

## Reinhardt Abraham Memorial Foundation

### **Newsletter 1998**

Edition No.1

Dear Reader,

First of all, we would like to welcome you to the first edition of our Newsletter, a new source of information about the Reinhardt Abraham Memorial Foundation (RASf). Ever since the RASf was founded in Berlin in June 1996 we have been putting every effort into extending the Students' Trainee and Exchange Program. As the partners in this rather unique undertaking are not merely based in Germany, but particularly in the USA, we can really say that a great deal of work has been invested in the co-ordination of this multi-cultural foundation in the past eighteen months.

The Trainee Program in co-operation with the Boeing Company entered its second round in the Spring of '98. The Technical University of Berlin is sending four students to Seattle this year. At the same time, the first two participants who went over to the USA in August 1997 returned to Germany in March.

The Technical University (TU) of Berlin is in the process of establishing a partnership with the University of Washington in Seattle, in order to enable American and German students to work together within the extent of scholarships set up by the

Reinhardt Abraham Memorial Foundation.

In this way, the initiative taken in founding the Reinhardt Abraham Memorial Foundation is beginning to bear fruit. Reinhardt Abraham's labors in giving young engineering graduates hands-on training are continuing to be pursued thanks to the support of the Foundation. The ever growing spectrum of tasks have brought about the birth of this Newsletter in order to keep all those informed who are generously participating on both sides of the Atlantic about our progress.

It is to our aim of keeping you up-to-date that we want to dedicate this and the subsequent issues of our Newsletter. We will be going to press twice a year to report on people and projects, experiences and opinions.

It is our hope that our Newsletter will provide an opportunity of disseminating information in a manner appropriate for the work and aims of the Reinhardt Abraham Memorial Foundation to strengthen the ties and understanding between its American and German participants.

**The Reinhardt Abraham  
Memorial Foundation -**

## Putting the Aims of the Foundation into Effect

The aims of the *Reinhardt Abraham Memorial Foundation* have been realized step by step over the past two years. In its initial stages, an agreement materialized between the *Boeing Company* and *Lufthansa German Airlines* with the purpose of creating a support program on behalf of Reinhardt Abraham whose objectives are to set new standards of study and research in the field of civil aviation.

As the founders soon realized that particularly the administrative costs of running a legally independent foundation were going to be exorbitant, Lufthansa suggested integrating the Reinhardt Abraham Memorial Foundation into the *Deutsche Lufthansa Berlin-Stiftung (DLBS)* as an independent division. The DLBS's statutory object is the preservation of cultural values as well as the patronage of the sciences in the field of civil aviation.

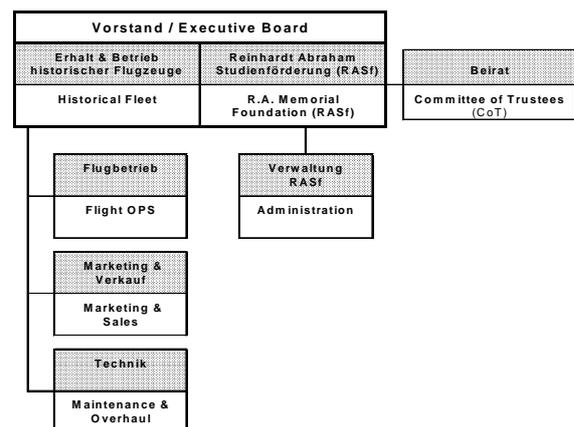
Consequently, as a part of the DLBS, the *Committee of Trustees (CoT)* of the Reinhardt Abraham Memorial Foundation was conceived, it being composed of representatives of Boeing, Lufthansa and the Technical University of Berlin. The Committee of Trustees selects the beneficiaries and provides advice concerning the directives of the study support programs. In this way, it works under the auspices of the *Executive Board of the Deutsche Lufthansa Berlin-Stiftung*.

*Dr. Gerwin Dienger*, Senior Vice President of the Project and Development Engineering Division of Lufthansa Technik, and *Ekkehard Tschirner*, General Manager Alli-

ance Sales of Lufthansa German Airlines, are both members of the Board.

