12th JOINT EUROCAE WG-98 / RTCA SC-229- Meeting Minutes
“Aircraft Emergency Locator Transmitters (ELTs)”

<table>
<thead>
<tr>
<th>Date</th>
<th>Tuesday 12th through Friday 15th December 2017</th>
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<tbody>
<tr>
<td>Place</td>
<td>Washington D.C., U. S. A.</td>
</tr>
<tr>
<td>Venue</td>
<td>RTCA, 1150 18th St, NW, Washington, DC 20036</td>
</tr>
<tr>
<td>Hosted</td>
<td>RTCA</td>
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Present:

<table>
<thead>
<tr>
<th>First Name</th>
<th>Name</th>
<th>Company</th>
</tr>
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<tbody>
<tr>
<td>Richard</td>
<td>Anderson</td>
<td>Boeing</td>
</tr>
<tr>
<td>Xavier</td>
<td>Audouze</td>
<td>EASA</td>
</tr>
<tr>
<td>Alain</td>
<td>Bouhet</td>
<td>Orolia-McMurdo</td>
</tr>
<tr>
<td>Erin</td>
<td>Boyle</td>
<td>US Coastguard</td>
</tr>
<tr>
<td>Claude</td>
<td>Cresp</td>
<td>ELTA</td>
</tr>
<tr>
<td>John</td>
<td>Fisher</td>
<td>FAA</td>
</tr>
<tr>
<td>David</td>
<td>Fuhrmann</td>
<td>USAF</td>
</tr>
<tr>
<td>Charisse</td>
<td>Green</td>
<td>FAA</td>
</tr>
<tr>
<td>Christopher</td>
<td>Hoffman</td>
<td>ACR Electronics, Inc.</td>
</tr>
<tr>
<td>Olivier</td>
<td>Hohin</td>
<td>ELTA</td>
</tr>
<tr>
<td>Christophe</td>
<td>Horiot</td>
<td>Airbus</td>
</tr>
<tr>
<td>Fadl</td>
<td>Khalil</td>
<td>Boeing</td>
</tr>
<tr>
<td>Majed</td>
<td>Koubieissi</td>
<td>Cobham</td>
</tr>
<tr>
<td>Dan</td>
<td>Lemon</td>
<td>NOAA</td>
</tr>
<tr>
<td>Rebecca</td>
<td>Morrison</td>
<td>RTCA</td>
</tr>
<tr>
<td>Tom</td>
<td>Pack</td>
<td>ACR Electronics</td>
</tr>
<tr>
<td>Philippe</td>
<td>Plantin de Hugues</td>
<td>BEA</td>
</tr>
<tr>
<td>Dany</td>
<td>St-Pierre</td>
<td>COSPAS-SARSAT</td>
</tr>
<tr>
<td>Richard</td>
<td>Smith</td>
<td>NTSB</td>
</tr>
<tr>
<td>Stuart</td>
<td>Taylor</td>
<td>HR Smith</td>
</tr>
<tr>
<td>George</td>
<td>Theodorakos</td>
<td>NASA</td>
</tr>
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Day 1 – Tuesday 12th December 2017 (9:00 AM – 5 PM)

1. Welcome/Introductions/Administrative Remarks/DFO FACA Statement

Tom Pack welcomed everyone to RTCA for the joint RTCA SC-229 and EUROCAE WG-98 meeting.

Charisse Green, FAA DFO, opened the meeting announcing the Federal Advisory Committee Act, stating that the Advisory Committee meeting was open to the public. Charisse advised members that a Notice of the meeting had been published in the Federal Register on October 31, 2017 and that attendance was open to the interested public.

Rebecca Morrison announced a statement on behalf of RTCA/EUROCAE discussing regulation including the RTCA Proprietary Policy, the EUROCAE IPR Policy and RTCA/EUROCAE Membership Policies.

_The full presentation is available on the Web space._

**Questions** - No questions.

Rebecca welcomed everyone to RTCA headquarters and discussed logistics for the week.

Tom asked for round table introductions and group members were asked to sign the attendance list.
2. Agenda overview and approval

Tom & Philippe reviewed the agenda from the on-screen presentation discussing the plan for the week.

