBDA, a world leader in missiles and missile systems, is a multi-national group with 10,000 employees on industrial facilities in France, the United Kingdom, Italy, Germany and the United States.

MBDA was created in December 2001, after the merger of the main missile producers in France, Italy and Great Britain. Each of these companies contributed the experience gained from fifty years of technological and operational success. The restructuring of the industry in Europe was completed with the acquisition of the German subsidiary EADS/LFK in March 2006. This further enriched MBDA's range of technologies and products, consolidating the Group's world-leading position in the industry. MBDA is the only Group capable of designing and producing missiles and missile systems to meet the whole range of current and future operational requirements for the three armed forces (army, navy, air force). Overall, the Group offers a range of 45 products in service and another 15 in development.

MBDA has demonstrated its ability to bring together the best skills across the whole of Europe, and has succeeded in becoming the prime contractor for a series of strategic multi-national programmes. These include the six-nation Meteor air superiority weapon, the Franco-British conventionally armed cruise missile, Storm Shadow/SCALP, and a family of air defence systems based on the Aster missile for France and Italy (for ground and naval based air defence) and for the UK (naval air defence for the Royal Navy's Type 45 destroyers).

Other programmes such as MEADS further serve to position MBDA at the heart of the European defence sector as well as establishing cooperative transatlantic links with the principal groups in the US defence industry.

In parallel to these large cooperative programmes, MBDA's name is inseparable from a number of systems which have strengthened its reputation as an unrivalled leader. The MILAN anti-armour weapon has been supplied to over 40 countries in the world and the Exocet anti-ship missile, in its surface, submarine and air-launched variants, represents



the main naval superiority weapon of navies throughout the world.

The mastery of cutting-edge technologies is not only an advantage for MBDA in successfully developing and producing new products. It is also a means of guaranteeing customers that innovations can be made to existing products during their life span in order to meet constantly changing specifications arising from increasingly complex engagement scenarios. It is precisely this combination which makes MBDA the defence sector partner of choice in many countries around the world.

► Website: www.mbda-systems.com

SAM S.c.r.l

The SAM S.c.r.l., was founded the 2th April 1998. It is composed by twelve Companies (large, small and medium) operating in the aeronautic and space sectors. SAM, a simultaneous engineering system, is one of the first Italian example of cluster in the aerospace sector. SAM has been founded to take advantages of all the development opportunities coming from national and international economic recovery.

SAM is composed from the following companies:

1. Compagnia Generale per lo Spazio S.p.A. is one of the more large company in Europe for space systems integration;
2. Costruzioni Aeronautiche Tecnam S.r.l., interested in two main activities: the construction and assembly of structural components for commercial aviation (tailplanes, fuselage panels, etc.) and the design and manufacture of prototypes and production units for light or ultralight aviation;
3. Fox Bit S.r.l., engineering company which areas of expertise are Aerospace, Space and Defense.;
4. Geven S.p.A., with experience in the design, testing, production and maintenance of aircraft interiors as well as passenger and crew seating;
5. M.T. Mechanical Technologies S.r.l., specialized in manufactures equipments, structural and oleodynamic components by machining different materials like alloys, titanium and high resistant steels;
6. Magnaghi Aeronautica S.p.A., is one of the leading companies in the Landing Gear field;
7. Metal Sud Srl, with experience in the execution of metal pretreatment and painting, as well as conductive painting of plastic materials;
8. Nuova Avioriprese S.r.l., works in the aerophotogrammerty field with its own air fleet and machinaries;
9. Salver S.p.A., develops and produces, in the aeronautic field, products in composite materials, as well as spare parts or bonded assies, realized either in composites and in composite-metal, togheter with bonded or riveted metal parts;
10. Techno System Developments S.r.l., is specialized in design, development and manufacturing of electronic equipment;
11. Tecno In S.p.A., works in different sector of civil engineering and provides its competences in the general field of engineering services;
12. TecnoSpazio S.n.c., is a company operating in mechanics sector of high linear and volumetric precision.

► Website: www.samaerospazio.it

► e-mail: sam@samaerospazio.it



STRATEGA

Stratega was founded by specialist skills with the aim to contribute to the development and spread of innovation through applied research, fostering relationships between the scientific and academic community and the business world. The mission of the Stratega is to design and support projects of industrial research with the aim to improve the level of competition and innovation in the enterprises. The company has built its mission around the slogan "R&D in" financial balance".



