Investing in People
Aviation Industry Qualification Offensive

How to get there — a route description
“The high levels of qualification and motivation for staff provide an immense competitive advantage, particularly for the small and medium-sized enterprises in the aviation initiative. The last few decades have shown how important consistent and sustained investment in qualification programmes is when it comes to ensuring the long-term viability of the industry.”

Uwe Gröning, Chairman, Hanse-Aerospace e. V., Managing Director Innovint Aircraft Interior GmbH

“The Qualification Offensive has been a huge boon for us as a vocational training school. The ‘Hamburg – the place for aviation’ initiative has encouraged the coordination of theory and practice. We have opened communication channels with both commercial interests and other nations.”

Hans-Werner Lüers, Principal of the State Vocational School for Manufacturing and Aircraft Engineering G15 (Staatliche Gewerbeschule für Fertigungs- und Flugzeugtechnik G15)

“The Qualification Offensive has made a significantly broad contribution to Airbus’s success in finding suitable applicants for its vocational training and academic programmes.”

Günther Meyer, Vocational Training Hamburg Airbus

“The Qualification Offensive is an absolute, resounding success! No other location has such good infrastructure! The cooperation is optimal.”

Thomas Erich, Deputy Head of Corporate Communications Lufthansa Technik AG

“The Qualification Offensive” has made a great network available. This definitely has to remain active to maintain Hamburg’s strong position as market leader.”

Jörg Hoppe, Managing Director, ELAN EDAG Lühmann Aeroengineering Network GmbH

“The Qualification Offensive is a good thing. Many participants come together around one table and talk about initiatives that would otherwise operate in parallel or, in the worst case, at cross-purposes.”

Elke Niemann, Central Training Coordinator Lufthansa Technik AG

“The aviation industry is a key industry and a growing industry. But we need to face the structural and demographic challenges of attracting highly qualified personnel over the long term. A very effective network of companies offering both initial and further training has developed in Hamburg, able to regularly feed outstanding personnel into the aviation industry via new qualification programmes.”

Jan Heinze, Head of Working Group “Personal Hanse-Aerospace e. V., Managing Director, Technische Fachschule Heinze (“Heinze Technical College”)

“TUHH has been a partner in the Qualification Offensive from the very beginning and will continue to work together to establish Hamburg’s position as a centre of aviation.”

Dr Johannes Harpenau, Aviation Research / Coordination Hamburg University of Technology
Investing in People
Aviation Industry Qualification Offensive

Technology – Talent – Tolerance!

In order to stay on the path to success and to reach the very top, the City of Hamburg has made the three success factors of the 21st century the guiding principles of urban development: technology, talent and tolerance!

The importance and inseparability of these three Ts has been proven over and again by the Aviation Industry Qualification Offensive since its founding in 2000. Talent has been, and remains, the focal point. To a certain extent, talent is the “jet engine,” the driving force, of economic development. In order to acquire talent, the Qualification Offensive, under the auspices of the Department of the Economy and Labour, promotes the technology-oriented expansion of training infrastructure as well as the expansion of national and international partnerships. The more open a region is to people and ideas, the more attractive it is to the elite of tomorrow. And it is tomorrow’s elite that will secure Hamburg’s leading position.

Hanseatic understatement notwithstanding, the fact cannot be denied: Hamburg is number one! League tables and competitions provide the proof: the water-side city has ranked highest amongst Germany’s federal states since 2001, primarily on the basis of its above-average economic growth. One of the biggest growth sectors is the aviation industry. The Aviation Cluster of the Hamburg Metropolitan Region ranks number one on a national level and number two Europe-wide in the civil aviation industry. And when the Federal Ministry of Education and Research looked for Germany’s best cluster strategies in the autumn of 2008, the Aviation Cluster of the Hamburg Metropolitan Region was officially crowned a leading edge cluster in Germany. Hamburg’s aviation industry wants to maintain this top position in the future.

Your, Carsten Frigge
Aviation Industry Coordinator and State Secretary of the Ministry for Economic and Labour Affairs

Job generator, source of innovation, facilitator

The aim of the Qualification Offensive is to provide the aviation industry with specialist personnel over the short, medium and long term. At the same time, this should facilitate growth in the region and enhance companies’ innovation and competitiveness. Long before other locations started working on the targeted development of talent, training programmes, study majors, young talent promotion schemes and other recruitment measures were being developed in Hamburg, tailor-made for the aviation industry.

Today, the Qualification Offensive may be likened to an intense, vibrant network in which companies from Hamburg’s aviation industry, universities and training institutions exchange information and knowledge as well as jointly developing new forms of initial training, further training and university-level education. The initiative “Hamburg – the place for aviation,” established within the HWF Hamburgische Gesellschaft für Wirtschaftsförderung mbH (Hamburg Business Development Corporation), serves as an umbrella. The economic and structural policy division of the Ministry for Economic and Labour Affairs (BWA) serves as hub and central contact point for the network.

Not only the members are interlinked with one another; the measures and programmes are, too. The boundaries are open. Active contributions in one area are often rewarded in another area. This is the recipe for success: every member contributes, secure in the knowledge that there will be a return on that investment.

“Qualified specialist personnel are, alongside physical space, the most decisive structural and location policy factor. In the light of demographic developments, the availability of specialist personnel is sure to become even more significant. I therefore look forward to continuing to bring the members of the Qualification Offensive together in a successful way, initiating model projects. Resources are available, within the framework of cluster-focussed employment policy, to boost innovative measures and to expand the education and training infrastructure in line with need and demand.”

Bernhard Proksch, Head of the Structural Policy, Employment Market and Agriculture Division, BWA
A380 brings upswing

Advanced course StartING got things moving

In the year 2000, Hamburg took off into a new era of aviation. The Free and Hanseatic City of Hamburg would become the second key location, alongside Toulouse, for the development and production of the wide-bodied A380 aircraft. This technological challenge, the biggest so far for the plant, was at the same time a challenge for the training and employment market in the city.

The Ministry for Economic and Labour Affairs (BWA) seized the initiative and invited all representatives of the aviation industry to a round-table discussion. The most important question was: do we have enough specialist personnel to meet the needs of the industry, including suppliers? The greatest deficit was in the area of engineers with aviation-specific know-how. Before thousands of employees could construct a whole new dimension of aircraft, experts had to develop the details. The solution: advanced training courses to win engineers from other disciplines and academics from related disciplines, such as architects, for the aviation industry.

Facilitated by BWA, a win-win concept as uncomplicated as it is unusual was born. Everyone would benefit from the new training course, named StartING: the Airbus specialist divisions, which had defined the content and could look forward to highly qualified personnel; the small and medium-sized enterprises (SMEs), which could not have financed such a course on their own; the students, who received a salary during the training course and had the guarantee of a job if they successfully completed the course; and the University of Applied Sciences (HAW Hamburg), which was able to further expand its infrastructure and competency with the support of government and enterprise.

The procedure: within five months, up to 30 engineers were to be brought up to speed in the core subjects

"After the turn of the millennium, the whole network was suddenly transformed. On the basis of the contacts with the BWA along with strong communication and involvement, many partners came together and began discussing engineering competencies, searching for solutions and planning joint projects."

Jörg Manthey, 1st Chairman of HECAS e. V., Managing Director of ELAN EDAG Lühmann Aero-engineering Network GmbH

"Lufthansa Technik benefits in a huge number of ways from the Qualification Offensive, beginning with the basic introductory approach to the technology and stretching to the outstandingly positive cooperation between partners and the acquisition of personnel. Each player does what they do best, and all take part."

Thomas Erich, Deputy Head of Corporate Communications Lufthansa Technik AG
of classical aircraft construction. The participants were chosen by the companies themselves. Airbus guaranteed that it would fill and fund 15 places. The other 15 were available to the SMEs. Salaries were to be made exclusively by the companies. The professors at HAW Hamburg produced a modular course concept and guaranteed that it would be carried out to completion. The costs of the qualification were split between the companies and BWA.

StartING was a success from day one. In five courses, 150 employees from other disciplines were acquired and qualified for the aviation industry. The name defined the nature of the course. StartING strengthened the trust and cooperation between the partners whilst the universities structured their teaching programmes to match real-world practice. It also provided the impetus for many other measures. StartING was the breakthrough for a new form of cooperation.

**Academic Training**

**Learning by doing at the highest level**

**Unique courses with major practical components**

What are the most important focal points in the study of aircraft construction? What other competencies are needed, apart from classical structural aircraft design? These questions arose at the very beginning of the collaboration between the universities and the aviation sector companies. The answer: know-how relating to cabin design and development!

As a centre of aviation, Hamburg is the world’s leading competency centre for aircraft cabins and cabin systems. In order to meet the need for cabin specialists, additional places were suggested for engineering students to major in cabins and cabin systems – at the time, a unique major programme in Germany.

