INTRODUCTION

Welcome to the 29th European Rotorcraft Forum. The Forum will be held in Friedrichshafen, Germany, from Tuesday 16th to Thursday 18th September 2003.

About 100 authors from all over the world will present and discuss papers on recent advances in research, development, design, manufacturing, testing and operation of rotorcraft aiming to foster the exchange of information and views between manufacturers, research centres and laboratories, operators, and agencies. This will be the 29th such Forum since the event started in Southampton in 1975; it has subsequently been held annually in turn in the UK, Germany, France, Italy, The Netherlands and, since 1995, in Russia. The most recent Forum was held in Bristol in 2002.

NATIONAL ORGANISING COMMITTEE

B. Gmelin
DLR Programme Directorate Aeronautics
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Eurocopter Deutschland
D-81663 München, Germany

ERF SECRETARIAT

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Telefax: +49 (0) 228 30 80 524
E-Mail: klaus.schubert@dglr.de
Internet: www.dglr.de
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Eurocopter S.A.S.,
F-13725 Marignane Cedex, France

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Dept. of Aerospace Engineering,
Politecnico di Milano, Via Goldi 40, I-20133 Milano, Italy

Mr. B. Gmelin (Forum Chairman)*
DLR Programme Directorate Aeronautics,
Lilienthalplatz 7, D-38108 Braunschweig, Germany

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Kazan Helicopters, Tetsevskaya Str.,
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Cascina Costa, I-21017 Samarate-Varese, Italy

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Mil. Moscow Helicopter Plant, 2 Sokolnichesky Val, Moscow 107113, Russia

Mr. M. Stephan
Eurocopter Deutschland, D-81663 München, Germany

Mr. A. Vagin
Kamov Company, 8a, The 8th March Str., Lubertsy, 140007, Moscow Region, Russia

Mr. A. Vincent
Westland Helicopters Ltd
Yeovil, Somerset BA20 2YB, UK

* Country Representative
**GENERAL INFORMATION**

**Venue**
**Graf-Zeppelin-Haus**, Olgastrasse 20, D-88045 Friedrichshafen, Germany

The venue chosen, the Graf-Zeppelin-Haus Friedrichshafen, offers excellent conference facilities. The city of Friedrichshafen, well known for its trade fairs and the Zeppelin, offers an interesting mixture of high technology, international flair and a unique recreation area. The panoramic situation on Lake Constance, bordering onto Germany, Austria and Switzerland makes Friedrichshafen one of the most interesting conference venues in Germany.

**Forum Registration**
**Graf-Zeppelin-Haus**, Foyer
Telefon: +49 (0) 7541 378031, Fax: +49 (0) 7541 378032

The registration desk will be open during the following hours:
- Monday 15 September 2003 17:30 - 19:00 hrs
- Tuesday 16 September 2003 07:30 - 18:00 hrs
- Wednesday 17 September 2003 07:30 - 17:30 hrs
- Thursday 18 September 2003 07:30 - 17:30 hrs

**Registration Fees**

<table>
<thead>
<tr>
<th>Category</th>
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<tr>
<td>Chairmen/Speakers</td>
<td>590,00 €</td>
<td>630,00 €</td>
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<tr>
<td>Members of the CEAS/ RHS/AHS</td>
<td>630,00 €</td>
<td>680,00 €</td>
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<tr>
<td>Non Members</td>
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<td>Accompanying Persons</td>
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1) **CEAS**: Confederation of European Aerospace Societies, (AAAF, AIAE, AIDAA, DGLR, FTF, NVvL, RAeS, SVFW)
2) **RHS**: Russian Helicopter Society
3) **AHS**: American Helicopter Society
4) Undergraduate Students, max. age 28 years, please send a copy of your Student ID-Card with your registration form.

