Foreword from Roland Hengartner,
President of the SAC and CEO of Aerolite AG

Dear members and interested parties,

Six years after the founding of Swiss Aerospace Cluster SAC we are constantly experiencing increased members in our network.

Switzerland plays an important role in aviation, it is even more important in an organization like SAC to unite companies, universities and politics.

Together we want innovation in aviation business and economic growth. The companies in the aerospace industry of Switzerland have an important role worldwide, either as a supplier for aircraft or helicopter manufacturers or as a service in engineering and marketing. New markets are searched, processed and existing markets continue to expand.

Our strengths are the members of the network SAC, which can share their thoughts, ideas and visions. The challenges from business, government and aviation will be discussed at specific events and investigated for common solutions. Also SAC want to be a contributor in the cooperation with other clusters and organizations in Europe, Middle East, Asia and USA. Already this year we have had interesting events with companies and organizations from the United States, Dubai and China. With already 81 members we will present to the companies this competence brochure and you will get a first impression about our members, what products and service will be offered to the aviation business.

Thank you to all members for their active participation in all the events and interesting discussions with authorities and politicians that form an important pillar in our organization.

I look forward to more interesting discussions and exchange of ideas with the members.

Sincerely,

Roland Hengartner
President of the SAC and CEO of Aerolite AG
Greetings from Chris Watts,
Switzerland Global Enterprise

Dear Members of the Swiss Aerospace Cluster. Over the last century, the manned aerospace industry has grown and taken shape like no other sector. All this would not have been possible without aviation having overcome the boundaries of time and space. Hence, important technological breakthroughs are directly and indirectly attributed back to the Aviation sector. Even today in the age of the Internet and Globalization, the aerospace industry contributes existential improvements to our lives.

The landlocked country, Switzerland, had already recognized the importance of this industry early on, and managed to make an excellent name for itself through continuous technological and service innovations. As the small market of Switzerland was unable to generate enough demand for this undertaking Switzerland and its aviation sector had to engage itself on an international level at an early stage, this strategic move is applicable more than ever today. One of today’s fastest growing markets in the aerospace industry can be found in the Gulf Region. The rapid growth that the International Airport of Dubai (DXB) witnessed has turned it into the largest international airport in the world.

Furthermore, the planned and the ongoing investments in the new Al Maktoum Internatio­nal Airport (DWC) will also continuously strengthen the aviation sector within the economy of Dubai. Furthermore, Abu Dhabi is currently in the process of laying the foundation for its own aerospace industry. Even across the other neighboring Gulf countries is the aviation sector playing a prominent role in the diversification and continuous development of the respective economies.

Having said this, the collaboration of the Swiss Aerospace Cluster and Switzerland Global Enterprise with the Swiss Business Hub Middle East, is indeed the next important natural step in this regard. Under the motto “Swiss Excellence in Aviation and Aerospace”, Swiss aviation companies will be offered better access to information, market entry consultation, and support in their activities across the Gulf countries. It is in my function as Director of the Swiss Business Hub Middle East and Consul General of Switzerland to Dubai, that I would like to cordially invite you to make use of this fantastic opportunity.

Sincerely,

Chris Watts
Consul General & Director Swiss Business Hub Middle East

Greetings from Bruno Sauter,
Canton of Zurich

Switzerland’s Aerospace Cluster enjoys a formidable reputation both on the international and the national level. The Canton of Zurich hosts the largest number of companies within the cluster and is proud to play an important role in its promotion. I am extremely pleased that the close and longstanding cooperation of the Swiss Aerospace Cluster’s with Zurich’s Office for Economy and Labour is continuously triggering innovations, which let Switzerland stay ahead of the game.