The University of Applied Sciences (HAW Hamburg) made three additional professorships available for the purpose. Airbus Germany supported the measure by establishing an endowed professorship for aircraft cabin architecture. In order to create an optimal learning environment, the Ministry for Economic and Labour Affairs (BWA) provided 400,000 euros in funding for HAW Hamburg’s laboratories. This meant that the Department of Aeronautical and Automotive Engineering could be provided with a large autoclave, CATIA workstations, and other equipment. The winter semester 2005/06 thus saw the first aviation fans commencing their studies on the Bachelor and Master of Aeronautical Engineering programme majoring in cabins and cabin systems.

This new study major, in turn, paved the way for a new, sustainable institution, which was conceived by the Qualification Offensive in the course of the application for the Top Cluster award: the Hamburg Centre of Aviation Training (HCAT). At HCAT, the industry, universities and the State Vocational Training School for Manufacturing and Aircraft Engineering
G15, collaborate on the early identification and solution of upcoming needs. Here, students can put their theoretical designs for cabins and cabin systems to the test and evaluate the practicality of installation and repair.

The Qualification Offensive led the Hamburg University of Technology (TUHH) to expand its aeronautical studies programmes, develop continuing education modules, and establish a centre for aviation research. The research projects, jointly conducted with industry, are carried out by young people who apply the know-how they have acquired in the participating companies, making efficient technology transfer a reality. Once again, the whole network benefits.

Another attractive feature of TUHH is the “mobility window” in the research-oriented Masters in Aircraft Systems Engineering programme, allowing students to spend the third semester in a qualified programme abroad at an international partner university, for example at INSA (Institut National des Sciences Appliquées de Toulouse). The “mobility window” is supported by the Greater Hamburg Aviation Cluster and the Aerospace Valley World Competitiveness Cluster Midi-Pyrénées & Aquitaine.

“With the new equipment, financed by BWA, we can run through the whole industrial process chain, from design through to the production of modules and functional units of an aircraft cabin. New university research products have been made possible, and Hamburg’s aviation enterprises can also use the facilities for their operational research.”

Prof. Dr Hartmut Zingel, Deputy Head of the Department of Aeronautical and Automotive Engineering, HAW Hamburg

A successful career start benefits from both time spent studying abroad and practical experience. The global players Airbus and Lufthansa Technik, inspired and informed by the Qualification Offensive’s university programme, have therefore collaborated with HAW Hamburg to develop a means of offering a dual-mode course of study in Hamburg, with integrated practical experience. The companies assume responsibility for the study fees and pay a monthly subsidy. In return, students spend approximately one third of the year in the company, implementing what they have learned.

“The promotion of aviation competence by the Qualification Offensive is linked to an accentuation of our aeronautical technology study programmes in the area of aircraft cabins. There is now much more capacity for young people, fascinated by aviation, to undertake an academically demanding course in aeronautical systems technology.”

Dr Johannes Harpenau, Aviation Research / Coordination Hamburg University of Technology
Fast qualification and new motivation

Network develops continuing education models

The aviation industry never stands still. It is always changing and developing. Its future lies in innovation. The manufacturing skills of the industry’s personnel must therefore be continually enhanced with extra qualifications. Continuing education is an ideal approach, especially when specialist personnel are needed at short notice.

In order to train not only engineers, but also other specialist personnel, for the aviation industry, a new career was conceived in Hamburg, positioned at the midpoint between aircraft mechanic and engineer. Aeronautical Technician (“Luftfahrttechniker”) is a career path with outstanding employment perspectives. As the shortage of engineers has not yet been resolved, the qualification as a state-certified aeronautical technician opens the possibility of promotion to middle management.

But in order to go to school, you have to interrupt your work. Companies, however, cannot afford to go without personnel – especially talented and innovative personnel. Airbus, Lufthansa Technik, suppliers and the State Vocational Training School for Manufacturing and Aircraft Engineering G15 therefore developed a new continuing education model which was, at the time, unique in Germany. During the two-and-a-half year state-certified aeronautical technician programme, six-month semesters at the school alternate with practical periods in the company. This means that the young employees receive a salary throughout the entire training period, although they only actually work in the company for half the time.

The content of the course has been aligned with the standards published by the European Aviation Safety Agency, which means the technicians can receive a CAT B1 or CAT B2 certification. The companies can, however, influence the programme with their requirements. The school also coordinates internships abroad, for example in France.

“Aided by the Qualification Offensive network and with the financial support of the Federal Employment Agency, numerous unemployed engineers have become aviation draughtsmen or technical writers. Operating as a collective, HECAS filled the classes and ELAN later took on approximately a quarter of the trained personnel.”