All participants (including chairmen and speakers) must complete and return the enclosed Registration Form. Payments must be made in “Euro”, preferably by bank transfer to DGLR account No. 3 403 718, Hypo Vereinsbank (BLZ 380 200 90), D-53175 Bonn, Germany, reference: Participant’s Name and 29th ERF.
The following Credit Cards are accepted: American Express, Mastercard, VISA

Registration fee includes:

- Welcome Drink on Monday, 15 Sep
- ERF Proceedings*
- Attendance at ERF Sessions*
- Refreshments and Lunch on 3 days
- Civic Reception by the Mayor of Friedrichshafen
- Forum Dinner
- Technical Visit

* Not included in the registration fee for accompanying persons

Cancellation
Substitutions may be made up to the day of the Forum. Please notify the Conference Secretariat of name changes as soon as possible. For cancellations received up to 15 August 2003 there will be a 50% refund. If notice is received after that date there will be no refund.

Accommodation
Block reservations at special rates during the Forum have been made for participants at the hotels below. Deadline for all reservations is 1 August 2003.

Please make your reservation as early as possible by using the enclosed fax-leaflet. Hotel bookings will be handled by the TOURIST–Information Friedrichshafen and will be acknowledged by return fax.

Hotels

Seehotel **** (A Category)
Bahnhofsplatz 2
88045 Friedrichshafen

Buchhorner Hof **** (A Category)
Friedrichstrasse 33
88045 Friedrichshafen

City Krone**** (A Category)
Schanzstrasse 7
88045 Friedrichshafen

Goldenes Rad **** (A Category)
Karlstrasse 43
88045 Friedrichshafen

Hotel Föhr  (B Category)
Albrechtstrasse 73
88045 Friedrichshafen

Hotel Goldener Hirsch (C Category)
Charlottenstrasse 1
88045 Friedrichshafen

Hotel Zeppelin  (C Category)
Eugenstrasse 41/1
88045 Friedrichshafen

Hotel Schwanen (C Category)
Friedrichstrasse 32
88045 Friedrichshafen

Hotel Wohlwender (C Category)
Olgastrasse 64
88046 Friedrichshafen
GENERAL INFORMATION (Cont’d)

Language
English will be the official language during the Forum. There will be no simultaneous translation during the sessions.

Proceedings
Every registered participant will receive a CD-ROM with the papers available and a hard copy of the Paper Abstracts when checking in at the Registration Desk. A complete CD-ROM will be sent to all registered delegates about one month after the event.

Luncheons
Lunches will be served in the Hugo-Eckener-Saal of the Graf-Zeppelin-Haus. They are included in the registration fee.

Travel Advice
Friedrichshafen can be easily reached by air, rail and road. Please find travel information on the last pages.

Exhibition
Space for a limited exhibition shall be available conveniently located at the conference area. The exhibition will be open during the entire Forum. Companies and organisations exhibiting will be included in the final programme.

Workshops (by invitation only)

HART Workshop
An international workshop on Rotor Blade-Vortex Interaction (BVI) Air Load and Acoustics Prediction will be hosted by the HART Team on September 15, 2003 at the conference centre. 
Point of contact: Dr. Yung H. Yu, US-Army-NASA; e-mail: yyu@mail.arc.nasa.gov

Noise Regulation Workshop
A workshop on Key Issues for Land Use Planning Development Related to Rotorcraft Operations in Noise Sensitive Areas will be arranged in context with the Forum. Through invited papers from experts in rotorcraft noise sources, operations, subjective acoustics and regulations, this special session will attempt to recognize the different needs and then propose different ways to answer to public expectations in a more efficient way, while ensuring a wealthy economic helicopter market. Appropriate rating metrics, noise measuring techniques, low noise flight procedures, trajectory and noise control systems on ground, as well as operational regulations, are in the scope of this special session.  
Point of contact: Gilles Arnaud, Eurocopter; e-mail: gilles.arnaud@eurocopter.com