The Swiss aviation and aerospace industry is represented by a multitude of companies and networks. The demand for their output – be it cutting-edge innovations in technology or process management, or state-of-the-art knowledge – prevails in a wide range of business sectors inside and outside the field of aviation and aerospace. 240 of these privately owned, non-profit and government controlled organisations are headquartered in the Canton of Zurich. In the Zurich region, these companies can rely on a powerful financial centre and outstanding infrastructure. In addition, they work in close proximity to world-renowned research institutions, enabling them to form collaboration partnerships. Education curricula such as the graduate engineering studies offered by ETH Zurich or the Aviation Bachelor programme at the ZHAW School of Engineering safeguard that the expertise relevant for the development of the aerospace industry is maintained at the top level. One of the latest examples of a successful collaboration between industrial and scientific partners are components and electronics developed by ETH Zurich, the University of Zurich and Ruag Space for the LISA Pathfinder satellite launched in 2015. With the help of the Office for Economy and Labour’s division for Business and Economic Development Zurich’s aviation and aerospace companies also profit from a variety of networking activities, which include events with direct access to Zurich’s highest government officials.

We are proud that the Zurich portfolio of aviation and aerospace enterprises boasts well-known brand names – among them industrial companies such as Ruag, Siemens, SR Technics or Rheinmetall Air Defence, a considerable number of Swiss and European airlines as well as service providers such as Zurich airport, Skyguide or Gate Gourmet. They represent considerable market potential and are an important reputation factor for Zurich and for Switzerland. In the Zurich region, the near future will continue to provide many opportunities for networking and collaboration, among others the new Switzerland Innovation Park Zurich alongside established research institutions such as the EMPA Laboratories for Material Science in the Park’s vicinity. I am therefore confident that the Swiss aviation and aerospace industry will continue to excel both in technological and economic terms.

Bruno Sauter
Managing Director of the Office for Economy and Labour in the Canton of Zurich
The Swiss Aerospace Cluster

The industry network supporting the Swiss aerospace and satellite services industry in the transfer of knowledge and technology.

About us

The Swiss Aerospace Cluster is an agile network for pooling information across companies, associations and research institutions thereby increasing the organizations’ potential for development and promoting innovative products. We welcome new input and innovative ideas from old and new members.

**General Assembly:** All members meet once a year to decide on the cluster’s strategy, elect the board, exchange information and to attend workshops.

**Board:** The Board consists of elected members. It implements the cluster’s strategy with support of the Cluster Office.

**Cluster Office:** The Cluster Office supports the board in management, administration and communication of the cluster.

**Advisory Board:** A group of renowned representatives from the aerospace field (e.g. from industry, politics, law or research) provides valuable advice and input for the continuing development of the cluster.

**Working Groups:** Members can organise working groups for information exchange on various important topics.

Better together

The aviation and space industry play an important role in the Swiss economy. The industry consists of numerous small and medium sized enterprises that manufacture highly innovative products for OEMs and other major aerospace customers. The Swiss Aerospace Cluster brings together aerospace suppliers, research institutions as well as the service and downstream industry to promote the transfer of technology and knowledge and to strengthen the network.

Our Mission

We strengthen the positioning of Swiss organisations in the aviation, space and satellite services industry, with a particular focus on SMEs and the supply chain.

In order to achieve this:

· We build and maintain a network of manufacturers, service providers, universities, universities of applied sciences, associations, public institutions, with a focus on supporting SMEs.
· We facilitate active exchange of information and knowledge between all partners.
· We ensure knowledge and technology transfer in the sector of aerospace and satellite services.
· We cooperate with Swiss federal offices, international organizations (e.g. ESA, EACP), cantons (e.g. ZH, NW, GL) and other clusters and across disciplines.
· We participate in international projects to assess, develop and strengthen the aerospace industry.
· We encourage and facilitate participation at leading international trade fairs.
The working group Helicopter supports the helicopter industry in the area of production and supply of helicopter technology, helicopter business, landing places, education and further training, research of the helicopter area, CAMO and other purposes. The working group also promotes the Elaboration of the first helicopter competence center in Switzerland, based in Mollis (GL). (Article in 10 vor 10; April 27, 2016)

There are great challenges for the helicopter industry in Switzerland in the future, such as changes of regulations, high production costs and the cost level in general Level. This working group should therefor tackle those challenges as well as pool the strong knowledge nationally and internationally.

