Combined Aerodrome Safeguarding Team (CAST)

CAST Meeting 13

Wednesday 3rd July 2024

Hybrid Meeting



Aviation House, Beehive Ring Road, Crawley, West Sussex, RH6 0YR

Microsoft Teams

Post Meeting Notes

CAST Meeting 13 -

Wednesday 3rd July 2024

Agenda Item 1 - Introduction - Matt Roberts, Policy Principal Aerodromes, CAA

Matt Roberts has stepped down as industry chair and will now be a special advisor along with Mandy Purdye on specific topics. Diane Jackson will be taking over as Industry co-chair. Mike Sparrow will be the CAA Chair of the group.

Agenda Item 2 – Report from Chair of Technical Focus Group – Matt Roberts, Policy Principal Aerodromes, CAA

- (a) The position of Chair of the Technical Focus Group is currently vacant, the role is open only to Aerodrome Safeguarding Officers and applications from consultants will not be considered. If you are interested, please email the CAST mailbox (CAST@CAA.CO.UK).
- (b) AOA guidance notes have now been moved over to CAST and have been refreshed and updated where required. These are published on the CAST website.
- (c) The IFP Group and CAP 1096 Group are dormant as no work is currently needed. These will need to be reactivated as there are potential matters on the horizon. Only as and when required otherwise they will stay dormant.
- (d) The Renewables Group has been dormant and will now be stepped up again. This is to cover and develop renewables guidance including glint and glare. Ross Franklin was announced as the Chair, however, Ross and Caroline Moore will both organise communications for volunteers and an open-discussion meeting will shortly be scheduled to determine what work needs to be done.
- (e) Chair vacancy there are some roles, and these will be communicated by the CAST Exec shortly. There have been some volunteers and CAST Exec will engage with these volunteers soon regarding potential roles on Exec and/ or subgroups.

CAP 785 - IFP Update - Jean Francois Soldano, Principal Airspace Regulator, CAA

- (a) Rule Making Task 2 documents are being consulted on CAP 785-A and CAP785-B. They are temporary measures. The CAA still needs to upgrade all the requirements to a basic regulation which leads to the rule making task. That work is progressing, and impact should be negligible for the industry. Industry will be consulted, specifically design organisations to ensure the requirements for the future are fully understood. With regard to how information is presented to industry, there is currently the CAP system, but CAA want to elevate to a basic regulation-373 affecting ATM and ANS service providers. The task will include reviewing how requirements for safeguarding can be clarified in CAP 738. In CAP785-B, currently there is a mix of basic requirement, guidance material and AMC. This will be clarified in the future. Industry can then understand from an Aerodrome and Design Organisation perspective. The approximate timeline for the rulemaking project is possibly 18 months to 2 years and will go out for consultation.
- (b) Periodic Review of IFPs CAA want to change the process and implement a more proactive process for the management of IFP, to ensure CAA are fully transparent and can plan our resources to manage periodic reviews. Will be a discussion between aerodromes and design organisations, initiate project management to identify timelines or availability of resource and discuss technical points, if required, with the design organisation. This is in progress.

- (c) Safeguarding of IFPs No significant update. CAP 785 is being published. At last CAST meeting was agreed an extension of the transition period until April 2025, to ensure design organisations have time to develop an IFP Safeguarding tool, if required. Would then submit to CAA for approval and put everything in place.
- (d) CAA Resource Successful in recruiting additional resource and the team is being developed. This will help with backlog of periodic reviews, IFP Safeguarding and help progress the rulemaking task and the modernisation of the UK Airspace.
 - Question What is the timeline for the new periodic review process?
 - Shouldn't take too long to implement the process. Will be discussing with the design organisations and then engage with industry regarding the concept via CAST, possibly at the next meeting. Will not affect industry processes and is mainly to identify CAA resource internally.
 - Question Please confirm what the position is with CAA resource to undertake core functions such as response to IFP Periodic reviews or support to ACPs?
 - CAA are in the process of onboarding an IFP Regulator and the other regulators in the coming weeks. By the end of the year there will be 4 x IFP Regulators with Terence Ngai taking on the role of IFP Principal. CAA are in the process of identifying what the priorities are in terms of periodic reviews. Will focus also on FASI programme and the modernisation of all the TMAs. Jean Francois' role will be changing to more of a policy role regarding airspace design. All the technicality of IFP design will be managed by Terence.
 - Question regarding (d) on the slide- Resource has come from industry. Have the CAA got any plans on how to attract/reinvigorate IFP designers within the industry?
 - CAA compete with industry to attract new resource internally. Training an IFP regulator means training an IFP designer and CAA don't have the resource internally to do that. It is not required to be a UK APD to fulfil that role. It needs to be a qualified IFP designer not a UK approved one. CAA can attract from worldwide but has some constraints in terms of upgrading to UK excellence and performance.
 - Question There is a need for better communications on progression of these points. Is it possible to have a 3-month regular update on how progressing?
 - Can agree to update and information share via CAST every 3 months.

CNS (Communication, Navigation & Surveillance) Group Update – Stuart Rankin, Policy Principal CNS & Spectrum, CAA

Stuart chairs the CAST CNS Subgroup. Minutes produced from the meeting inform decision making. Topics covered include impact of Starlink terminal. Discussions will be translated into a document which has the working title of a CNS and Spectrum Safeguarding Best Practice Guide. It will aim to harmonise the approach to CNS safeguarding across the UK.

(a) 1.4 GHz fixed link to mobile phone transition – Main aim is to find more radio spectrum for mobile phone operators to utilise. Issue with the transition is that adjacent to that are Inmarsat, which has an allocation where they provide a number of different services including safety of

life. Have discussed pre consultation with Ofcom on their proposals to produce a policy and transition to enable mobile phones to utilise this spectrum. One proposal is a safeguarded area around an airport, based on Ofcom's understanding and studies of the resilience of the terminals installed on aircraft. Although these terminals aren't typically used in the UK, because of the terrestrial communication infrastructure in the UK which does not require it, it is typically used in Oceanic. Regulations require the equipment to be tested and confirmed to be working on the ground. Equipment must be operating effectively and if a base station is too close and it's blocking that equipment or degrading it, that could cause issues. This is ongoing and will go out to consultation in a couple of months.

- (b) 5G Vs Radalts No significant change. There is concern around potential harmful interference to radio altimeters from mobile phones operating in adjacent bands. Lots of international activity around this part of the challenge and ICAO circular and other papers have focussed on what's happening in the US in terms of their 5G deployments. There was an issue at Heathrow where there were a number of specific aircraft types which experienced radio altimeter failures. The CAA is liaising with aircraft manufacturers (the issue is airframe specific) as to what was done to resolve that issue. There is an understanding that was an aircraft integration issue and antennas and cabling on the aircraft were replaced but this has not been confirmed.
- (c) The agenda for the World Radio Conference in 2027, on the agenda items to seek spectrum for future mobile phone networks (6G), again in two more adjacent bands to the radio altimeter spectrum that UK has. Internationally there is a piece of work to develop new radio altimeter standards that are more resilient when operating adjacent to the current global deployments. This work could take a number of years. Until the standards are agreed, manufacturers are producing that equipment and it's actually deployed and installed on aircraft. The matter is trying to match the pace of the aviation industry to provide that change with the mobile phone industry, in wanting to push that agenda forward and start to deploy new networks in the bands that are available. The CAA are monitoring and there is still no significant evidence that for the UK's deployment of 5G, it is creating interference issues. The 5G deployment in the UK and globally has begun to slow. Radio regulators and other government departments are turning their attention to the next generation. A lot of the work internationally is to prepare for 6G and to make sure there is not the same issue again when starting to see deployments of that network.
- (d) GNSS Jamming Focus has been around activity that we see in conflict zones (Eastern Europe and the Middle East). The CAA are ensuring we are on top of capturing if there are specific issues that are occurring. Poland have had issues with GNSS interference jamming or spoofing due to activity assumed to be in conflict zones. It is not similar in the UK, but we are conscious that the capability to spoof and jam is becoming more widespread and easier for entities to access. Within the advancement of commercially available technology that capability is becoming more available. There is now a CAA Safety Risk Working Group to focus on the topic of GNSS Jamming. The potential impacts and the potential mitigations are spread across different areas of policy. There may be a mitigation for better GNSS resilience in developing new receivers. Another area of policy may be about educating flight crews about how they can effectively work around interference when it does occur.