Liability
The organising committee and the DGLR cannot be held responsible for any personal injury, loss, damage, accident to private property or additional expenses incurred as a result of any delays or changes. Luggage is at owner’s risk throughout the Forum.
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<thead>
<tr>
<th>Time</th>
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<tr>
<td>07:30</td>
<td>Registration</td>
<td>FOYER</td>
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<td>Opening Ceremony</td>
<td>Ludwig-Dürr-Saal</td>
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<tr>
<td>09:30</td>
<td>Keynote Address</td>
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<tr>
<td>10:00</td>
<td>General Session</td>
<td>Ludwig-Dürr-Saal</td>
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<td>12:00</td>
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<td>Alfred-Colsman-Saal SESSION 2: Dynamics 1</td>
<td>Theodor-Kober-Saal</td>
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<td>15:30</td>
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<td>16:00</td>
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<td>Session 16: Aerodynamics 4</td>
<td>Session 17: Structures &amp; Material 1</td>
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<td>Session 19: Aerodynamics 5</td>
<td>Session 20: Structures &amp; Material 2</td>
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<td><strong>Success through Cooperation</strong></td>
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<td>General Session 1:</td>
<td>Ludwig-Dürr-Saal</td>
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<td></td>
<td><strong>Aspects of Future Civil Helicopter Operations</strong></td>
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<td>Hugo-Eckener-Saal</td>
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<td>Ludwig-Dürr-Saal</td>
<td>Alfred-Colsmann-Saal</td>
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<tr>
<td>14:00</td>
<td>(1) Influence of a Helicopter Tail Rotor Shroud on the Interaction Noise Due to the Main Rotor Vortices</td>
<td>(4) Fundamental Understanding and Prediction of Rotor Vibratory Loads in High-Speed Forward Flight</td>
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<td>M. Weisgerber, G. Neuwerth</td>
<td>J. Sitaraman, A. Datta, J. Baeder, I. Chopra</td>
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<tr>
<td>14:30</td>
<td>(2) Improvement of DLR Rotor Aero-acoustic Code (APSIM) and its Validation with Analytic Solution</td>
<td>(5) Aeroelastic Stability Analysis of Wind-Turbines Using an Eigenvalue Approach</td>
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<td>J. Yin, J. Delfs</td>
<td>M. H. Hansen</td>
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<td>15:00</td>
<td>(3) Airfoil-Vortex Interaction Simulation Using the Compressible Vorticity Confinement Method</td>
<td>(6) New General Code for Helicopter Dynamics Optimisation</td>
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<tr>
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<tr>
<td>16:00</td>
<td>(10) Description and Validation of the ONERA Computational Method for</td>
<td>(12) Design Optimization for Improved Tiltrotor Whirl Flutter Stability</td>
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<td>the Prediction of Blade-Vortex Interaction Noise</td>
<td>E. L. Hathaway, F. Gandhi</td>
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<td>P. Beaumier, Y. Delrieux</td>
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<td>16:30</td>
<td>(11) Acoustic Validation of a New Code Using Particle Wake Aerodynamics and</td>
<td>(13) Design of Experiments Approach to Helicopter Rotor Optimization</td>
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<td>Geometrically-Exact Beam Structural Dynamics</td>
<td>M. S. Murugan, R. Ganguli</td>
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<td>D. Opoku, F. Nitzsche</td>
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<td>17:00</td>
<td>(14) Nonlinear Flapping Oscillations in Helicopter Rotors</td>
<td>(17) Reducing the Vulnerability of Military Helicopters to Combat Damage</td>
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<td>R. Ramos, D. de Andrade</td>
<td>P. Collis, C. McAulay</td>
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<td>19:00</td>
<td>Reception by the Mayor of Friedrichshafen</td>
<td>Zeppelin Museum, Friedrichshafen</td>
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**Wednesday 17 September 2003**