Goals of the Working Group Helicopter:
· Consists of experts within the System Helicopter in Switzerland
· Regular exchange within the group
· Internationalization of the knowledge of the working group
· Organization of seminars and meetings
· Exchange with other working groups in order to learn from each other and create cooperation opportunities across different sectors (both on a national and international level) and enable synergies
· Increase of the external visibility of the working group and the system Helicopter

The main competencies of the Working group:
· Risk & Safety
· Education & Training
· Operation
· Regulation & Insurance
· Production, Assembly & Trade
· Infrastructure
· Maintenance, Overhaul & CAMO
· Consulting
· Research & Development

Chairman:
René Vuillemin, Europoles, www.europoles.com

Deputy:
Martin Stucki, Marenco, www.marenco-swisshelicopter.ch

For more Information please contact:
info@swiss-aerospace-cluster.ch
Glarus soars to the top of the helicopter industry

Aviation has a long tradition in the canton of Glarus. The most recent to benefit from this expertise is the helicopter industry, which has made its home in the canton. A new hub is now showcasing helicopter competence at home and abroad, giving the industry a strong tailwind.

It’s next to impossible to conceive of a life without aviation in the middle of the Glarus Alps in view of the glaciers. As early as 1939 the first aviation day attracted thousands of spectators to the Mollis airfield to watch the daredevil men in their flying machines. And not just for show: helicopters play a major role in rescue purposes. The Swiss Air Rescue Guard Rega uses the former military airport, the company Marenco is building the first Swiss helicopter here.

“The helicopter is a part of life in Mollis. In Switzerland in general, along with Canada, you find the largest helicopter know-how in the world,” says René Vuillemin, CEO of Europoles Switzerland AG. This isn’t something that is has widely been known, but that’s set to change – in Switzerland and abroad – after the helicopter expert group of the Swiss Aerospace Cluster was christened earlier this year. People are even talking about it in Dubai.

Experience is of high value

René Vuillemin is one of the founders of the expert group – and the go-to person for helicopter landing pads, especially those on hospital roofs. Vuillemin sees the growth potential of the helicopter industry when it comes to the demand for these co-called heliports. “There is huge interest in China, and in Germany alone 600 sites have to be newly built or rebuilt. And countries in the Arabian Peninsula continue to be a major market for the industry,” he says.

This is confirmed by recent studies showing that helicopter use in countries such as China, India or even in Qatar or Dubai is downright booming and more and more suppliers are entering the market. “Cumulative experience is especially advantageous, which is what we have here. Helicopters and their related solutions, which were developed here in the glacier region, or pilots who learned their craft here are of high value for regions that are only now starting to use helicopters,” says Vuillemin.

Heli-experts complement each other

The companies located on the ground, each of which cover different parts of the industry thanks to their specialisation, also complement each other. Marenco is the driving force, and CEO Martin Stucki is co-founder of the expert group. Stucki isn’t just well known in the Swiss scene; with his futuristic, single-motor, light helicopter, he’s inspired the entire industry to innovate. Generally speaking, the old designs are optimised, but the aircraft itself becomes a completely new product.

Rega partners Heli Linth AG and Linth Air Services AG are Mollis old-timers, both of which offer services such as maintenance and operation. Then there’s Christian Müller and Next Generation Flight Training (NGFT), a member of the expert group. Müller writes and co-authors helicopter manuals for specialist customers, teaches and advises on safety issues and other matters.

Andreas Gafner is convinced that Mollis is an ideal location. Training areas in the lowlands, foothills and alpine environment are just a short distance away, says the pilot instructor and CEO of Heli Operators Swiss Skyway Services AG. And the airfield makes it possible to handle customs formalities directly on site.

Strong network with room to grow

With politics and residents alike on board, it’s clear that the conditions are just right. Glarus Nord mayor Martin Laupper and Glarus location promoter Christian Zehnder have been supporters of the mini-hub for helicopter competence since the beginning. “Local and new companies can benefit from the location, not least because of the growing pool of skilled workers,” says Zehnder. And links to nearby universities in Zurich and Rapperswil already exist.

According to Zehnder, it’s also important for the local network that suppliers can be found in the immediate surroundings. In neighbouring Netsntal, for example, Sauter Bachmann AG manufactures precision gears, high-performance gearboxes and transmission systems. New companies are always welcome, whether they plan to relocate here or are founded directly in Mollis. And space is already being taken care of, says Zehnder: 50,000 square metres of land will be available in approximately a year’s time.

