

Agenda

Saturday, 11.05.2002

Research and Development: Airship Design

Chairman: M. Mandel

8:30 S. Rudolph

(ISD, University of Stuttgart)

Automated Sensitivity Analyses During the Preliminary Design Phase and Comparison of Airship Construction Methods

9:00 M. Rehmet

(University of Stuttgart, Fairchild-Dornier GmbH)

Airship Design in the Engineering Education

9:30 R. Bannasch

Experimental Studies Under Scaled (Reynolds-similar) Flow Conditions

History and Law

Chairman: M. Mandel

10:00 W. Hallmann

Baloons and Airships viewed from the juristical view point

10:30 - 10:45 Coffee Break

Projects and Technologies:

High Altitude Platforms

Chairman: Th. Lutz

10:45 R. Kornmann

(ISD, University of Stuttgart)

Flight Experiments with the HAP- Test Carrier „Airworm“

11:15 R. Schubert, K.H. Well

(IFR, University of Stuttgart)

Flight Mechanical Model, Analysis and Simulation of an unconventional Airship Concept in multi- segment Construction - the „Airworm“

11:45 W. Knaupp, E. Mundschau

(Zentrum f. Sonnenenergie- und Wasserstoff - Forschung BW)

Properties and limits of today`s Photovoltaic- Hydrogen Energy Supply Systems for High Altitude Platforms

12:15 End of Presentations and Constitution of a Technical Committee of FA S2.3

12:30 - 13:30 Lunch

13:30 Excursion to CargoLifter Carrier in Brand with private motorcar or S-Bahn/train

15:30 meeting point station Brand

15:30 - 18:00 Visit of the CargoLifter Facility (R. Riedel)



Deutsche Gesellschaft für Luft- und Raumfahrt - Lilienthal - Oberth e.V.

- Wissenschaftlich - Technische - Vereinigung -

PROGRAMME

DGLR Workshop V

Flight Systems Lighter Than Air

10 -11 May 2002

TU Berlin

DGLR LTA Committee S2.3
Flugsysteme leichter als Luft

Dipl.- Ing. Mathias Mandel
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Dr.- Ing. Thorsten Lutz
Tel.: 0711 / 685 - 3406
E-mail: lutz@iag.uni-stuttgart.de

Agenda of the meeting

The conference language is German
Discussions will be held in English upon request

Friday, 10.05.2002

8:00 - 8:45 Registration

8:45 - 9:00 Welcome

Research and Development:

Aerodynamics and Flight Mechanics

Chairman: M. Mandel

9:00 Th. Lutz, A. Jakobi, P. Funk, S. Wagner
(IAG, University of Stuttgart)

**DFG Research Group Airship Technology
at the University of Stuttgart-
Aerodynamical Investigations**

9:30 P. Funk, Th. Lutz, S. Wagner
(IAG, University of Stuttgart)

**Measurement of Aerodynamic
Coefficients Related to the Airship „Lotte“
for the Purpose of Flight Simulations**

10:00 D.-A. Wimmer, K.H. Well
(IFR, University of Stuttgart)

**Validation of a Flight Mechanical
Simulation Model from Flight Test Data**

10:30 - 10:45 Coffee Break

Operation and Application

Chairman: B. Knauer

10:45 B. Sträter
(Zeppelin Luftschifftechnik GmbH)

**The First Operational Season of the
German Zeppelin Air Carrier Company**

11:15 Kl. Henning, J.K.Bock
(SLTA)

**Facts on Cruise Liner Tourism - Chances
for Airship Tourism**

11:55 J. Fecher
(Zeppelin Luftschifftechnik GmbH)

**Airship Operation according to
Instrument Flight Rules (IFR)**

12:25 - 14:00 Lunch Break

Research and Development:

Fight control and guidance

Chairman: Th. Lutz

14:00 P. Kungl, M. Schlenker
(ISD, University of Stuttgart)

**Performance of Measuring Flight for
System Identification of Lotte: In-Flight
Data Acquisition On-Board of the Airship**

14:30 A. Kornienko, D. -A. Wimmer, K.H. Well
(IFR, University of Stuttgart)

**Identification of flight mechanical
parameters for the airship Lotte by
inflight tests**

15:00 F. Böhm, A. Kulshreshtha
(TU Berlin)

**Integrated Estimation and
Filter Model for Airship Navigation**

15:30 - 16:00 Coffee Break

Projects and Technologies

Chairman: J.K.Bock

16:00 N. Lewkowicz
(CargoLifter Development GmbH)

Aerostatics o Large Airships

16:30 J. Eissing, B. Kämpf
(CargoLifter Development GmbH)

**Propulsion Arrangement of the
CargoLifter CL160**

17:00 H. Künkler
(IABG)

**AirFerry - a Tentative System
Approach for Short and Medium
Range Transportation**

17:30 D. G. Graber, P. G. Koch, P. F. Rudin
(DEX Ltd.)