Day 1 Welcome/Introductions/Administrative Remarks

- Welcome/Introductions/Administrative Remarks/DFO FACA Statement
- Agenda overview and approval
- Minutes Paris meeting review and approval
- Review Action Items from Paris meeting
- “Phasing in” RTCA/DO-204B, EUROCAE/ED-62B –Timeline and ToR
- WG status and week’s plan
- Working group of the whole meeting (rest of the day) to answer the comments received during the Pre-FRAC / Pre-Open Consultation

Day 2 & 3

- Working group of the whole meeting to answer the comments received during the Pre-FRAC / Pre-Open Consultation

Day 4

- Action item review
- Consider a motion to open Final Review and Comment/ Open Consultation on the revision to RTCA/DO-204B, EUROCAE ED-62B
- Future meeting plans and dates for formal FRAC / Open Consultation
- Other business
- Adjourn

The agenda was approved.

3. Minutes Paris meeting review and approval

Stuart provided an update of the minutes produced from the Paris meeting.

There were no questions regarding the minutes and they were considered to be accepted.


Tom provided a summary of events from previous meetings and that since the last meeting in Paris, Philippe had produced a single document with all changes highlighted with the help of Anna. He announced that a further Telecom took place late September and PreFRAC started on 26 September.

Tom announced that on 15th January, the document should be distributed for FRAC for 45 days.

He suggested that by the next meeting in March 2018, the joint plenary would review all of the comments received and hoped that a FRAC resolution and consensus on the final documents would be available to send to the PMC and Council in May 2018.

He announced that by June 2018, if successful the Publication of the documents will be posted on RTCA / EUROCAE Websites as ED-62B and DO-204B
5. **WG status and week’s plan**

Tom announced that since the Pre-FRAC was launched, over 1200 comments had been received and approximately 800 of them with a proposed solution. He said that all of the comments and a copy of the draft document, ED-62B had been sent to group members on the 1st December.

He proposed that the group starts the week, working as plenary on the ‘TBDs’ for group members to try and provide a resolution. Then review all comments from submitters to check if the answers proposed are appropriate whilst reviewing ED-62B to see if everyone agreed with the proposals.

Philippe reviewed the spreadsheet which was categorised- TBD’s and 1 – 5 in order of complexity to prioritise on during the week. He noted that since the publication of the document, Tom had worked on the document to make some proposals that were highlighted in green.

6. **Working group Plenary (rest of the day)**

The group started to work on Philippe’s spreadsheet by filtering the spreadsheet into ‘non concurs’ from section 6,1 and continued to answer the comments received during the Pre-FRAC Pre-Open Consultation for the rest of the day.

**Day 2 & 3**

The Working group continued to answer the comments received during the Pre-FRAC / Pre-Open Consultation for the two days.

**Day 4 – Friday 15th December 2017**

Tom welcomed everyone back and announced that the meeting would commence with industry presentations.

1. **Industry Presentations**

   **ARINC/AEEC Presentation: Tom Pack**

Tom provided a presentation on the formation of the ARINC Airline Electronic Engineering Committee (AEEC) and the work of the Systems Architecture and Interfaces (SAI) Subcommittee for Global Aircraft Tracking (GAT).

He described the:

- ARINC Project Initiation/Modification and how the document works.
- Phased Approach to Autonomous Distress Tracker (ADT) and Timely Recovery of Flight Data (TRFD)
- ADT Sub Group
- Implementation architecture
- Timelines
- GAT Team Requirements Discussions/Issues
- High Level Functional Diagrams for ELT ADTs
- ELT (DT) Solutions
- ELT (DT) Characteristics and concepts
- Environmental Characteristics

Ahmet also provided an update and details on the ARINC label itself.

*The full presentation is available on the web space.*
ICA0 DOC10054 Presentation: Philippe Plantin de Hugues

Philippe Discussed an update from the GADSS advisory group to list what had been done and what needed to be completed, looking at reviewing all the requirements and listing them in a document.

