Bonded Composite Repair of Aircraft Structures: Contemporary Challenges and Latest Innovations

Session 1: Introduction to Composite Repair
Session 2: Bonding Techniques
Session 3: Material Properties and Selection
Session 4: Damage Assessment and Repair Design
Session 5: Repair Implementation and Monitoring
Session 6: Case Studies and Lessons Learned

With the participation of distinguished speakers from:

AIRBUS
AIRFRANCE INDUSTRIES
KLM Engineering & Maintenance
Fraunhofer IFAM
UNIVERSITY OF PATRAS

More information: www.easn-tis.com/cpd
Getting around Paris

We highly recommend that upon arrival to issue the so-called Navigo Weekly Travel Pass.

The card has many advantages as:

- it allows UNLIMITED travel with all public transportation means (including from and to the airport).
- It is valid for one (1) week (from Monday to Sunday).
- It costs 22.80 Euro for "All Zones" (+ 5 Euro for the first time you issue the card).

What you would only need is a small photo (~3x3cm) of yours, so please don’t forget to bring one with you.

More information regarding Navigo Weekly Travel Pass Website

- Navigo Weekly Travel Pass Printable file

The Venue

CLUB LAFFITTE (Room: Degas) 54, rue Laffitte 75009 PARIS • https://club-laffitte.com

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EASN Association teams up with GMI Aero and organize a **SEMINAR** on

**Bonded Composite Repair of Aircraft Structures: Contemporary Challenges and Latest Innovations**

**When:** 18-20.06.2019  
**Where:** Paris, France

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**AGENDA**

**Day 1 • Tuesday, June 18th 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Subject</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>08:30 - 09:00</td>
<td>Registration</td>
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</tbody>
</table>
| 09:00 - 09:15 | Official Welcome                                                        | **Prof. Spiros Pantelakis**  
EASN Association |
| 09:15 - 09:45 | Aircraft Composite Repair – Evolution and Challenges                  | **Mr. Roland Chemama**  
GMI Aero |
| 09:50 - 10:35 | Main composite repair types and application procedures                | **Dr. George Kanterakis**  
GMI Aero |
| 10:35 - 11:00 | Coffee Break – Networking                                               |                                                                            |
| 11:00 - 12:00 | **Key Note Lecture**  
New Aircraft, New Materials, New Repairs                                | **Mr. Guillaume Ferrer**  
Airbus Customer Services |
| 12:00 - 12:45 | Numerical design and virtual testing of bonded composite repairs      | **Prof. Konstantinos Tserpes**  
University of Patras |
| 12:45 - 14:00 | Lunch Break – Networking                                               |                                                                            |
| 14:00 - 14:45 | Basic composite repair equipment – Description & Demo                 | **Mr. Konstantinos Kitsianos**  
GMI Aero |
| 15:00 - 15:45 | Composite repair advanced solutions & innovations                      | **Dr. George Kanterakis**  
GMI Aero |
| 16:00 - 16:45 | Complex Composite Repair Case studies                                  | **Prof. Konstantinos Kitsianos**  
GMI Aero |
| 16:45 - 17:00 | Q&A session – Open Discussion                                          | All                                                                       |

| 21:00 | Official CPD Seminar Dinner                                             | All                                                                       |

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- **Fraunhofer IFAM**
- **UNIVERSITY OF PATRAS**

More information: www.easn-tis.com/cpd
### AGENDA

**Day 2 • Wednesday, June 19\(^{th}\) 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Subject</th>
<th>Instructor</th>
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</table>
| 09:00 - 09:45 | Bondline quality challenges and inspection methods                       | Dr. Kai Brune  
Fraunhofer IFAM                                   |
| 09:45 - 10:30 | NDT of bonded composite repairs                                           | Dr. Kai Brune  
Fraunhofer IFAM                                   |
| 10:30 - 11:00 | Coffee Break – Networking                                                |                                                 |
| 11:00 - 12:00 | **Key Note Lecture**  
Technical Challenges and Innovations in Bonded Composite Repair of Commercial Aircraft | Mr. Philippe Servant  
AFI KLM E&M                                         |
| 12:00 - 12:45 | Mechanical Testing of Bonded Composite Repairs                           | Prof. Konstantinos Tserpes  
University of Patras                                 |
| 12:45 - 14:00 | Lunch Break – Networking                                                 |                                                 |
| 14:15 - 15:00 | The effect of pre-bond contamination and ageing on the strength of the bondline | Prof. Konstantinos Tserpes  
University of Patras                                 |
| 15:00 - 15:45 | SHM of bonded composite repairs                                           | Dr. Aggelos Christopoulos  
GMI Aero                                                 |
| 15:45 - 17:00 | Q&A session – Closing Remarks – Demonstration of Innovative Composite Repair Equipment and Methodologies | All                                             |

**Day 3 • Thursday, June 20\(^{th}\) 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Subject</th>
</tr>
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<tbody>
<tr>
<td>10:00-16:00</td>
<td>Visit to selected Aeronautical Stakeholders (Cleansky 2, IPSA etc.) inside Le Bourget Air Show</td>
</tr>
</tbody>
</table>

With the participation of distinguished speakers from:

- **AIRBUS**
- **AIRFRANCE**
- **KLM**
- **Fraunhofer IFAM**
- **UNIVERSITY OF PATRAS**
Social Events

1. Official CPD Seminar Dinner

When: Day 1: June 18th, 2019 17:30 / 21:00
Where: Musée Grévin (10 Boulevard Montmartre, 75009 Paris)

The social event of the first day includes:

- **17:30 Visit of Musée Grévin**: The Musée Grévin is a must-see in Paris. Opened in 1882, it is the wax museum of Paris. There, you will be able to see representations of famous individuals that have had an impact on the course of human history.

- **21:00 Dinner at Café Grévin**: After your visit inside the museum (Musée Grévin) special arrangements have been made in order for the participants to enjoy the Official CPD Seminar Dinner.

- **How to reach Musée Grévin**: The participants will go all together right after the seminar: walking 15 min.

Don’t forget your cameras!

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**Social Events**

**Musée Grévin**

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- **KLM Engineering & Maintenance**
- **Fraunhofer IFAM**
- **University of Patras**

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**Social Events**

**Café Grévin**

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### Social Events

**Café Grévin**

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**Buffet**

**Salty**
- Tomato Gazpacho
- Caesar Salad

- Mini Chicken Sandwich
- Mushroom Quiche
- Mini Salmon Sandwich

- Seasonal Mushroom Risotto
- Goat Cheese, Honey and Nuts

**Sweet**
- Madeleine
- Sweetness with chocolate
- Seasonal fruit pie
- Seasonal fruit salad

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1 glass of champagne & Apéritif
2 glasses of wine (Bordeaux or chardonnay)
Water
Coffee or Tea

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With the participation of distinguished speakers from:

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More information: www.easn-tis.com/cpd
Social Events

2. Visit inside Le Bourget Air Show

When: Day 3: June 20th, 2019 10:00
Meeting: Thursday 09:00, Outside Gare du Nord

Please send us until Monday 10th of June your ID card number your Details (Name and surname) and your Date of Birth in order to ensure your entrance there!

Contact Information

- Sarah BAGLIONE: +33 6 21 68 10 57 (call & whatsapp)
- George KANTERAKIS: +33 6 81 00 87 69 (call)

Do not hesitate to call us for any additional information or emergency!

With the participation of distinguished speakers from: