



**Introductory Meeting of the eVTOL Safety Leadership Group (eVSLG)
1 November 2021 10:00-12:00 GMT
MINUTES**

Co-chairs:

Matt Rhodes (MR)	Bristow Helicopters
Rick Newson FRAeS (RN)	Civil Aviation Authority

In attendance:

Julian Firth	Air Accidents Investigation Branch
Ollie Dismore	British Helicopter Association
Steve Standing	Civil Aviation Authority
Marilyn Pearson	CAE
Rob Weaver (RW)	Eve Air Mobility
Mike O'Donoghue	General Aviation Safety Council
Will Fanshawe	Halo Aviation
John Ilson	Joby Aviation
Max Fenkell	Joby Aviation
Colin Russell	Lilium
Wg Cdr Ian Fortune	Military Aviation Authority (Rapid Capabilities Office)
Andrew Sage	NATS
Sam Wright	NATS
Paul Harper	Vertical Aerospace
Gareth Salt	Virgin Atlantic
Frank Hitzbleck	Volocopter

Secretariat:

Angela Lynch	Civil Aviation Authority
Gavin Rutter	Civil Aviation Authority

Introduction

Members were welcomed by the co-chairs to the first meeting of the eVSLG. They reconfirmed the strategic purpose of the group: to help establish a dedicated safety forum for this developing sector.

Co-chair RN underpinned the need for transparency and a commitment from members to actively share information within the forum. He gave assurances that commercially sensitive topics would be handled as such, with CAA representatives on hand to assist with the consolidation of any confidential data for example.

Each of the members introduced themselves, their organisations and shared their hopes and expectations for the group.

RN reflected that the group's membership was well placed to achieve the objectives set out in the draft ToRs, but closer exploration of these at this meeting would also give rise to considerations of any current competency gaps that need to be immediately addressed or at a later stage.

Safety Leadership Group Context

RN gave a short presentation on the Onshore and Offshore Helicopter Safety Leadership Groups; explaining the rationale behind their initiation, their safety aims and their achievements so far. CAA Safety Reviews documents [CAP1145](#) and [CAP1864](#) were highlighted for reference as part of this.

Some parallels were drawn between the current UK rotorcraft sector operations and potential future eVTOL operations. Both in terms of the types and environment of operations, but also in terms of complexity and the involvement of a lot of different stakeholders.

Members agreed however, that it could not be assumed that all helicopter risks will necessarily apply to eVTOL operations, or that existing certified fixed wing aircraft and rotorcraft comparisons would cover all future risks the sector will face. It will be necessary to identify what is unique about eVTOL. This underpinned members' agreement that the establishment of this separate group to focus purely on eVTOL presented a better forum at present than simply adding eVTOL under an existing group.

It was noted that there would be similarities and differences, also with wider aviation operations, such as Remotely Piloted Aircraft Systems' (RPAS) safety.

RN highlighted the systemic approach to risk assessment developed under the CAA, which includes identifying specific root causes of risks. SS added that risk reporting would be key to this approach being effective. In this respect it was noted that the CAA could also support the group under its system-wide risk assessment approach, to share proposals and eventually – with industry input - form Guidance Material, Acceptable Means of Compliance and appropriate regulation.

On the topic of risk management, RN also highlighted the [Egis report](#), commissioned under the Future Flight Challenge (FFC), looking at future flight operations' safety identification and management (completed July 2021). This report had contributed to the case for establishing this group. In particular he pulled out two recommendations from the report:

- “Recommendation 9.3 – Establishment of an aviation system risk baseline made up of both the current risk profile and the future expected risk profile, based upon future concepts of operations
- Recommendation 9.4 – Prioritisation of the issues and recommendations in the report and the establishment of a safety work program in support of the FFC. This should include, amongst other things, a plan for managing the impacts of complex systems at the Governance, Management and Task/Technical layers. This should also include consideration of the many more detailed recommendations in this report. Consideration should be given to placing the responsibility for developing and delivering this plan on a pan-industry body or establishing one specifically for this purpose.”

As an author of the report, RW offered to provide members with further information as and when required.

Co-chair MR described the approach the Offshore Helicopter Safety Leadership Group (OHSLG) had taken to encourage its members to think non-competitively within the forum: agreeing the mutual goal of avoiding accidents as they have a damaging effect on the entire industry, and therefore must be prevented by all where they can.

MR highlighted the structure of the OHSLG, including its working-level sub-groups and its effective system of sharing safety data. eVSLG members may benefit from a similar system and should also consider whether sub-groups or a similar ‘Task and Action’ group approach may work here as well.

Draft Terms of Reference

The Draft Terms of Reference (ToRs) were reviewed in detail.

Members asked that the ToRs be updated to capture more fully today’s discussion in regarding commercial sensitivities. It was suggested they include a description of Freedom of Information obligations for completeness.

There was a discussion on the scope and membership statements in the ToRs. It was agreed that the eVSLG should aim in the first instance to include representatives from all professionally piloted operations, but balance this with restricted direct membership in order to remain manageable.

Due to the unique nature of future eVTOL operations other stakeholders were also recognised as potentially playing a key role, for example ground infrastructure providers and managers. A question was raised on whether ‘business jets’ should as a distinct sector be directly represented on the group at this time. Members felt that whilst helicopters were currently the best analogy to eVTOL aircraft in terms of safety, the range of design configurations – including hybrid versions and combined fixed wing designs – meant that these operations could also legitimately be taken into account.

The importance of specific environmental factors influencing aircraft and rotorcraft operations was noted. It was stated that ‘vertiports’ may present unique challenges, such as operating in new and different hostile environments.

Members discussed whether the group should cover more than just electrically powered aircraft. RN asked that members provide suggestions for the ToRs statement to ensure all were happy with what the group is set to cover.

For Publication

It was agreed that these points in relation to scope and membership would be considered further under this group and its future establishment of technical tasks for action.

RN noted that he and CAA colleagues had received requests from several sectors and a diverse range of experts, for example from RPAS stakeholders, to be involved in the eVSLG. Where possible and requested, CAA colleagues had followed up with the individuals and organisations to provide greater clarity on the group and understand more about their own specific interests. These conversations have been recorded and the co-chairs will share more information on these Expressions of Interest (Eols) with members in due course.

It was noted that the ToRs currently do not specify the governance of the group in terms of sub or working groups. This would be discussed for agreement at the first full meeting of the group in January. It was agreed that this should be as simple as possible to limit the need for additional administrative resource but maximise specific outputs for the group and incorporating available wider expertise as appropriate and where relevant.

Members noted that the ToRs focused on UK operations only and asked about interaction with international stakeholders. MR agreed that whilst the focus is on the UK, it will be important that the work feeds into - and draws from - international initiatives (as well as relevant wider initiatives in the UK). RN added that through his representation the eVSLG will output into the Vertical Aviation Safety Team (VAST), for example. An overview of VAST was given. Existing VAST members offered to share more information with the group as required.

The members agreed on an initial meeting frequency of every three months, as proposed in the ToRs.

Next meeting: 11 January 2022, Microsoft Teams