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<tr>
<th>Time</th>
<th>Session 7: Aerodynamics 1 (HART II)</th>
<th>Session 8: Flight Mechanics 1</th>
<th>Session 9: Aircraft Design 2</th>
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<td>07:30</td>
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| 08:30 | (18) HART II: Prediction of Blade-Vortex Interaction Loading  
I. Shaik, W. v. Grünhagen, M. Hamers, H.-J. Pausder | (24) Experimental Studies of Fin and Tail Rotor Interaction Conducted on a Mil Moscow Helicopter Plant Rotor Test Bench  
V. A. Ivchin, M. A. Gringauz |
| 09:00 | (19) Final Analysis of HART II Blade Deflection Measurements  
O. Schneider, B. van der Wall | (22) Handling Qualities Assessment of the Effects of Tailboom Strakes on the Bell 412 Helicopter  
A. W. Gubbels, J. R. P. S. Carigan | (25) Tiltrotor Whirl Flutter, Noise and Performance: the ADYN Project  
A. Pisoni |
| 09:30 | (20) Rotor Wake Definition for Accurate BVI and Broadband Noise Prediction - Results from the HART-II Study  
H. D. Schnell |
<p>| 10:00 | Coffee                              |                             |                              |</p>
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<tr>
<th>Time</th>
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<th>Alfred-Colsmann-Saal</th>
<th>Theodor-Kober-Saal</th>
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<tr>
<td>10:30</td>
<td>(27) High Resolution Wake Modelling Using a Semi-Lagrangian Adaptive Grid Formulation</td>
<td>(31) Simulation of Tiltrotor Motion</td>
<td>(35) FHS, the New Research Helicopter: Ready for Service</td>
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<td>J. Yin, J. Delfs</td>
<td>R. G. Bedford, M. H. Lowenberg</td>
<td>M. Hamers, M. Gläßer</td>
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<tr>
<td>11:30</td>
<td>(29) Experimental Characterisation and Comparison of a Model Helicopter Rotor Tip Vortex and Fixed Wing Tip Vortex</td>
<td>(33) Numerical Simulation of Critical and Transient Conditions of Helicopter Spatial Motion and their Adaptation in Flight Tests</td>
<td>(37) Recent IBC Flight Test Results for the CH-53G Helicopter</td>
</tr>
<tr>
<td>12:00</td>
<td>(30) For the Rotor Vortex Structure Analysis</td>
<td>(34) Development of Ideal Main Rotor Theory and its Application to Aerodynamic Analysis</td>
<td>(38) Requirements Verification Using a Model Based Approach</td>
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<td>V. Anikin, B. Kritsky</td>
<td>A. S. Braverman</td>
<td>B. Freyenberg-Richter, A. Piechullek-Königer, T. Sutor</td>
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<td>12:30</td>
<td>Lunch</td>
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<tr>
<td>14:00</td>
<td>General Session 2: Rotorcraft History in Germany</td>
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<td>Ludwig-Dürr-Saal</td>
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</table>
| 15:30 | (39) Application of CFD to the Fuselage Aerodynamics of the EC145 Helicopter. Prediction of Unsteady Phenomena and of the Time-averaged Influence of the Main Rotor  
A. D’Alascio, A. Berthe | (43) Closed-Loop Aeromechanical Stability Analysis for a Helicopter with Higher Harmonic Control  
K. Gajda, J. Narkiewicz |
|       |                                                                                 | (44) Advanced Vibration Reduction by IBC Technology  
D. Roth |                                                                                       |
| 16:00 | (40) Calculations of Aerodynamic Interaction between Helicopter Rotor and Fuselage by Free Wake Method  
Q. Zhao, G. Xu, C. Li, J. Zhao | (45) NASA/Army/MIT Active Twist Rotor Closed-Loop Control Test for Vibration Reduction  
S. Shin, C. E. S. Cesnik, S. R. Hall | (48) Analytical Method to Determine Dynamic Forces on Sub-Scale Helicopter Blades at ONERA, France  
P. Crozier |
| 16:30 | (41) Application of Cartesian Background Grid in Combination with Chimera Method to Predict Aerodynamics of Helicopter Fuselage  
W. Khier | (46) Reduction of Vibrations Transmitted to Helicopter Airframes Using Active Gearbox Struts  
L. Dozio, E. Bianchi, G. L. Ghirinelli, P. Mantegazza, F. Cenedese | (49) Wind Tunnel Testing of a Helicopter Fuselage and Rotor in a Ship Airwake  
R. G. Lee, S. J. Zan |
| 17:00 | (42) Navier-Stokes Computations of a Complete Helicopter Configuration Accounting for Main and Tail Rotors Effects  
T. Renaud, C. Benoît, J.-C. Boniface, P. Gardarein | (47) Reduction of Vibrations Transmitted to Helicopter Airframes Using Active Gearbox Struts  
L. Dozio, E. Bianchi, G. L. Ghiringhelli, P. Mantegazza, F. Cenedese | (50) Active Tab, a New Active Technique for Helicopter Noise Reduction  
N. Kobiki, A. Takeshi, K. Natsuki, S. Shigeru, T. Anzhong |
<p>| 17:30 | End of Session                                                                   |                                                                                     |                                                                                   |