Pooling and presenting skills

Can Mollis become the centre of Switzerland’s helicopter industry? “Absolutely – and this is supported by the national and international connections,” says the expert René Vuillemin. Only two hours away is the capital city of Bern, where the expert group plans to advocate for the industry’s interests. It only takes one hour to the Zurich airport, making destinations like Dubai a stone’s throw away.

The aerospace hub is already cooperating intensively with the Swiss Business Hub in Dubai, while Vuillemin has been supplying sophisticated lighting systems to premium airports in countries such as Dubai or Qatar for the past few years. He knows first hand that helicopters will soon be used to replace taxis in those countries to get from one skyscraper to the next.

“It’s a big advantage for the expert group’s participants to appear together at international trade fairs,” he says. By presenting a unified picture, it becomes much easier to attract the attention of other industry players such as Iran, which is now developing its own air rescue system. With experience, an innovative spirit and Switzerland’s solid reputation as a reliable partner, companies from Mollis are in a strong position to score well in this competitive and safety-focused industry.

Source: Greater Zurich Area (2016):
Glarus soars to the top of the helicopter industry (August 25, 2016)
Aerolite Max Bucher AG was founded on November 1, 1995 and started its activities in aircraft interiors and the EMS market for rotary and fixed wing aircraft. Today it has grown in its workforce to 90 skillful people. To fulfill customer needs Aerolite cover design, Engineering, Manufacturing, Implementation and Certification.

Aerolite is working worldwide and some of the main customers are Eurocopter in Germany and France, Agusta in Italy, Rega in Switzerland, DRF and ADAC in Germany, Nolas in Norway, SOS Gotland in Sweden, Eliarrio in Italy, Human Consults in Austria, Mont Blanc Hélicoptères in France, Airbus France, Boeing in USA, Swiss in Switzerland, Lufthansa Technik in Germany, Jet Aviation in Switzerland, LAR in Luxemburg and others.

Air Zermatt is a Swiss based helicopter company operating in and around the Zermatt/Matterhorn area, carrying out its main activities between 600 up to 4650 meters. The fleet comprises of 9 helicopters: 5 AS350B3s, 1 H130, 1 H135 and 1 B429. Air Zermatt also provides training all over the world. The company has been awarded with the Herosism Award 3 times, latest in 2011 for the highest rescue mission ever conducted on 6950 meters above sea level with an AS350B3 piloted by one of Air Zermatt’s pilots. The crew was establishing a self-sustainable rescue station in Nepal and giving training to the local crews when they received the distress signal from a group of climbers at the Annapurna.

The ATC – Air Zermatt Training Center is the training department for internal and external courses of all relevant topics (see certifications).
The Center for Aviation Competence (CFAC) is an independent institution of the University of St. Gallen. It offers services, training and further education for the aviation industry. Service products, such as market research and studies, are based on their expertise, which they have generated through scientific research, publications and the experience of their special committees and partners, as well as through their general director. CFAC offers consulting projects, studies, expert opinions and research to aviation companies and to companies working within the aviation industry.

### Center for Aviation Competence (CFAC-HSG)

**Address:** Dufourstrasse 40a  
CH-9000 St. Gallen

**Contact:** Dr. Andreas Wittmer

**Phone:** +41 71 224 25 00  
**Fax:** +41 71 224 25 36

**Email:** cfachsg@unisg.ch

**Website:** www.cfac.ch

**Year of Foundation:** 2005

**Employees:** 7

**Competencies:**
- **research:** We do scientific research and publish in world top journals
- **academic training:** We educate practitioners and University students on a top level
- **services:** We connect scientific research with practical challenges
- **aviation consulting**

**Certifications:** EQUIS, AACSB

Europoles Suisse is a technology leader in the development, production, assembly and service of maintenance-friendly lighting solutions as well as in basis heliport systems.