Jörg Hoppe, Managing Director, ELAN EDAG Lühmann Aeroengineering Network GmbH

“The Federal Employment Agency in Hamburg considers itself a competent partner of the aviation initiative which, through targeted qualification of existing specialist personnel, makes a substantial contribution to ideally filling the vacancies on offer.”

Renate Göben, Team Aviation, Federal Employment Agency, Hamburg
The Technische Fachschule Heinze (“Heinze Technical College”), a private specialist training school with state recognition, also trains aeronautical technicians. An intensive full-time programme, with a duration of only two years, enables students to complete both the state-certified aeronautical technicians qualification and the CAT B1 foundation training at the same time. Innovative curriculum and a tightly integrated network in the civil aviation industry ensure outstanding career opportunities for graduates. Ultimately, graduates of the Technische Fachschule Heinze can complete a Bachelor of Engineering qualification after only one additional year of study, thanks to a partnership with a university in England, in place since the end of 2008.

Numerous other continuing education programmes are also supported – not always so directly, but no less effectively. The very existence of an active network has itself made it possible for many measures to be implemented in a targeted and consequently successful way. The Federal Employment Agency has, and remains, an important partner. The Federal Employment Agency in Hamburg already made an accurate assessment of the needs of companies in Hamburg’s aviation industry several years ago and proactively initiated continuing education opportunities. These opportunities have been conceived for both commercial technical careers and for engineers and technicians, and fine-tuned to meet the current requirements of companies. In recent years, around 1,500 commercial technical personnel and more than 1,000 engineers and technicians have been trained.

During the training programmes, the Employment Agency has financed the study fees, travel costs and living expenses of participants. The Agency works closely with employers and training institutions in Hamburg as well as with the Aviation Initiative. As well as being a founding member of the Aviation Initiative, it is also engaged in an ongoing collaboration with the Qualification Offensive network. The focus of the six placement officers in the aviation team is on the placement of specialist personnel from the Greater Hamburg region.

“The in-service aeronautical technician training programme has been very well received. Demand is high, as is the placement level.”

Hans-Werner Lüers, Principal of the State Vocational School for Manufacturing and Aircraft Engineering G15

“Qualified personnel are very important, particularly for small business in the supply sector. In order to equip those coming from other careers and industries for aviation, we need continuing education and qualification programmes. Personnel and engineering service providers, whose primary capital is the know-how and competence of their staff, are also essentially dependent on training and qualification programmes.”

Jan Heinze, Head of Working Group “Personal Hanse-Aerospace e. V.,” Managing Director of Technische Fachschule Heinze

“The Qualification Offensive, especially BWA, has provided us with optimal support in bringing various entities together, from the Federal Employment Agency to the universities. Quickly and without bureaucracy. Not at all what one expects from a government department. The Qualification Offensive has contributed to people finding employment and has supported us in our search for employees.”

Ralf Gust, Managing Director, Yacht Teccon

Continuing Education
As a rule, the company is responsible for the traineeship. Individual companies, however, are often unable to achieve what they would like to. The Qualification Offensive has made possible things which individual companies would not have been able to manage alone, and it continues to do so. It brings information and people together, creating a success story beyond expectations.

One example: the Ministry for Economic and Labour Affairs (BWA) invited companies from the shipbuilding and engine building industries to discuss the local shortage of specialist personnel and to enquire about demand. The shortage of qualified engineers was ongoing. At the same time, it became clear that there are tasks for which an engineer is overqualified, but which exceed the capabilities of a draughtsman. A solution was found: the newly created career “technical product design”.

The specifications of the qualification were defined and jointly developed by Hamburg companies. In order to make it easier for companies that had not yet offered traineeship programmes to begin doing so, BWA brought all participants – the Chamber of Commerce, the vocational training schools, and the companies – together. Joint marketing of the new career path was conducted at career and training fairs. The technical product designer traineeship programme turned out to be both a success story for companies such as FERCHAU AVIATION and a very effective entry point to the aviation industry for young women.

“The networking of manufacturers, suppliers, users and customers in Hamburg as a centre of aviation is unique and provides an extraordinary advantage for the business of training.”
—Rudolf Jany, Vocational Training Hamburg Airbus

“The ‘Hamburg – The place for aviation’ initiative made us aware of the gaps in the range of training available. It led us to engage with this subject and make a decision: to train people ourselves. In September 2008, for the first time, nine technical product designers began their traineeships with us.”
—Christof Müller, Personnel Officer, FERCHAU AVIATION
A network without borders

Partnerships with aviation clusters abroad

Thanks to its important international port, Hamburg has long been considered a gateway to the world. Building on this tradition, the aviation industry is establishing a network that stretches well beyond national borders. One of the most important connecting points is the training and international orientation of personnel. Cross-cultural experience is becoming an ever-more important rung on the career ladder, and not just in aviation.