Stratega activities are focused on four main sector: Research, Training, Consultancy and Culture.

Stratega skills are related to the following points:

- Feasibility Study, Business Plan and Marketing Plans;
 - Project & Knowledge Management with distributed software tools;
 - Technology Transfer on industrialization policies and techniques;
 - Design, implementation and development of programs for the industrial research and the experimental development;
 - Promotion and enhancement of new industrial and commercial inventions and innovations (through the support to the finding of venture capital, protection of property rights, supply chain integration opportunities);
 - Support the achievement of benefits based on EU funding programmes;
 - Promotion and tutoring for new companies (start-ups);
 - Design and Implementations of models of governance in complex systems.
- ▶ Website: www.sixtema.net
▶ e-mail: info@sixtema.net



TECNAM

For over 60 years, Tecnam has been committed to serving the General Aviation community. Be it the 6th generation Tecnam P92, the bestselling P2002 or the P2006T Twin, Tecnam are firmly established as the aeroplanes of choice with General Aviation customers and operators. Be they private pilots enjoying flying for leisure or some of the world's leading Flight Training Organizations. The recent introduction into service of the P2008 and development of the advanced technology, four-seater, single engined P Twenty Ten, ensures that Tecnam continue to offer the widest range of General Aviation aeroplanes.

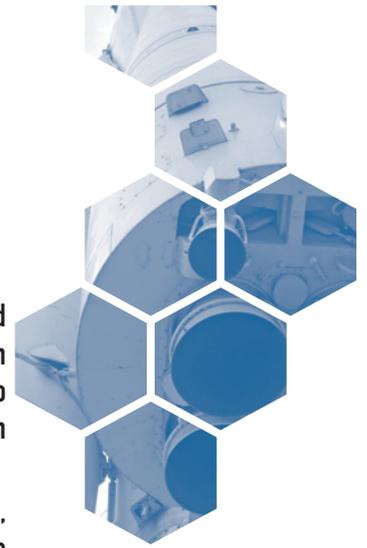
With over 3,500 Tecnam aeroplanes operating around the world today, Tecnam customers and operators are supported by a global network of over 60 dealers and 100 Tecnam Service Centres. The Tecnam teams passion for flying has undoubtedly resulted in Chief Designer, Professor Luigi Pascale, creating some of the most innovative and stylish aeroplanes. More importantly Tecnam's wide range of aeroplane models afford its customers and operators superb value for money, from the low initial purchase price to unbeatable operating costs.

- ▶ Website: www.tecnam.com
- ▶ e-mail: info@tecnam.it

TELESPAZIO

Telespazio, a joint venture between Finmeccanica (67%) and Thales (33%), is one of the world's leading players in satellite services. The company, headquartered in Rome, Italy, employs approximately 2500 people. It relies on an international network of space centres and teleports and operates worldwide through many subsidiaries. In particular, it is present: in France with Telespazio France; in Germany with Telespazio VEGA Deutschland, GAF and Spaceopal (a joint venture in which the





German space agency DLR holds a 50% interest); in the United Kingdom with Telespazio VEGA United Kingdom; in Spain with Telespazio Iberica; in Hungary with Telespazio Hungary and in Romania with Rartel. Telespazio has consolidated its presence in South America with Telespazio Brasil and Telespazio Argentina. It operates in the US via Telespazio North America. In Italy, the company is also present through e-GEOS (in which the Italian Space Agency holds a 20% interest).

Telespazio is a leading company in sectors that are becoming increasingly important for public institutions, business operators and consumers, with activities ranging from the design and development of space systems to the management of launch services and in orbit satellite control; from Earth observation services, integrated communication, satellite navigation and localisation, to scientific programmes.

Telespazio relies on a wealth of experience of the highest level, stemming from technological expertise acquired over 50 years of business practice. The Company's experience is also drawn from the management of space infrastructure - including the Fucino Space Centre, the world's largest civilian teleport - as well as from its involvement in major space programmes, including: Galileo, EGNOS, Copernicus, COSMO-SkyMed, SICRAL and Göktürk.