A most recent update is around the latching interference issue, where aircraft coming across, for example, the Middle East are experiencing the impact of GNSS jamming. It is seen in the cockpit and there is a long list of different things that are impacted. With the latching, we are seeing that effect as an aircraft enters UK or Oceanic airspace still having the effects of GNSS jamming even though it occurred thousands of miles away. The CAA are working with the Airworthiness

department coordinating with some of the manufacturers of this equipment to establish the effect on their equipment in terms of this latching issue. Effectively, what manufacturers are having to understand is how they are integrating GNSS data into their avionics, as we have seen that data is being used for a lot of different purposes. We have seen, for example, controller pilot data link where the timestamp for the data packets that are sent is taken from a GNSS clock and interference is impacting the delivery of those messages.

- (e) CNS Safeguarding Best Practice Guide Hopeful that potentially for the CAST CNS meeting in October, there will be a populated document to share and discuss in more detail.
 - Question The Air Traffic Control working group at the AOA raised the spoofing and jamming as a concern and were looking for guidance. Is there any?

The only guidance that the CAA have produced is a Safety Notice, which will be updated in the next 2 to 3 months. It is a reflection of the EASA SIB that they have produced. It highlights the systems that are impacted/ potentially impacted by GNSS jamming or spoofing, which seems to change depending on different aircraft manufacturers and different aircraft. There is no single statement that can encapsulate the impact that a flight crew will see. It also highlights the specific geographic areas where jamming is most likely to occur. One of the features EASA is looking at is to better define what the jamming or spoofing activity will actually be. What the safety notice or the SIB doesn't do, is tell you what you might experience. If there is a call for briefings or collaborations with other groups, CAA would be open to using the Safety Risk Working group as a contact point.

We have also been looking at Terrestrial resilience. This concept of minimum operational networks and what does the DME network need to look like in the future to provide resilience against the interference that we're seeing. It is being done under our airspace modernisation strategy to provide that long term resilience potentially using DME.

(f) Jean Francois – This is a serious problem for navigation and communication. In terms of navigation, the CAA are preparing a new PBNIR implementation rule. The current PBNIR is limited to the requirement applicable in 2020 and affecting some but not all Aerodromes. For the PBNIR, there is a revised regulation that is being prepared and will be subject to consultation shortly. The CAA are defining what the new requirement will be for navigating through airspace. That includes contingency and what contingency means. It also includes the minimum operating network, number of beacons and DMES, NDBS, and possibly VORS. That means initially the objective was to move to full GNSS, but now this is being discussed by all regulators. We are not necessarily and directly affected in the UK, but we are seeing the consequences of what is going on in Eastern Europe. The new regulation for navigation will clarify all of this and will clarify what the requirements are for the airline operators and ANSPs. This will require implementation of a specific or tactical procedure to detail what would happen in the event of GNSS failure. This is being discussed on the FASI programme with all ACP sponsors or currently Scottish TMA, Manchester TMA, London TMA etc. We hope that the new regulation will clarify all of this. It's a very complex subject and it does affect all the avionics. CPDLC could be used in the future for the UK. Jean Francois' team is drafting the new PBN regulation, and they will consult on it to clarify what the requirements are and what the contingency plan should be in terms of DME. It will affect ANSPs, how we provide the service, will reflect the cost on sponsors, etc. The CAA will try to align with Europe since we are part of the network, and we want to minimise the effect on European operators.

CAP 1096 Cranes Update - Kevin McMorrow, Principal Airspace Regulator, CAA

- (a) CAP1096 update is still being developed by us. The changing legislation that's being considered is still out for comment with legal teams. The CAA are grateful to all the support CAST provided over the past two years in supporting the CAP 1096 work. The reason for the delay has been due to the CAA's commitment to get the policy right the first time. The ACOMS system is working efficiently. What used to take 35-40 minutes to assess for one crane is now down to 2 minutes due to system automation. Capacity has increased and more staff have and are being brought on. That means that crane operators can apply once to the CAA and then there is the confidence to send that out to all aerodromes that are affected.
- (b) The current legislation as it is publicised online still stands meaning the 6 km rings. If it is around that measurement, please do consider speaking to the aerodrome and then putting in an ACOMS. The system runs very well on different platforms. We are aware of a couple of instances where operators have had issues registering and then getting access. If that does happen, please email CAST and these can be resolved guickly.
 - Question Is there any ability for aerodromes to expand the 6 km distance that's currently in place?

The CAA have had instances where crane operators have come to us beyond the specified 6 kms. It's had an impact upon instrument flight procedures, and we've had to promulgate minimum changes. It is entirely possible that when the legislation feedback comes back from the legal teams that that distance will expand anyway. At the moment, the extant legislation still remains but you are able to recommend the increases. However, we would counsel some caution with that as we have got to ensure the balance works for the UK as a whole, including airports and industry. E.g. If expanded out to 10 or 12 miles, then not all applications will be sent for each crane as the industry will not be able to cope with that. The APDOs would struggle with making all those assessments because that would take it from hundreds a week at the moment to tens of thousands which is not feasible.

• Question – In the interim, how would it be best to get those cranes that are beyond the 6kms? Should they come to the aerodromes direct?

We agree coming direct to the aerodrome is good practice. Companies have improved their procedures and are coming direct which is a good culture. CAST plays a large part in ensuring the message has been passed out.

 Question – We had instances where cranes which were 100 metres and above, outside the 6 kms area, which were potentially impacting IFPs and we were not actually notified via ACOMS.
 We found out on different channels. What can we do in the interim until the new CAP 1096 is published?

As it's above 100 metres, that should still be a notifiable obstacle. They're still being assessed. If specific instances, then these should be emailed to the team. As enroute obstacles or aerodrome obstacles should be assessed and communicated to aerodromes.

• Question – As an airport located in the city, we do suffer from cranes. There is definitely a lack of knowledge of crane operators. Few come through on the portal. What else can we do?

The CAA rely on knowing about the crane before we can carry out our actions. If it's not submitted to us, we don't know. If we are aware of the hazard, we can do something about it, but we need to be made aware. We do encourage the crane operators to go to the portal. The rules apply to the large or small companies. It's about awareness of the education piece.

 Question – You said you get hundreds of updates a week, but we don't receive hundreds of updates?

Those hundreds could be aerodromes' ones, they could also be enroute ones, but you should still be getting them. It maybe they are aerodrome obstacles or the applications that we're assessing are so low that they don't meet any of the criteria that are required. Kevin McMorrow will check this.

 Question – Regarding the ACOMS database, the crane database will represent an obstacle database that is partially published, partially unpublished. Is that something you could make available in a form that could be used by IFP design organisations?

The CAA are currently working on that. The issue is the security aspect. We don't want to publish it in such a way that someone with base level knowledge of coding can help themselves to a free VFR chart.

Noted that Kevin McMorrow is being replaced and new replacement starts on 22nd of July.

Agenda Item 3 – Report from Chair of GA Focus Group – Matt Wilkins, Airfield Manager, Old Buckenham Airfield

The significant topic continues to be pylons and the incorrect approach that National Grid are taking towards them. Ann Bartaby is leading the efforts and liaison with the local authorities regarding the aerodromes that have been affected, particularly on the Norwich Tilbury route. A CAST alert was put out on this topic earlier this year, which will be updated. It was initially altered by AAT. Following the air shows and GAA busy season, we will be deciding what other topics need to be discussed. There are now increased links with the General Aviation Awareness Council who have been looking at planning and safeguarding for years and prior to CAST. Also, when it reforms the APPG for Aviation's Airfield working group, the connection is Matt Wilkins who chairs both of them. Accordingly, there is a more coordinated message that will be going forward from GA.