A prime example of profitable cooperation is the educational exchange programme between the Aviation Cluster of the Hamburg Metropolitan Region and the “Aerospace Valley” the joint cluster between Midi-Pyrénées (Toulouse) & Aquitaine (Bordeaux). In 2004, Hamburg and Toulouse agreed to create a Franco-German network of aviation suppliers, schools and universities along with other organisations from the education and training sector.

A short-term pilot project was launched at this time, in the form of a six-month internship with Hamburg companies for BTS graduates (brevet technique scientifique) from France. The internships were intended to deliver technical training and an awareness of work processes and culture, as well as helping the young technology students to acquire mobility, flexibility and adaptability. The Mobilitätsagentur (“mobility agency”), a division of the association Arbeit und Leben e. V., Hamburg, was brought in to overcome the initial language barrier. Many French participants first attended a four-week German course before commencing the internship. The European Leonardo da Vinci Programme was then activated to mobilise interns from other European countries as well. The pilot project actually became an outstanding recruitment tool for SMEs and was adopted as a regular programme. Many interns, assigned by the Qualification Offensive to suppliers such as Yacht Teccon, Eurodoc, 3d-Contech, Dasell and Labinal, stayed or came back again.

The idea of an exchange programme for trainees and apprentices was a direct result of this success. This, however, was not a simple process. Germany has a dual-mode system, where trainees are involved with real products throughout their three-and-a-half year traineeship. The French model has theory first, then practice. The French, therefore, were extremely well-informed but had no practical experience. The traineeship coordinators were sceptical. Initially, the plan was to establish contact and build trust on both sides. Mutual visits and reciprocal workshops allowed the content of the exchange to be defined.

“Special technical and personal commitment of the traineeship coordinators in companies, schools and universities, and the project management by Mobilitätsagentur are exemplary: They are the lifeblood of the Franco-German competency network. These factors, combined with the cooperation of the two economic development corporations in Hamburg and Toulouse, have created an outstanding basis for further steps in the internationalisation process of the Aviation Cluster of the Hamburg Metropolitan Region.”

Ingrid Schilling-Kaletsch, Head of Qualification Offensive Aviation Industry, Ministry for Economic and Labour Affairs

“The support of the city of Hamburg was very important when we were looking for an interfacing point. It is able to work at an organisational level, exerting political influence, such as between school supervisory boards. These are things that we cannot achieve on our own. The partnership with the Department brings everything to life.”

Rudolf Jany, Vocational Training Hamburg Airbus
The key players in Hamburg were the Principal and teachers at the State Vocational School for Manufacturing and Aircraft Engineering G15, along with traineeship coordinators and trainers from Airbus and Lufthansa Technical Training. Experience and insights were gathered and formed a foundation for seeking – and finding – common starting points.

The trainees now work in tandem, as partners on a single project. When a French trainee, for example, undertakes a four-month internship at Airbus or Lufthansa Technik, a German trainee is put alongside him or her. Both benefit in terms of cross-cultural team skills. Over time, it has become possible for trainees from both countries to complete individual training modules within four weeks.

The University of Applied Sciences (HAW Hamburg) and the Hamburg University of Technology (TUHH) have also added international, technology-focused continuing education modules to their programmes. Within the framework of the Qualification Offensive, the modules were developed together with European partners – e.g. the Katholieke Hogeschool Brugge-Oostende (KHBO) and the Université Bordeaux I – to an international in-service masters programme.

“The French are very interested in learning German and working at German companies. We are now hiring 18 technicians and engineers from France.”
Ralf Gust, Managing Director, Yacht Tecon

“The mobility programme has been the catalyst for a lot of things. We never used to be this active abroad. We now have an outstanding partnership with France and are open to other countries, such as Spain and Italy.”
Hans-Werner Lüers, Principal of the State Vocational School for Manufacturing and Aircraft Engineering G15

“International aviation presupposes an exchange of people and ideas per se. Appealing education and training programmes in the Greater Hamburg region attract people from all over the world. They lay a foundation for later international business relationships.”
Uwe Gröning, Chairman, Hanse-Aerospace e.V., Managing Director Innovint Aircraft Interior GmbH
Job fairs, trade fairs and prequalifying

Attracting attention and arousing interest

Together, we are stronger. This applies in particular at trade fairs and job fairs. The small and medium-sized enterprises in particular all agree: they, and their concrete job vacancies, receive a lot more attention under the umbrella of the initiative, “Hamburg – the place for aviation”, than they do alone.

