MAC Challenge Group

Notes of Meeting Held at: CAA House, London

Date: 31 May 2018

PRESENT

NAME	Initial	Representing
Stu Wain	SW	CAA (Chair)
Sarah Fox	SFx	CAA – MAC Programme Manager
Tom Hardie	TH	FASVIG
David Gibbs	DG	CAA – ISP
Kirtan Hingu	KH	CAA -Future Airspace
Tim Freegarde	TF	BGA
Anna Collard-Scruby	ACS	CAA – Human Factors Specialist
Ian Souter	IS	NATS
David Cockburn	DC	GASCo

Welcome & Introductions

Stu Wain opened the meeting and, after welcoming all present and thanking them for their attendance, ran through the purpose of setting up the Moving Maps working group and the Agenda for the day.

Purpose of working group

The rationale behind the Moving Maps working group is to have a small task force, focussed for around 12 months, to discuss and achieve identification of the steps necessary to resolve issues around the use of Moving Maps Technology. At present, Moving Maps is not the primary navigation tool recommended and trained for, and if it is to become a preferred option, revised guidance, a revised mindset and revised training is required. There is some caution which needs to be exercised around the type of electronic provider used, to ensure that data is credible and that the system is used safely, particularly as it is possible that alerts and advice may ultimately emanate from the same display system ie. EC and Moving Maps. A further word of caution was registered that the use of Moving Maps should only be regulated where needed.

Approach to working group

➢ Small task force with a defined task and timeline set up
➢ A sub-set of the current ECWG
➢ Define vision and outcomes
➢ Understand enablers and blockers
➢ Mitigate issues
➢ Proposal on how we move into moving maps usage

Scope of working group

➢ Cross community feedback
➢ Previous papers and studies
➢ Training and Testing
➢ Hardware & Software
➢ Human Factors

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Output of working group

A presentation to CAA Board requesting endorsement of the concept of Moving Map technology and its use across the GA Community; possible translation thereafter into a 'CAP' style document.

General comments/themes discussed

- Regulation would not be expected to cover the screen to be used, but would relate to the data source
- Technology in its current form is not quite right
- Where Moving Map technology is placed in the cockpit is key
- It is the intention that this would not replace paper maps and earnest navigation skills intoto
- Pilot training must be updated to reflect the use of Moving Map technology but traditional navigational methods must still be retained
- There is a perception that the CAA will not allow Moving Map technology to be used
- There are many different providers of Moving Map technology and some pilots are currently using one form or another
- Supplementary guidance rather than changing EASA law is the recommended approach to enable rapid progress
- The British Gliding Association currently polices its own membership in the use of moving map technology. The Association has its own policy whereby pilots submit their GPS system for inspection and either approval, or education and guidance, is given. This is managed by volunteers and is every effective.
- NATS is gatekeeper for data provided for both paper and electronic VFR charts. Paper charts are printed on an annual or 18 month cycle depending on the chart and updates are provided via the chart amendment service until the next print cycle. Electronic charts are created at the same time and follow the same amendment process. In the future NATS is looking to provide a more frequent update service for the eVFR charts. NATS expect all data sets to be electronically available within a 2 year period from the commencement of RP3. This should resolve the issue of the consistent and certified core data source for moving map providers.
- Majority of powered GA pilots do not operate from a 'club' environment. Even those operating from the larger airfields do not have a membership, but simply pay a fee to store their aircraft. Using an airfield as a communication channel therefore has limited benefits.

Actions

Source legal education requirement for trainer pilots/instructors and provide detail on minimum pass requirement for navigation - DC

Document and submit to Stu Wain for information and cross industry collation:
- Gliding best practice guidelines issued - TF
- Training syllabus/requirements for Gliding and Hang Gliding– TF & TH
- Balloon training syllabus, alongside EASA requirements, and how these are referenced and trained – DC
- Helicopter navigation instruction paper and technique - TF

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Collate, review and summarise all training material and circulate to working group - KH

Document and submit to the working group:
- An A4 paper on the CAA new digital data stream - DG
- An A4 paper on how NATS currently generates data and how maps are created – IS
- A short paper on the real challenges likely to be faced, from a Human Factor, if moving maps were to be introduced – the common Human Factors you would/might expect from Moving Maps and TCAS type alerts – ACS

Source road traffic data about the number of road accidents before, after and during the mainstream introduction of GPS systems for travel by road with any intelligence which supports – KH

Send through magazine publications where moving map information would be useful and relevant and contact details for the GA Alliance – TH

Understand current status of PPL working group and request update brief to be shared at next working group – DG

Understand a wider viewpoint of moving map technology and source opinion on what is possible/not possible from:
- CAA flight examiners - SW
- EASA (Michael Masson) - SW
- GA Safety team - SW

Next Meeting
Provisional placeholder for 30th August, CAAH, London, 14.00 – 17.00 hours