| 19:30 | Conference Dinner                                                               |                                                                                     |                                                                                   |</p>
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<tr>
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<td>Ludwig-Dürr-Saal</td>
<td>Session 16: <strong>Aerodynamics 4</strong> Chairman:</td>
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<tr>
<td>08:30</td>
<td>(51) Dynamic Stall on a Supercritical Airfoil</td>
<td>Alfred-Colsmann-Saal</td>
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<td>W. Geissler, G. Dietz, H. Mai</td>
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<tr>
<td>09:00</td>
<td>(52) The Application of Air-jet Vortex Generators to Control the Flow on Helicopter Rotor Blades under Quasi-steady and Unsteady Conditions</td>
<td>Theodor-Kober-Saal</td>
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<td>C. Singh, D. J. Peake, F. Coton, R. Galbraith, A. Kokkalis</td>
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<td>Ludwig-Dürr-Saal</td>
<td>Alfred-Colsmann-Saal</td>
<td>Theodor-Kober-Saal</td>
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<td><strong>Session 19: Aerodynamics 5</strong></td>
<td><strong>Session 20: Structures &amp; Materials 2</strong></td>
<td><strong>Session 21: Modelling &amp; Simulation 2</strong></td>
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</table>
|       | (60) TILT Rotor AERodynamics: A Comparative Study of Prediction Methodologies Using the PROPWING Database  
A. Visingardi, S. G. Voutsinas, A. Saporiti | (64) High Energy Absorbing Structure for Rotorcraft Crashworthiness  
J. G. A. da Silva, E. P. N. Duque, L. S. Cicolani |
|       | (61) A Time-dependent-Coefficient Reduced-Order Model for Unsteady Aerodynamics of Proprotors  
M. Gennaretti, L. Greco | (65) A Design Solution for a Crashworthy Landing Gear Based on a New Trigger Mechanism for the Plastic Collapse of Metallic Tubes  
A. Airoldi | (68) Use of Potential Flow State-Space Inflow Modeling for Mass Source Rotors  
K. Yu, D. A. Peters |
|       | (62) Efficient Rotor Aerodynamics Predictions with an Euler Method  
M. Biava, A. Pisoni, A. Saporiti, L. Vigevano | (66) Preliminary Study on Structural Properties of Active Twist Blades  
J. Riemenschneider | (69) Neural Networks for BVI System Identification  
H. Gläßel, S. Rudolph, J. Kahl, O. Dieterich |
|       | (63) Chimera Simulations of Multibladed Rotors in High-Speed Forward Flight with Weak Fluid-Structure-Coupling  
K. Pahlke, B. van der Wall | | (70) Autogyro Inverse Simulation for Handling Qualities Assessment  
M. Bagiev, D. G. Thomson, S. S. Houston |
<p>| 12:00 | Lunch                                                                            | |                                                                                   |
| 14:00 | <strong>General Session 3: Advanced Rotorcraft</strong>                                        | |                                                                                   |
| 15:00 | Coffee                                                                           | |                                                                                   |</p>
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<tr>
<th>Time</th>
<th>Ludwig-Dürr-Saal</th>
<th>Alfred-Colsmann-Saal</th>
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<tr>
<td></td>
<td>A. Le Pape, P. Beaumier</td>
<td>L. Lanzi, C. Bisagni, P. Cordisco</td>
<td>A. V. Chuntul</td>
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<tr>
<td>16:00</td>
<td>(72) Improving Reduced Aerodynamic Models Using Computational Fluid Dynamics</td>
<td>(76) Industrial Applications of Shearography for Inspection of Aircraft Components</td>
<td>(78) Design of a Primary Fly-by-Light Control System</td>
</tr>
<tr>
<td>16:30</td>
<td>(73) CFD Simulation of Fire Extinguishing System: Two Gases Mixture inside the Engine Bay</td>
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<td>(79) A Comparison of Flight Guidance Symbologies for Obstacle Avoidance during Helicopter NOE Flight</td>
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<td>A. Berthe, A. D`Alascio</td>
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<td>V. Gollnick, R. Gaffal</td>
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<td>17:00</td>
<td>(74) The Analytical Definition of Rotor Streamtube to Step in 3D Navier-Stokes Flow Numerical Solution for Helicopter in Hover</td>
<td></td>
<td>(80) COFEUX - An In-flight Validation of the Operational Concept for the Control of Air-to-Ground Weapons on Army Helicopters</td>
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<td>I. T. Karamisir</td>
<td></td>
<td>C. Cabirol</td>
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<tr>
<td>17:30</td>
<td>Close of Conference</td>
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SOCIAL PROGRAMME

Welcome Drink
Monday 15 September 17:30 hrs
For early registrants welcome drinks will be served in the Foyer of the Graf-Zeppelin-Haus until 19:00 hrs, giving you the opportunity to meet prior to the Forum.

Civic Reception
Tuesday 16 September 19:00 hrs
This will be held in the “Zeppelin Museum” and will be hosted by the Mayor of Friedrichshafen. Drinks and snacks will be served. Accompanying persons are welcome to attend.

Conference Dinner
Wednesday 17 September 19:30 hrs
An informal dinner will be held on the MS Schwaben (Motorship). The “Dreiländer-Bodensee” buffet will offer you a variety of regional cold and warm specialities.

SIGHTSEEING PROGRAMME

Friedrichshafen
Tuesday 16 September 10:30 - 16:00 hrs
*Your Price:* —
A guided city tour through Friedrichshafen.

Meersburg-Mainau
Wednesday 17 September 08:30 - 16:00 hrs
*Your Price:* 38,00 €
*Minimum Participants:* 25

*Alternate: Bregenz-Austria*
*Your Price:* 23,60 €
*Minimum Participants:* 6

Castle Neuschwanstein
Thursday 18 September 08:30 - 18:00 hrs
*Your Price:* 58,00 €
*Minimum Participants:* 25

*Alternate: Lindau*
A guided city tour through Lindau.
*Your Price:* 16,00 €
*Minimum Participants:* 6
Friday 19 September 2003

? Astrium GmbH
88039 Friedrichshafen
Scientific and Earth Observation Satellites
Microwave Instruments

? MTU Friedrichshafen GmbH
88040 Friedrichshafen
MTU offers propulsion and drive systems for a multitude of applications. From workboats through passenger ferries to yachts, very different marine areas are served. In individual segments, as for example with high-speed ferries or mega yachts, our company has achieved a leading position worldwide. Naval applications are another major focus of MTU’s activities.