The Qualification Offensive therefore organises job fairs and makes a joint stand available at trade fairs in Germany and abroad. This is, and will continue to be, one of the most important recruitment tools. Companies, authorities, universities and vocational schools can provide information on traineeships, apprenticeships and university courses, whilst companies also have the opportunity to conduct targeted recruitment.

Partners abroad promote Hamburg’s aviation stand to jobseekers. The demographic development of school statistics in Germany means, however, that companies cannot afford to be satisfied with those who come to job fairs, show interest or prequalify.

Over the medium and long term, they have to exploit everything the location has to offer. Even students of the lower secondary modern schools can turn out to be aviation whizzkids, as has been proven. Many of them, however, would not make it through the application matrix because of their difficulties with mathematics or English.

In order to enable these students to undertake traineeships, BWA, teachers and the Federal Employment Agency support a prequalifying programme in the training facilities at large companies. Every year at Lufthansa Technical Training, for example, a dozen lower secondary modern students graduate from a ten-month-long course designed to prepare them for an apprenticeship as toolmakers. Two thirds of the time is spent in the training workshop, the rest in an internship. Once a week, a teacher comes to the company to fill in the gaps in the principle subjects. The students also learn work virtues such as punctuality and reliability.

It is a genuine success story. In 2008, eight out of twelve students passed the Lufthansa Technik employment test and were hired, the other four found work with other companies. To make sure that the students do not fall behind during the apprenticeship, Lufthansa Technik also provides extra tutoring in parallel to the vocational school.

“The Qualification Offensive has set in motion the development of many successful and sustainable recruitment tools. Apprenticeship prequalifying, for example. Without this preparatory approach we would not be able to hire lower secondary modern students. But in view of future demographic developments, it is our aim to offer this group a career perspective in aviation.”

Hans-Peter Meinhold, Head of Training, Hamburg, Lufthansa

“The aviation cluster includes Technical Training GmbH, Airbus and Lufthansa Technik as well as the universities and other educational institutions. This means that very efficient programmes can be developed, as potential applicants can obtain a thorough overview of qualification options in the aviation industry from a single information pool. The Qualification Offensive has made a significantly broad contribution to Airbus’s success in finding suitable applicants for its vocational training and academic programmes.”

Günther Meyer, Vocational Training Hamburg Airbus
Creating fascination for flying early on
Projects that get children hooked on engineering

Boys often want to become firemen or policemen, whilst girls often dream of being vets or nurses. But “aircraft mechanic” and “aeronautical technician” are not jobs that children mention all that often. Only very few dream of mechanical engineering from a young age.

“Technology for children. The fascination of flight” is a series of events designed to achieve just that. Intensive research and development in Hamburg as a centre of aviation is of little use if the next generation of aviation technologists is not large enough to take over the project. The shortage of specialist personnel that already prevails, combined with years of low birth rates, demands long-term thinking. Put simply: children need to become hooked on engineering.

As a first step, therefore, a series of events was developed in a collaborative effort by the University of Applied Sciences (HAW Hamburg) and companies from the aviation industry, under the title “Engineering for children: the fascination of flight.” For a number of years now, 8 to 12-year-olds have been visiting engaging lectures at HAW Hamburg, where they learn how an aircraft flies or what a dentist’s mirror is doing in the fuselage of an aircraft. The mini-students are then able to put what they have learned into practice in the participating companies’ production facilities. To make sure that the fascination with flight doesn’t fade during puberty, and in case that is when it first really takes hold, the programme was extended in 2008 to cater for 12 to 16-year-olds. At the same time, the FaszinationFliegenKlub (“Fascination of Flight Club”) was founded. This sustainable concept has already found its imitators, for example in the shipping industry.

“We have got to know a lot of highly interested, very capable young people at the summer camp. The trainees, mechanics and engineers were inundated with questions. The young people were wholeheartedly involved, both in the practical projects in the workshops and directly at the aircraft.”

Prof. Dr Monika Bessenrodt-Weberpals, Vice President of Studies and Teaching, HAW Hamburg

The recipe for success is, once again, joint community effort. Taking place under a single umbrella, the various activities acquire more weight, primarily because all participants are pulling together. That is just what makes the programme work. The partners are continually coming up with new ideas and planning new activities. Teachers are provided with special “Follow Me” boxes filled with information material on aviation for project weeks, there is a summer camp, and children and teenagers are presented with certificates for their “Fascination of Flight” folders. These may
help them when they apply for training or education programmes later on.