The company now covers the whole space market value chain through its four business units: Satellite Systems & Applications, Satellite Operations, Geoinformation and Networks & Connectivity.

Telespazio responds to new demands in the satellite services market with innovative ideas and solutions. Today, more than ever, Telespazio is a true innovator, transforming what were once just possibilities into real services available to an increasingly wide audience worldwide.

- ▶ Website: www.telespazio.com
- ▶ e-mail: sales@telespazio.com



VITROCISSET

Vitrociset S.p.A., a qualified Italian company devoted to the provision of engineering, technical and logistics services, has been established in 1992 through a merging between Ciset S.p.A. and Vitroselenia S.p.A..

The company's main fields of activity encompass Defense systems, ATC systems, Satellite Technologies, Telecommunications, Transport and Info-mobility, IT and Environmental Systems, which require a sound expertise based on the implementation, integration and management of electronic and IT systems in civil and military sectors for private businesses, public authorities, governmental agencies and international organizations.

Vitrociset S.p.A. plays also a key role in the Research, Technology and Innovation, with the motivation to be a winner competitor in the Research & Technology (R&T) opportunities issued by National and EU/NATO organizations, operating in connection with institutions, universities, research centers, SMEs and LEs. Vitrociset S.p.A. is also involved in current Italian R&T Platforms for defining the national Strategic Research Agenda.

Within this scenario, a Corporate R&D (CR&D) Center, lunched on 2011, plays a prominent role in the identification and exploitation of new technologies. A special attention is given to innovative solutions with high added value able to respond and to anticipate the customers' needs and to strengthen its presence in an increasingly competitive international contest. Therefore, CR&D Center specializes on the building of scientific networks and on opening outwards to foster creativity, according to a model where innovation and international relations converge in optimal way.

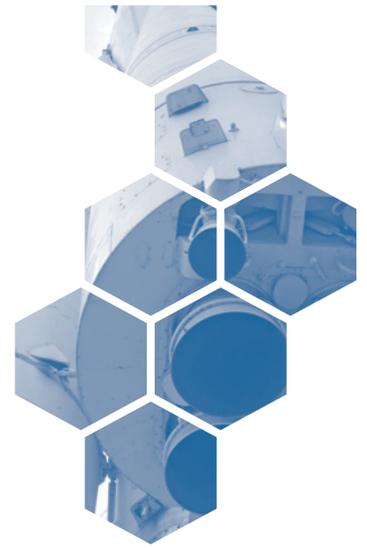
To summarize the CR&D expertise: Security, Defence, Space, Civil and Military Cooperation, Transportation, Logistics, Environment, Energy and ICT are the pillars on which the growth of Vitrociset S.p.A. is based in a changing world.

- ▶ Website: www.vitrociset.it
- ▶ e-mail: amestero@vitrociset.it



E. Project proposals submitted at the BIAT 2014

Company	Title of the Project
ALENIA AERMACCHI SPA - 1	CERVIA - Innovative and Advanced Methods for Certification and Verification
ALENIA AERMACCHI SPA - 2	FUSIMCO - Metallic Composite Hybrid Fuselage
ALENIA AERMACCHI SPA - 3	SCAVIR - Advanced Configurations Studies for an Innovative Regional Aircraft
ALENIA AERMACCHI SPA - 4	STEP FAR - Development of Eco-Compatible Materials and Technologies, of Drilling and Trimming Processes and of Robotized Assembly
ALENIA AERMACCHI SPA - 5	SIPROP - Technologies for Design and Manufacturing of Airplane on Board Systems
C.A.M.A. SCARL - CONSORZIO ATITECH MANUTENZIONE AERONAUTICA SCARL	MAVER - Maintenance Aids Viability for Enhanced Results
CIRA SCPA - CENTRO ITALIANO RICERCHE AEROSPAZIALI - 1	Improved Coding Technologies for Aerial Imagery
CIRA SCPA - CENTRO ITALIANO RICERCHE AEROSPAZIALI - 2	Leading Edge Morphing Device
CIRA SCPA - CENTRO ITALIANO RICERCHE AEROSPAZIALI - 3	Robotic Systema for the Manufacturing of Anisogrid Composite Structures
CIRA SCPA - CENTRO ITALIANO RICERCHE AEROSPAZIALI - 4	Adaptive Automatic Landing
CIRA SCPA - CENTRO ITALIANO RICERCHE AEROSPAZIALI - 5	On-Line Mission Replanner
CIRA SCPA - CENTRO ITALIANO RICERCHE AEROSPAZIALI - 6	ASHRAM - Ash & Sand Route Airspace Monitoring