There will be the opportunity to visit two more factories, pointed out in the final Programme.
Hotel Fohr is in the vicinity of the venue (5 minutes walk)
Mit dem PKW
Aus Richtung Stuttgart:
> A81 und A96 bis zum Autobahnende
> Stockach, B31n (in Richtung Lindau)
> bis Friedrichshafen

Aus Richtung Ulm:
> B30 über Ravensburg nach Friedrichshafen

Aus Richtung München:
> A96 Richtung Lindau, Abfahrt
> Sigmarszell/Friedrichshafen
> oder bis Romanshorn und mit der
> Bodenseefähre in Lindau bis Friedrichshafen

Aus Richtung Zürich:
> N7 bis Kreuzlingen/Konstanz
> Autofahre Meersburg
> oder über Romanshorn then with the
> Bodenseefähre in Lindau bis Friedrichshafen

Aus Richtung St. Gallen:
> N1 zu Romanshorn
> Autofahre Friedrichshafen

Aus Richtung Österreich:
> über München
> A96 Richtung Lindau
> oder über Arlberg/Bregenz/Lindau

Mit der Bahn
In Deutschland:
> InterRegio- bzw. Regionalexpress-Anschluss
> aus Richtung Basel, Freiburg, Offenburg,
> Karlsruhe, Stuttgart, Ulm, Augsburg bis
> Friedrichshafen

Aus der Schweiz:
> SBB-Strecke Basel/Lindau
> oder bis Romanshorn und mit der
> Bodenseefähre in Lindau bis Friedrichshafen

Aus Österreich:
> über München/Ulm
> oder ÖBB-Strecke über Bregenz/Lindau bis Friedrichshafen.

Mit dem Flugzeug
Deutsche Lufthansa:
> Direktflüge ab Berlin Tegel, Hamburg
> ab Köln und dem Drehkreuz Frankfurt
> ab München oder Berlin Tegel
> über Frankfurt kann die Anreise aus aller Welt
> erfolgen.

Crossair:
> Direktflüge von zahlreichen EuroCross
> Destinationen via Basel nach Friedrichshafen.

Auskünfte über nicht aufgeführte Flugverbindungen erhalten Sie in Ihrem Reisebüro am
> Heimatort. Als Alternative zum Flughafen
> Friedrichshafen steht der Flughafen Zürich
> (Schweiz) zur Verfügung. Von Flughafen Zürich
> besteht eine Direktverbindung mit Bahn und
> Fähre nach Friedrichshafen.

By Car
From Stuttgart:
> A81 and A96 to the end of the motorway
>Stockach, B31n (direction Lindau)
> to Friedrichshafen

From Ulm:
> B30 via Ravensburg to Friedrichshafen

From Munich:
> A96 direction Lindau, exit
> Sigmarszell/Friedrichshafen
> or via Arlberg/Bregenz/Lindau

From Zürich:
> N7 to Kreuzlingen/Konstanz
> Car ferry to Meersburg
> or via Arlberg/Bregenz/Lindau

From St. Gallen:
> N1 to Romanshorn
> Car ferry Friedrichshafen

From Austria:
> via Munich
> or via Romanshorn then with the Bodensee
> ferry, hourly service to Friedrichshafen

By Train
In Germany:
> InterRegio or Regional express connections
> from Basel, Freiburg, Offenburg, Karlsruhe,
> Stuttgart, Ulm, Augsburg to main station
> Friedrichshafen

From Switzerland:
> SBB line Basel/Lindau
> or via Romanshorn then
> with the Bodensee
> ferry, hourly service to Friedrichshafen

From Austria:
> via München/Ulm
> or ÖBB line via Bregenz/Lindau to
> Friedrichshafen.

By Air
Lufthansa:
> Direct flights from Berlin Tegel, Hamburg
> from Köln via Frankfurt
> ab München via Berlin Tegel
> via Frankfurt for international arrivals.

Crossair:
> Direct flights from many EuroCross
> destinations via Basel to Friedrichshafen.