At the same time, the Qualification Offensive is promoting numerous other projects for school students. Examples include the DLR_School_Lab at Hamburg University of Technology (TUHH) and the aerodynamics laboratory at HAW Hamburg. Roberta is also very popular – robotics courses for girls from the seventh grade on. Trained engineers from TUHH take a construction kit with them when they visit the girls at their school, and together they build small robots.

Hamburg is top — and that’s the way it should stay

Hamburg Centre of Aviation Training (HCAT)

Joint top performance in science and industry is the key to sustainable success. The cross-sector Excellence Clusters Competition organised by the Federal Ministry of Education and Research was therefore looking for the best cluster strategies. Hamburg’s holistic “new kind of flying” strategy convinced the jury. Aviation Cluster of the Hamburg Metropolitan Region will receive 40 million euros in funding over five years. Hamburg’s players in the field of aviation will provide at least the same amount within the cofinancing framework.

An innovative project with a sustainable concept is the Hamburg Centre of Aviation Training (HCAT). At the centre, industry, universities and the State Vocational Training School for Manufacturing and Aircraft Engineering G15 are networking needs-based qualification projects and facilitating practice-oriented university education in the competency major of cabins and cabin systems. The HCAT concept is a milestone in the Qualification Offensive’s developmental work. The partnership structure has become even stronger and more concentrated with enhanced strategic focus. The participants’ training activities thus multiplex even more effectively. This considerably increases the attractiveness of the cluster.

The prime goal of HCAT is the strengthening of personnel as a success factor, whilst simultaneously strengthening Hamburg’s position as a European training and continuing education centre.

"The Qualification Offensive has been the impetus for a lot of good projects. It was, for example, the foundation for the development of the HCAT project. The Qualification Offensive has generated synergies and adaptive qualities. We don’t just have a win-win situation; this is a triple-win situation. On the one hand we can take vocational students to the practical area at HCAT, where mock-ups can also be constructed; on the other hand our technical continuing education also takes place there. And our initial training is close to HAW Hamburg. This brings our colleagues closer to the substance of new developments."

Hans-Werner Lüers, Principal of the State Vocational School for Manufacturing and Aircraft Engineering G15

“It is very practical to be able to fall back on a network. One never loses the sense of connection, always has a good interview, and has a clearer perspective of what the future may bring. This is especially important with regard to the Best Clusters competition. We have to give further consideration to what we can do for the next generation, to ensure that there is sufficient know-how on board for us to fulfil our plans. There are a lot of cooperative models we could consider ...”

Elke Niemann, Central Training Coordinator Lufthansa Technik AG
Contact Partners

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info@dlr-schoollab-hamburg.de,
www.dlr-schoollab-hamburg.de

Traineeships and Apprenticeships
Airbus Operations GmbH
Frau Timm, Tel.: +49 (0)40 - 74 37 28 25,
berufsausbildung.hamburg@airbus.com,
Fax: +49 (0)40 - 74 37 41 84, www.eads.net

Hamburg Chamber of Commerce (Handelskammer Hamburg)
Traineeship advice: Tel.: +49 (0)40 - 36 13 81 38,
ausbildungsberatung@hk24.de,
Fax: +49 (0)40 - 36 13 84 01

Lufthansa Technik AG
Frau Bakonyi, Tel.: +49 (0)40 - 50 70 6 45 98,
azuibmarketing@tt.hl.de,
www.BE-Lufthansa.com

NORDMETALL Verband der Metal-
und Elektroindustrie e.V.
(Metal and electrical industry trade association)
Herr Golinski, Tel.: +49 (0)40 - 63 78 42 02,
golinski@nordmetall.de,
www.nordmetall.de

State Vocational Training School for Manufacturing and Aircraft Engineering
(Staatliche Gewerbeschule Fertigungs-
und Flugzeugechnik)
Herr Luers, Tel.: +49 (0)40 - 4 28 95 30,
G15@bsb.hambug.de, www.g15.de

Higher Education
German Aeronautical and Astronautical Society (DGfL), Hamburg branch
(Deutsche Gesellschaft für Luft- und Raumfahrt e.V. (DGLR) Bezirksgruppe Hamburg)
Herr Jung und Herr Bäumle,
hamburg@dglr.de, www.dglr.de
Airbus Operations GmbH
Herr Wilwert, Tel.: +49 (0)40 - 743 752 82,
Fax: +49 (0)40 - 743 74 184, fachpraktikum.
hamburg@airbus.com, www.eads.net