*The requirements:*-

ICAO Manual – Guidance doc (DOC10054) that is dedicated both to the industry and to regulated authorities around the world to enable them to build their national regulations. They will use this manual to build their standards. Philippe said that it is not mandated by ICAO but most regulatory bodies will use the guidance.

He said that on Annex 6 it notes that ED-237 can be used as guidance material.

Philippe also discussed the objectives, structure of the document and future meetings

*The full presentation is available on the web space.*

2. **Discussion to launch FRAC/OC process on 16 January: Rebecca Morrison**

Rebecca gave a presentation on behalf of Anna to discuss FRAC process.

Rebecca explained that as this is a joint working group, the EUROCAE system would be used for this particular FRAC process. She also demonstrated how to register on the EUROCAE website to either concur or none concur.

*The full presentation is available on the web space.*

Philippe asked that if we decided to postpone by 3 months, what would be the impact on the RTCA side? Rebecca said that we are too late to have a TOR update in December but she would expect that by March they would accept a full real timeline of new dates.

3. **Consider a motion to open final review and comment/ open consultation on the revision to RTCA/DO-204B, Eurocae ED-62b**

Philippe offered a slide on what he would propose to go forward if the group decided to go to FRAC in January.

He said that we would need to discuss as a group and get consensus. Tom asked if someone was prepared to make the motion to propose to open FRAC in January

Philippe said that when we have accepted all of the comments, we would have a mature document and his feeling that if we are delaying the FRAC process, it would be important for ELT manufacturers to have ED62B published; his feeling was that we should go to FRAC.

There was general discussion on whether to go to FRAC in January or delay until March.

Greg announced that he still doesn’t understand what the difference between FRAC in January or FRAC in March? What would the group gain? Philippe said that we could ask the ELT manufacturers if they were prepared to wait 3 months, if it would be okay.

Chris said, as an ELT Manufacturer, from his point of view he feels that the time frame is too aggressive and that we should wait.

Charisse didn’t think we were at the point that we should go to FRAC as there was still too much work to do. She said that we need to review what is not there and need time to review and agree on the document.
George speaking for NASA didn’t feel we are ready; we need to ensure everything is accounted for and we haven’t even looked at the NASA comments that were submitted to this meeting, there is still a lot of work to do.

Fadl said that the word file would be sent on the 22nd December; most people are on holiday until January the 2nd and didn’t feel there would be enough time to review.

Tom supported delaying this but didn’t want people to sit back and wait till Toulouse to continue work, there still needed to be work continuation.

Philippe stated that the group seemed to have consensus not to go to FRAC and that he would provide a new work plan.

Alain said that to delay a few weeks wouldn’t be an issue but would review the proposal on the new work plan and comment on that.

Philippe said that he would produce a new proposal of dates as soon as possible before the end of the year. He said that we need to have more work between meetings.

Philippe said that he was about to send a calling notice for the next meeting in Toulouse for 14-16th March, the whole process would be delayed by one more meeting.

**COSPAS-SARSAT Presentation: Dany St-Pierre**

Dany gave an update on Cospas-Sarsat on work since the last meeting. He discussed updates to working groups, Satellite and ground stations, updates from JC and proposed amendments to documents.

4. **Future meeting plans and dates for formal FRAC / Open Consultation**

Pauline (Thales) announced that she would need to know attendance for the next meeting by the 2nd February.

It was agreed to book the 19th – 22nd June as tentative for the last meeting in America.

5. **Other business**

No other business

6. **Adjourn**

Philippe thanked everyone for their work and RTCA for hosting the meeting.

Meeting closed 15:00
# List of Plenary Actions:

<table>
<thead>
<tr>
<th>ACTION NUMBER</th>
<th>ACTIONNEE</th>
<th>ACTION</th>
<th>STATUS</th>
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<tbody>
<tr>
<td>Action 1</td>
<td>Philippe</td>
<td>To produce a reviewed timeline for FRAC.</td>
<td>Open</td>
</tr>
<tr>
<td>Action 2</td>
<td>Philippe</td>
<td>To send the PDF and Spreadsheet to members</td>
<td>Open</td>
</tr>
<tr>
<td>Action 3</td>
<td>ALL</td>
<td>To review the documents and provide comments</td>
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