

GoR – Structures and Materials

53rd Meeting to be held at ONERA, Paris– France on 20/21 October 2005

20 October 14.00 a.m.

1 Opening remarks and adoption of Agenda

2 Summary Records 52nd GoR meeting

3 Action Items

| Action Item | Responsibility | Action |
|-------------|------------------------------------|---|
| 52.1 | Thea van der Helm | Remove M. Mahé from the IPoC list |
| 52.2 | Tasadduq Khan | Try to contact Dassault for a new IPoC |
| 52.3 | All | To check the correctness of the various information pages on the GARTEUR website |
| 52.4 | All | All GoR members should inform each other on a regular basis about developments on nanotubes |
| 52.5 | Jonathan Dee | Will give a presentation on nanotubes at the next GoR meeting |
| 52.6 | Roger Ohayon | Maybe an A4 proposal should be made on "Morphing wing" program |
| 52.7 | Sören Nilsson | Prepare a short presentation on shape control actuators for the next GoR meeting |
| 52.8 | Rien van Houten | Put SM-AG 25 report on the GARTEUR website |
| 52.9 | Tasadduq Khan | ONERA is not participating in the AG29. T. Khan will find out and report in the next GoR |
| 52.10 | Jaap Wiggenraad | The finalising of the SM-EG28 proposal does not require action now see also 52.14 / 52.15 |
| 52.11 | Klaus Rohwer | Approach the person in charge of the AG28 for letters of adherence and acceptance |
| 52.12 | Klaus Rohwer | Ask F. Roudolff how to finalise AG28 work and the final report |
| 52.13 | Paul Curtis | Ask Airbus UK contact person name for Jonathan Dee |
| 52.14 | Jaap Wiggenraad | Send around NLR proposal EG28 on Materials Properties during curing |
| 52.15 | All | In Fall 2005 meeting decide who wants to participate in EG28: Material properties during curing |
| 52.16 | Roger Ohayon | R. Ohayon will ask Michelle Willows to give a presentation on AG30 S&M. |
| 52.17 | Aniello Riccio | Approach the different countries and see if they want to join this activity to form an EG. Then indicate the person to participate in the next meeting (Damocles3) |
| 52.18 | Aniello Riccio | Chairman for Exploratory Group called EG31 : "Damage growth in composites". |
| 52.19 | Paul Curtis | Ask Peter Lloyd to attend the EG meeting on smart actuators |
| 52.20 | Ansell, Wiggenraad, Dee, Minuto | Check interest to join the EG on smart actuators |
| 52.21 | Roger Ohayon | Will be the transfer co-ordinator and should exchange information between the Helicopters and Structures and Materials Group of Responsables. Then later a workshop should be organised and a joint meeting |
| 52.22 | Jaap Wiggenraad | Inform chairman Helicopters group next Fall meeting of the council and ask Mr. F. Toulmay of AG15 (EG23) to give a presentation during this meeting |
| 52.23 | All | Decide whether it is, both civil and military, of enough interest to form a Garteur Exploratory Group on 'Methods for mass estimation' |

GoR – Structures and Materials

| Action Item | Responsibility | Action |
|-------------|----------------|--|
| 52.24 | All | There should be more involvement of the Universities from other countries |
| 52.25 | Harold Ottens | Ask B. Oskam and the EU for proposal on ERA-NET: Air TN and send this to all the GoR S&M members |
| 52.26 | Thea | Put Appendices on the GoR website straight away and mail the members accordingly. Will mail the particulars of Henk Jan ten Hoeve to Hans Ansell Will update the meeting-schedule with dates and places (see website). |

4 Progress reports and status on current AG's

| | |
|---|-----------|
| AG 27 <i>Fractographic Aspects of Fatigue Failure in Complex Composites</i> | P. Curtis |
| AG 28 <i>Impact Damage and Repair of Composite Structures</i> | K. Rohwer |
| AG 29 <i>Interchangeability composite material</i> | P. Curtis |
| AG 30 <i>High velocity impact</i> | R. Ohayon |
| Check letters of acceptance and letters of adherence per participants. | |

5 Progress reports on current EG's

| | |
|--|------------------|
| EG 28 <i>Material Properties during curing</i> | J.F.M. Wiggeraad |
| EG 30 <i>Damocles3</i> | A. Riccio |
| EG 31 <i>Damage growth in composites</i> | A. Riccio |

6 Possible new activities, preparation pre-proposal (A4-format)

| | |
|--|-----------|
| 1. <i>Smart actuators</i> | T. Khan |
| 2. <i>Structural integrity high speed machined parts</i> | H. Ansell |
| 3. <i>Health Monitoring</i> | T. Khan |
| 4. <i>Mass estimation</i> | P. Curtis |
| 5. <i>Thru-thickness</i> | P. Curtis |
| 6. <i>High temperature composites</i> | P. Curtis |
| 7. <i>Nanotubes</i> | J. Dee |
| 8. <i>Morphing Wing</i> | R. Ohayon |

7 Technology watch and new ideas

8 Presentations

- Jonathan Dee: nanotubes (AI 52.5)
- Sören Nilsson: shape control actuators (AI 52.7)
- Michelle Willows AG30 (AI 52.16)

GoR – Structures and Materials

- 9 New chairmanship**
2006-2007 chairmanship Spain
- 10 Report from Council Meeting, 19 October Toulouse** J.F.M. Wiggeraad
- 11 ERA-NET : Air NT and GARTEUR**
- 12 Website update**
- 13 Any other business**
- 14 Date and place of next meeting**
54th meeting: 20/21 April 2006 in Torrejon - Spain, INTA
55th meeting: Autumn 2006 in the UK
- 15 Closure of the meeting 11.00 hours**
followed by
Tour at Palaiseau