**The Spherical Airship: Recent
Development**

from 20:00 Supper

Attendance Fees:

Members and Speakers	€ 30.-
Non-Members	€ 40.-
CargoLifter Excursion Fee	€ 10.-
Proceedings	€ 25.-

The attendance fees do not include food or drinks. During the workshop a catering service will provide food and drinks at reasonable prices. The attendance fees can be paid during the workshop.

Place of Events

The workshop will be held at the TU Berlin,
Institut für Luft- und Raumfahrt (ILR)
Building: Flugtechnik
Marchstr. 14
in lecture room F11(ground floor)

The ILR is located in the immediate vicinity of the Ernst-Reuter-Square, see map. For a detailed description of how to reach the meeting by car/train /aeroplane please look in internet under:

<http://www.tu-berlin.de/uebertu/anreise.htm>



Contact at ILR:

Dipl.- Ing. Florian Böhm
Tel.: 030 / 3142 - 4458
E-Mail: florian.boehm@tu-berlin.de

Hotel Reservation

As there are several events on the weekend of the workshop it is recommended that you make hotel reservations as soon as possible. The ILR recommends the following hotels:

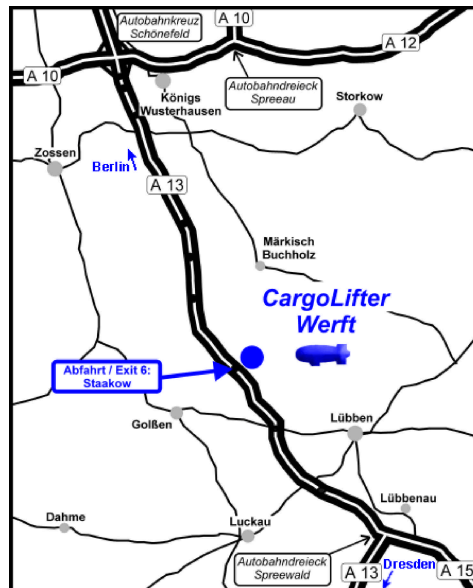
Hotel Gates	(http://www.hotel-gates.de)
single from € 95.-	Tel.: 030 / 311 - 60
Hotel Berlin Excelsior	(http://www.blueband.de)
single from € 110.-	Tel.: 030 / 3155 - 0
Hotel Econtel	(http://www.econtel.de)
single from € 82.-	Tel.: 030 / 346 - 810

You will find a list of hotels in Berlin inclusive Online-Booking under:

<http://www.berlin.de/home/TouristCenter/Unterkunft>
<http://www.travelinside.de/de/hotel/>

Start of CargoLifter

Detailed information how to reach CargoLifter by car or train is available in the internet (<http://www.cargolifter.com>) and will be given during the workshop respectively.



Sender:

Dr.- Ing. Thorsten Lütz
Institut für Aerodynamik
und Gasdynamik
Universität Stuttgart
Pfaffenwaldring 21

70550 Stuttgart

Registration

for the DGLR Workshop V
Flight Systems Lighter Than Air
May 10 - 11, 2002
TU Berlin

Personal Details:

Title:
Last Name:
First Name:
Organisation:
Address:
.....
E-mail:
Phone:

Excursion to CargoLifter Hangar

On Saturday, May 11, 2002 there is an opportunity to visit the CargoLifter hangar in Brand. Transportation from Berlin to Brand is available by use of either private cars or public transportation (local trains). Details will be available during the convention. All participants will meet at 15:30 at the railroad station of Brand from where shuttle bus service will be provided to the hangar.

I will attend the CargoLifter visit with ___ persons.

Please send the filled out registration form latest by 30.04.2002 to:

Dr.- Ing. Thorsten Lutz
Institut für Aerodynamik und Gasdynamik
Universität Stuttgart
Pfaffenwaldring 21
70550 Stuttgart
Fax: 0711 / 685 - 3438



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**IN
VITATION**

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