The *administrative departments* of the Reinhardt Abraham Memorial Foundation and of the DLBS are both based in Hamburg. The head office of the Foundation is located at the heart of the Lufthansa Technik overhaul base on the south side of Hamburg-Fuhlsbüttel airport. Its head, *Jürgen Kreth*, Technical Director of the DLBS, is responsible for the service functions and implementation of the internship programs of the Reinhardt Abraham Memorial Foundation.

### Deutsche Lufthansa Berlin-Stiftung



At head office, alongside her other numerous tasks, *Marianne Reichow* is the contact person for the students at home and abroad.

The internships and study opportunities in the USA require a great deal of planning and preparation. Apart from the beneficiaries' own personal enquiries, requests and problems, extensive immigration and residence formalities have to be dealt with. Since the foundation of the Reinhardt Abraham Memorial Foundation, setting up the scholarship programs has been in full swing. In its initial 24 months, the work of the Committee of Trustees has been governed by the

intensive preparations and discussions with regard to the type of study programs being offered. It was one of the CoT's first decisions to make best use of the potential of the participants, in this case primarily Boeing and Lufthansa, towards realizing the aims of the Reinhardt Abraham Memorial Foundation.

The Committee of Trustees encouraged the utilization of existing structures, both in an organizational and professional respect, in order to minimize costs and to be able to realize the tasks of the Foundation as rapidly and smoothly as possible.

And so it came to be that the first step of the *Trainee Program* at the Boeing Company was able to be put into effect within a relatively short planning period. Boeing put its existing trainee instruction program at the disposal of the Reinhardt Abraham Memorial Foundation and it was in the Spring of '97 that the first two students of the Technical University of Berlin were able to embark on their six months' stay in Seattle.

Plans for the further development of the Reinhardt Abraham Memorial Foundation program are progressing. This year, the Technical University of Berlin and the University of Washington in Seattle agreed to form a partnership which will be the base for the *Student Exchange Program*. In the initial stage in October 1998, the first American student from Seattle will be able to continue his thesis or degree during a six-month visit to the TU Berlin. The Reinhardt Abraham Memorial Foundation, which will be financing and organizing this research period, is already well advanced with its realization of a study period for Berlin students at the University of Washington in Seattle.

## **RASf – personal touch**

### **During the time my husband Reinhardt Abraham was in charge of Lufthansa,**

he encouraged the promotion of young talents within the company.

He instigated management development seminars and appointed talented engineers to various positions (job rotation) to train them for future leading positions with the company.

The Reinhardt Abraham Memorial Foundation - established after his death - wishes to accomplish the same goals: Young engineers will be provided with the tools to apply their profession to the future of the international aeronautical industry.

The program is intended to form a bridge between Germany and the U.S., and I hope that young students from the Technical University of Berlin and the University of Washington in Seattle will take advantage of this opportunity to put the original intentions of this program to practical use.

I wish the Reinhardt Abraham Memorial Foundation every success.

*Erika Abraham*

### **Dear Friends of the Reinhardt Abraham Memorial Foundation,**

Two years have now passed since the Foundation was founded. Although it is still in its infancy, we are quite proud about the achievements reached already.

We have succeeded in gaining further friends and supporters who have noticeably enlarged our funds base - thanks to the generosity and deter-

mination of all of you who are among the donators.

Our first two students have successfully completed their Trainee Program at Boeing and further are already on site.

Encouraged by this progress we hope that you will continue to promote and to strengthen our still young Foundation, thus enabling us to further expand our rewarding Students Trainee and Exchange Program associated with the name of Reinhardt Abraham. Thank you very much !

*Dr. Gerwin Dienger,  
Chairman of the Board of the Deutsche Lufthansa Berlin-Stiftung*

#### **Dear Friends,**

The Reinhardt Abraham Memorial Foundation was founded on 13th June 1996 and the first students have since been able to take part in an internship at Boeing in Seattle. For the coming years, a considerable expansion of the support program is already on the cards.

This train of events is a suitable opportunity to remember and recall our gratitude to Reinhardt Abraham.

After graduating from the Technical University of Berlin in 1956, he began at Lufthansa German Airlines where his successful career took him to the position of Technical Director and Deputy Chairman of the Board.

During his working life at Lufthansa, he maintained a close relationship with the Institute of Aeronautics and Astronautics at the TU Berlin, offering the students his undivided support with excursions, internships and training projects.

The students were always most appreciative of his lectures thanks to Abraham's dedication towards precise job-orientation.

It was also Reinhardt Abraham who made use of his own academic background in the subjects of physics, business engineering and aviation technology, combined with his professional experience, in insisting that engineering students reading aeronautics and astronautics should also have a good basic working knowledge of business engineering.

Numerous scholars took heed of his advice and were taken on at Lufthansa after graduation.

Another of Reinhardt Abraham's accomplishments which will never be forgotten is his personal commitment during the preparation and foundation of the Berlin Center for Flight Simulation. It was with his assistance that a modern training and research simulator was able to be acquired.

The simulator center is entirely integrated within the facilities of the TU Berlin and is a great success, both scientifically and economically.

The institute had many outstanding plans for further co-operation with Reinhardt Abraham. Regrettably, due to the serious illness which led to his death, these were never to materialize.

The members of the Institute for Aeronautics and Astronautics, as well as its students, will always be grateful for the attractive opportunities afforded by the Reinhardt Abraham Memorial Foundation which enable future graduates to have close contacts with the aviation industry, thus ensuring that the exceptional activity

shown by Reinhardt Abraham will always be remembered and appreciated.

*Prof. Dr.-Ing. Manfred Fricke, Institute for Aeronautics and Astronautics, TU Berlin*

## **The Reinhardt Abraham Memorial Foundation Boeing Internship**

Roland Platz and Andreas K. M. Reinke, both students at the TU Berlin, were the first participants in the six-month internship being offered by the Reinhardt Abraham Memorial Foundation in cooperation with the Boeing Company since the Summer of 1997.

In the Spring of 1997, the Reinhardt Abraham Memorial Foundation Committee of Trustees selected these two students out of a total of 28 applicants from various institutes of the TU Berlin. In March 1998, they received their final certificates in Seattle before returning home to Berlin.

### ***Roland Platz, Berlin***

Roland Platz has a background in mechanical engineering with an emphasis on studies in structures, loads, fatigue, and dynamics. He is in his sixth year at the Technical University of Berlin.

His work at Boeing consisted of a rotating schedule through the Structures organization in such areas as Propulsion Systems, Payloads, Stress, 747/767 Sustaining, and Fatigue Test for the 777 airplane.

His assignments helped support the production recovery of the 747 and

gave him working knowledge in the Structural Fatigue Test area of Boeing Commercial Airplane Group. He spent the last weeks of his six months in the area where he learned how loads are developed for airplanes.

The Fatigue site, located in Everett, Washington, houses an actual 777 airframe. It has been going through extensive testing for nearly three years. The tests equate to 140,000 cycles and simulate a sixty year old 777 airplane. It was Platz's job to help assess how a variety of simulated flying conditions impact the structural components of the airplane.

Platz said the most important thing he has learned at Boeing is how it does business. "I've gained experience on how to do fatigue testing and the whole process of performing those tests. I also learned about fatigue calculations and how Boeing predicts certain conditions with the thirty-year experience it has in fatigue testing," he says.

Platz has also appreciated the people at Boeing. "They are kind and the working environment is very nice. This is a great area to live in; I've had fun doing different things in the Pacific Northwest."

When he wasn't working for Boeing, Platz enjoyed hiking, biking, photography, and doing gymnastics.

"This was an interesting and complex internship. I had the chance to gain insights into Boeing's way of doing business. Moreover, I met many interesting people through this internship and during activities outside Boeing. I will miss them when I return to Germany.

The few disruptions we experienced in the beginning of the program, during planning or throughout the traineeship were always manageable. In my mind, to conduct a project like this was a wonderful idea of Boeing and the Reinhardt Abraham Memorial Foundation and I would like to thank everybody who helped to make it happen. Particularly, I would like to thank our mentor Robert Schililaty. I will never forget his hard work and strong personal contribution to make Andreas' and my stay so enjoyable. We became good friends with him and his family.

In closing, I would like to wish the Foundation all the best for the future. I strongly hope that this exchange program will be continued to give students the opportunity to be an intern at Boeing."