University of Applied Sciences (HAW Hamburg)
Central Course Advice:
Tel.: +49 (0)40 - 428 75 91 410,
studienberatung@haw-hamburg.de
Course advice for Aeronautical Engineering
Herr Prof. Schulze,
Tel.: +49 (0)40 - 4 28 75-79 08,
schulze@fzt.haw-hamburg.de,
www.fzt.haw-hamburg.de

Coordinator of dual-mode degree courses: Winfried Box,
Tel.: +49 (0)40 - 428 75-86 10,
box@rzbt.haw-hamburg.de,
www.haw-hamburg.de

Dual-mode degree courses
(with integrated practical components) in conjunction with aeronautical companies:
at Airbus: Nicole Friedrich,
Tel.: +49 (0)40 - 74 38 24 70,
nicole.friedrich@airbus.com;
at Lufthansa Technik: Frau Bakonyi,
Tel.: +49 (0)40 - 50 70 64 536,
azuibmarketing@tt.hl.de,
www.BE-Lufthansa.com

Hamburg University of Technology (TUHH)
Course advice: Frau Gieseler,
Tel.: +49 (0)40 - 4 28 78-2776 or -2232,
studienberatung@tu-harburg.de
General Engineering Sciences (B.Sc.)
www.tu-harburg.de/studium/programme/
bachelor/aerospace.html
www.tu-harburg.de/education/master/
general_engineering
Aircraft Systems Engineering (M.Sc.)
www.tu-harburg.de/education/courses/
master/aerospace.html oder www.fst.tu-harburg.de
www.tu-harburg.de/studium/student/int/
index.html
www.tu-harburg.de/studium/student/int/
master.html

Continuing Education, In-service Qualifications and Placement Coordination
Federal Employment Agency, Hamburg
(In-service qualifications, placement of special-
istical technical personnel in the aviation industry)
Technicians and engineers: Frau Jana Denk,
Tel.: +49 (0)40 - 24 85 19 81,
Frau Sigrid Lehmann,
Tel.: +49 (0)40 - 24 85-19 86

Industrial staff: Frau Sabine Hoffström,
Tel.: +49 (0)40 - 24 85 19 82,
Frau Tatjana Arenz,
Tel.: +49 (0)40 - 24 85 19 83,
Frau Silke Koch,
Tel.: +49 (0)40 - 24 85 19 85,
HamburgArbeitgeber-Luftfahrt@arbeitsagentur.de

Hamburg Chamber of Commerce (industrial master craftsmen in aeronautical engineering)
HKBIS Handelskammer Hamburg Bildungs-
Service gemeinnützige GmbH,
Frau Brändle,
Tel: +49 (0)40 - 36138-558,
hkbis@hk24.de,
www.hkbis.de

Hamburg Centre of Aviation Training HCAT
Ministry for Economic and Labour Affairs (BWA), Frau Schilling-Kaletsch,
Tel.: +49 (0)40 - 4 28 41-17 83
aviation@bwa.hamburg.de,
www.hamburg-aviation.com

Lufthansa Training Centre
Herr Pape,
Tel.: +49 (0)40 - 50 70 27 86,
oliver.pape@dh.de,
www.LTT.de

State Vocational Training School for Manufacturing and Aircraft Engineering
(Aeronautical Technician)
Staatliche Gewerbeschule Fertigungs-
und Flugzeugtechnik (Luftfahrttechniker)
Herr Luers,
Tel.: +49 (0)40 - 428 95 30,
G15@bsb.hambug.de, www.g15.de

Technische Fachschule Heinez (Luftfahrttechnik-
ner) (“Heinez Technical College” –
Aeronautical Technician)
Herr Dr. Voigt,
Tel.: +49 (0)40 - 639 02 90,
e.voigt@tf-heineze.de,
www.tf-heineze.de

TuTech Innovation GmbH (EPMA, innovation management etc.)
Frau Löbkins,
Tel.: +49 (0)40 - 766 29 65 51,
loebkins@tutech.de,
www.tutech.de

TUHH: Herr Dr. Harpenau,
Tel.: +49 (0)40 - 428 78 35 74,
harpenau@tu-harburg.de

Other training providers are listed online at
www.hamburg-aviation.com

Aviation Industry Qualification Offensive
Ministry for Economic and Labour Affairs (Bf Angewandte Wirtschaft und Arbeit)
Frau Schilling-Kaletsch,
Tel.: +49 (0)40 - 428 41 17 88,
aviation@bwa.hamburg.de,
www.hamburg-aviation.com