Company	Title of the Project
CNR RESEARCH NATIONAL COUNCIL - INO NATIONAL INSTITUTE OF OPTICS	Use of Coherent Infrared Sources for Non-Destructive Testing (NDT) and Safety
COSTRUZIONI AERONAUTICHE TECNAM SRL	TABASCO - Low Cost Technologies and Manufacturing Processes for Advanced Aircraft Composite Structures
D'APPOLONIA SPA - 1	FLY-BAG2 - Advanced Technologies for Bomb-Proof Cargo Containers and Blast Containment Units for the Retrofitting of Passenger Airplanes
GEVEN SPA	IMM - Interiors with Multifunctional Materials
IELLAB SRL	HESP&T - High Efficiency Signal Processing and Treatment
LEAD TECH SRL	LMS RFID - Software for the Marking and Traceability of Component Parts Using Passive RFID Systems
MBDA ITALIA SPA	TELEMACO - Enabling Technologies and Innovative Electronic Scanning Systems in Milimetre and Centimetre Bands for Avionic Radar Applications
NOVOTECH SRL	Composites Manufacturing with Automated Fiber Placement (AFP) Technology
O.M.I. SRL - OFFICINE MECCANICHE IRPINE SRL	Auxiliary Power Unit (APU) Development for Regional or Narrow Body Aircraft
SMS ENGINEERING SRL	NCMs - Non Conformity Management System
TECHNO SYSTEM DEVELOPMENTS SRL	Multi-Ocular Smart Sensor - Suite of 3 Cameras and a High-Performance Processing Unit for Visual Navigation (HPVN)
TELESPAZIO SPA	MISTRAL - Air-Launchable Micro-Satellite with Reentry Capability



The Italian Trade Agency - ICE is the Government agency that supports the globalization of Italian firms, implementing the strategies of the Ministry of Economic Development.

The Italian Trade Agency - ICE helps to develop, facilitate and promote Italian economic and trade relations with foreign countries, focusing on the needs of SME's, their associations and partnerships.

The Italian Trade Agency - ICE sustains Italian firms in their internationalization processes, in the marketing of Italian goods and services while promoting the "Made In Italy" image around the world, and it is directly involved in attracting foreign direct investments.

The Italian Trade Agency - ICE provides information, support and consultancy to Italian companies on foreign markets, promoting and fostering exports and cooperation in all areas - industry (consumer and capital goods), agricultural technology and agri-food, services, and training - with the aim of increasing and making more effective their presence on international markets.

The Italian Trade Agency - ICE works closely with the Italian Regions, the network of the Italian Chambers of Commerce, business organizations and other public and private entities.

The Italian Trade Agency - ICE headquarters is in Rome, with a large network of offices around the world and acts as "Trade Promotion Sections" of the Italian Embassies or Consulates.

The BIAT

Funded under the Cohesion Action Plan of the Economic Development Ministry, the BIAT - Innovation and High Technology Lab, is an initiative designed to enable the enterprises and research systems of Italy's so-called Convergence Regions - Campania, Calabria, Apulia and Sicily - to express their full potential for innovation and excellence. BIAT is part of the program of activities of the Italian Presidency of the EU.

The event is organised by the Italian Trade Agency in collaboration with Confindustria (the Confederation of Italian industry), the Convergence Regional Governments and Campania in.Hub.

BIAT aims to promote the placing on the market and/or the transfer of innovative products and services or high technology and intangible assets (patents in particular) by matching commercial and technology supply and demand between start ups, innovative SMEs, business networks, universities, technology parks and foreign counterparts.

BIAT aims to put in place a systematic offering of industrial application opportunities from which all entrepreneurs can benefit.





Campania In.Hub
ecosistema regionale per la promozione dell'imprenditoria innovativa