Information on air connections that have not been mentioned can be obtained from your
local travel agency. As an alternative to
> Friedrichshafen airport there is Zurich airport
(Switzerland). There is a direct connection by
rail and ferry from Zurich airport to
> Friedrichshafen.
Registration Form
29th European Rotorcraft Forum, 16-18 September 2003, Graf-Zeppelin-Haus Friedrichshafen, Germany

NAME ___________________________________________ FIRST NAME(s) ___________________________________________

TITLE ___________________________ TELEPHONE ___________________________ FAX ___________________________

COMPANY / ORGANIZATION ___________________________ E-Mail: ___________________________

ADDRESS ___________________________________________

Payment by bank transfer for the sum of EURO _____________ to DGLR „29 ERF“ through Hypo Vereinsbank, Bonn, Germany, Account No. 3403718, Bank-No. (BLZ 380 200 90). Please print the name of the participant and “29 ERF” on the transfer form.

Credit Card-payment for the sum of € _____________  American Express  Mastercard  VISA

Card Number ___________________________ Expiration Date _____________

REGISTRATION FEE (please mark your fee category)  
 Chairmen & Speakers 590 € 630 €  
 Members of CEAS / RHS/ AHS 630 € 680 €  
 Non-Members 680 € 750 €  
 Students* 250 € 280 €  
 Accompanying Spouses 150 € 180 €  

*Undergraduate Students only, max. age 28 years, please send a copy of the Student ID-Card with your registration form

The registration fee includes one set of the Forum Proceedings (not for Accompanying Persons), Welcome Drinks, Refreshments, Reception, Lunch on 3 days, Forum Dinner. For Cancellations received up to 15 August 2003 there will be a 50% refund. If notice is received after that date there will be no refund.

Signature ___________________________________________

Date ___________________________________________
Reservation for the Social Programme requested

Please print number of Participants:

_____ Civic Reception
Tuesday, 16 September 2003

_____ Forum Dinner
Wednesday, 17 September 2003

_____ City Sightseeing Tour
Tuesday, 16 September 2003

_____ “Meerburg-Mainau” Tour
Wednesday, 17 September 2003

_____ “Castle New Schwanstein”
Thursday, 18 September 2003

_____ Technical Tour
Friday, 19 September 2003

Please note that the tours can only be organized if there is sufficient response. Participants are kindly asked to mark the number of attending persons for each event.

DGLR
Deutsche Gesellschaft für Luft- und Raumfahrt - Lilienthal-Oberth e.V.
Godesberger Allee 70
D-53175 Bonn
Germany
29th European Rotorcraft Forum
September 16th – 18th, 2003
Friedrichshafen

Tourist Information
Inge Klein / Brigitte Glatzel
Postfach 24 60
D-88014 Friedrichshafen

<table>
<thead>
<tr>
<th>Category</th>
<th>Room price incl. breakfast and tax</th>
<th>Single</th>
<th>Double</th>
<th>3 Bed</th>
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<tbody>
<tr>
<td>A</td>
<td>Bath or Shower/WC</td>
<td>€ 95-130</td>
<td>120-165</td>
<td>140-180</td>
</tr>
<tr>
<td>B</td>
<td>Shower/WC</td>
<td>€ 65-95</td>
<td>90-120</td>
<td>115-140</td>
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<tr>
<td>C</td>
<td>Shower/WC</td>
<td>€ 45-65</td>
<td>60-90</td>
<td>90-115</td>
</tr>
</tbody>
</table>

If the requested room-category is not available, please reserve category: ________

Hotel choice - If you prefer a specific hotel, please let us know: ________________________________

Please, book your room in time as the room-quota is only available until 4 weeks before the event starts. After that, room requests can only be fulfilled according to daily availability.

Arrival: ______________________  Departure: ______________________

Full address:

If company-address, please, give name of the company::

First and Surname:

Address:

Postal code and town:  Country:

Dialling code country:  Dialling code town:  Tel.:  Fax:

Creditcard No.:  Company:  Expiry date:

Date:  Signature:

Arrival by:  Train _____  Car _____  Plane _____  Bus _____
The Tourist-Information only acts as an agent between the guest and the accommodation facility. I accept that upon receipt of my written reservation that this is a binding agreement between guest and accommodation facility. Cancellations must be made early enough to allow the accommodation management to re-let the room, otherwise a cancellation fee will be applicable.