### Europoles Suisse GmbH

**Address:** Feldbach 10, Postfach 243  
CH-8753 Mollis, Switzerland

**Contact:** Mr. René Vuillemin

**Phone:** +41 55 618 80 20  
**Fax:** +41 55 618 80 28

**Email:** info.epsuisse@europoles.com

**Website:** www.europoles.com

**Year of Foundation:** 1997

**Employees:** 20

**Turnover:** CHF 13 Mio.

**Competencies:** Europoles Suisse is a technology leader in the development, production, assembly and service of maintenance-friendly lighting solutions as well as in basis heliport systems.

**Certifications:** ISO_9001 certificate

Driven by the aspiration for quality and innovation and with Swiss precision, Europoles Suisse has developed the NIVATEC lowerable lighting system – the perfect solution for providing artificial light in large areas. Europoles Suisse is a technology leader in the development, production, assembly and service of maintenance-friendly lighting solutions. Europoles also contributes in a significant way to the rescue-chain in basis heliport systems – the helipads of Europoles offer a high degree of security and flexibility. An extended life time, the ability to adapt to varying diversifications and energies is guaranteed. First aid for your safety – Europoles your partner for heliports.
ME Advocat Rechtsanwälte is a general law firm which operates nationwide as well as at the European level specializing in the fields of business and commercial law as well as air law for over 20 years. We advise individuals SMEs and international companies. Likewise, the authorities, public institutions and foundations rely on our advice.

With our two locations in Staad/SG and Herisau/AR we cover German Switzerland and foreign clientele. Staad within the border triangle of Switzerland – Austria – Germany and next to the People’s business airport St. Gallen is an excellent starting point to neighboring countries. From Herisau we maintain clients of the region and furthermore a client segment that goes far beyond the Appenzell region.

Through our focus on corporate law and air law, we are specialized to capture the often multi-layered and complex issues of entrepreneurs and businesses in a timely manner and with the necessary experience.

Marenco Swisshelicopter AG is the result of combining a vision of Martin Stucki (founder and CEO), the engineering expertise of a team of highly qualified helicopter specialists, pilots and aviation experts supported by a large financial group. Marenco Swisshelicopter was founded in 2007 with the aim to develop, build, and promote a new, innovative single-engine light helicopter with a worldwide market potential. With this visionary concept the company develops a new generation of helicopters with a design that is focused on competitiveness, versatility and advanced ergonomics in conjunction with the integration and selection of the best materials available.
Next Generation Flight Training (NGFT) is a dedicated team of experts committed to the helicopter industry. NGFT brings the best of the Swiss helicopter industry to Global marketplace. A service minded approach and in-depth understanding of current und future needs are foundations for the success of our customers. NGFT is able to draw on a network of specialists to review procedures, evaluate new projects and get them to completion quickly and efficiently. Consulting: NGFT provides regulatory advice and services to make sure that all manuals, SOP’s and permits are up to date and accepted by the authorities. Training: NGFT combines modern technology and state of the art teaching methods to deliver tailor made solutions.

To be visionary has always been a tradition in the Canton Glarus. No wonder - in the narrow valley for a wide horizon, especially one thing is needed: Visions. A fact which has brought Sauter Bachmann its internationally renowned name, since its foundation in 1922. We produce gears, gearboxes and complex drive systems for airplanes, helicopters and turbines. We have made ourselves a name as a reliable partner for aviation and aerospace applications by achieving the equivalent qualifications. All our processes meet the internationally applicable certification standards in aviation and space as well as in the industry. About 50% of our products are exported, mainly to the USA and the EU.
You want to train or educate your pilots, crew and staff at the highest level in a well-structured work strategy so they know what decisions to make and how to manage difficult situations and conditions before, during and after a mission? Then we are the perfect partner for you!

Your company wants to purchase an aircraft or build a fleet including crew for aviation operations? Consulting and support is always at your disposal.

The company’s founder Andreas Gafner draws on more than 22 years of experience in helicopter operations in the areas of pilot and crew training, mountain, police, special operations, VIP and business aviation, Night, NVG, two-man OPS, navigation and bush flying.

The research teams at the Centre for Aviation are used to working in a dynamic and interdisciplinary environment. The Centre brings together many different technologies, methods and research fields under one roof. Our mission is help the industry to overcome the challenges of future global mobility – by researching ways to shape it more efficiently and safely.