***Andreas K. M. Reinke, Berlin***

Andreas Reinke was also a recipient of last year's Reinhardt Abraham Foundation award. His background is in aeronautical engineering. During the last weeks at Boeing he worked the Propulsion Systems Division (PSD). He supported testing on Auxiliary Power Units (APU) on 737 Next-Generation aircraft. In addition to testing APUs, Reinke was also involved in the Federal Aviation Administration (FAA) certification of the Next-Generation 737-700, and was involved then in the certification of the 737-800. His job included assisting in setting up APU flight test conditions, and gathering and analyzing data to comply with FAA regulations. He also worked on the resolution of software and hardware problems. Several times he has been part of the crew on actual test flights in order to gain data on the APU in real flying conditions.

Although Reinke specialized in airplane preliminary design and aerodynamics, he said his work in PSD has been valuable. "I think that it's important to know all the aspects of an aircraft in order to be successful in airplane design."

Reinke's interest in airplanes began at a young age. He said the first flight he ever took was on a 737. "I never imagined that I would be involved in the certification of the next generation of the 737."

Reinke appreciated the hands-on work he had been able to experience. "It gave me an opportunity to do more time-critical, research-related work. I've also had good experience on test flights, with the pilots, the FAA, and everybody that is involved in that process. I like the practical experience, instead of the theory-based learning you find at a university. It amazes me that the employees here actually work together when you consider the size of Boeing. When I first heard 'Working Together' from the 777 program I thought it was only a slogan. During my time here I have observed that not one but many people from different disciplines work together to produce Boeing products." In his spare time, Reinke enjoyed biking and photography.

"Well, after I experienced this great internship and believe to have a much better understanding of an engineer's work-life and the aeronautical industry, ready to go back to Berlin and finish my studies, I am as convinced as ever that aeronautics is the field of interest number one for me and I feel dedicated to keep in touch with this amazing business.

Apart from this, I have met many nice people whom I hope to meet in the future, either again in Seattle or

visiting me in Berlin or wherever I might be. I am sure that the Reinhardt Abraham Memorial Foundation will prosper and many more students will have the chance to experience what I have seen and more in order to spread the aeronautical knowledge and to yield a better understanding across the Atlantic.”

## **The Reinhardt Abraham Memorial Foundation and its Friends**

In 1996, the two major patrons of the Reinhardt Abraham Memorial Foundation, Boeing and Lufthansa, were able to establish a sound financial working basis thanks to the initial generous donations from the aviation industry. The list of donors reads like an aviation ‘Who is Who’ - General Electric Aircraft Engines, International Aero Engines, Sundstrand Aerospace, British Aerospace, as well as numerous private persons from the family and circle of friends of Reinhardt Abraham - Erika Abraham and the children, Camilio Dornier, Robert L. Kirk - all contributed to the great idea taking off. In Spring 1998, both Boeing and Lufthansa again increased the Foundation’s capital quite considerably.

As is the case with any type of foundation, the Reinhardt Abraham Memorial Foundation covers the supporting tasks with the interest from capital. This, of course, means that a comfortable backing of capital is not an end in itself, but rather a vital pre-requisite for the working of the Foundation. With interest rates presently at a rock-bottom low throughout the world, one really needs abundant capital volume to be in a position to finance the potential aims of the Foundation.

The tasks and the programs of the Reinhardt Abraham Memorial Foundation are quite diverse and are still partly in the making. To be able to convert all ideas into actual occurrences, an extension of the circle of friends of the Foundation is imperative.

The present level of proceeds enables sending four participants a year to the Trainee Program at the Boeing Company in Seattle. The Student Exchange Program is getting off to a start with two students annually. The Foundation would like to further increase the number of participants in the future. In order to be able to achieve this aim, the financial basis of the Reinhardt Abraham Memorial Foundation will successively need to be strengthened.

## ***Frankly speaking***

*The quality of life in the Greater Seattle area was an immediate eye-opener for the participants of the Boeing Trainee Program. The only problems which they encountered were with the cars they had to purchase - as the rumour goes, our participants were faced with a new never-ending hobby, albeit not exactly voluntarily, when they had to devote a major portion of their valuable spare time to repairing their jalopies. The Committee of Trustees will be altering the requirements for the next selection round accordingly ...*

## **Impressum**

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