Agenda Item 4 – Report from Chair of BNG (Biodiversity Net Gain), Regulations and Legislations Group – Diane Jackson, Aerodrome Safeguarding Officer, Manchester Airports Group (MAG)



Link for Biodiversity net gain - GOV.UK (www.gov.uk)

The difficulty has been the availability of people with ecological qualifications who are able to deliver, assess or audit the plans to meet BNG. We should expect developments to take even longer as they go through this process.

- (a) BNG Planning Guidance we have found some planning officers who are not aware of this provision so take the opportunity when discussing cases to raise awareness. They must abide by what we need so should be firm on that.
- (b) Permitted Development Rights the change of use may have a number of implications for aerodrome safeguarding e.g. attract more wildlife, cause CNS issue, cause glint and glare if more cars etc. so we need to ensure that we understand what is happening to the building.
- (c) Supreme Court Ruling One to keep an eye on the implications of possible need to assess if a scheme is considering their environmental impacts and what they are going to do to compensate it (similar to BNG).

Agenda item 5- Report from Chair of UK Wildlife Hazard Management Committee (UK WHMC) – Mark Freeman, Policy Specialist, Aerodromes

This is an overview of the actions that have come out of the committee. There are 2 that are notable:

- (a) Use of RFD (Registered Firearms Dealers) certificate for wildlife teams. The use of it at an aerodrome is questionable as to whether it is a legal position to be or not. CAA are currently in conversations with the police from a national level. Mark will be presenting to the licencing team across the UK about the reasons why we would use firearms in an aerodrome environment, an overview of wildlife etc. Following that meeting we should get to a point where we can agree if an RFD is a suitable legal position. Need to ensure that every aerodrome in the UK is aware of the stance and the position. If they aren't aware, then it will have an impact and they will need to put in place a suitable plan to be able to come away from the RFD and go into either licencing or certification for their firearms side of their wildlife management. We should be able to give a conclusive answer towards the end of the year.
- (b) The Natural England Licencing manager gave a presentation on the whole process of CL12. During that presentation it was advised that during the CL12 process and any interactions with your local LPAs regarding potential concerns that you might want to raise around wildlife and your aerodrome, that the correct process would be the section 106 process. Mark has confirmed this is not the only option open to aerodromes. If it is suitable and applicable for the aerodrome to use that process, that is fine. However, planning conditions is another and possibly a more popular route. MF sending an email shortly regarding this to that community which will hopefully clarify the position.
- Question At the Wildlife Committee meeting, there was an update regarding bird strikes, could you give a summary?
 - ICAO are imminently publishing out the latest IBIS report process version 3. It has been approved and is waiting to be published. Part of the forum committee have looked at and reviewed the CAP 772 process and made some comments around what they think industry would want out of some guidance material around wildlife. MF plans to review the IBIS v3 document, the comments from industry and establish how to move forward. Will probably be the end of this year before it comes out to consultation or possibly next year. After consultation, will go through the process and publish a revised CAP 772. IBIS is the process that

is used for states to report all their wildlife strikes, etc There are no stats for wildlife strikes at this point.

Question – Is there any move towards simplifying the wildlife strike reporting form?

Yes, but there are no actual work streams at this point in time working on it. The IBIS reporting process may help to give CAA a positive stance so that we can move to simplify it. From a state perspective, we send information off to ICAO that is then entered as part of a wildlife worldwide reporting process to establish what is going on with wildlife strikes across the industry. That is useful data. However, we have been challenged on some of the data that we've sent on that process through the system from contractors that work with various airports, because they end up with different data sets. It is difficult to understand why the data sets are different from a contractor to the state. One of those potential answers is that aerodrome operations will report to a contractor something quick and easy and only takes a few minutes of your operation time. Whereas this system is possibly not as user friendly as it could be. If it was simpler, then people would use it more and we would end up with more data. The problem is that certain types of data need to be supplied to ICAO from an IBIS perspective. It is a matter that is to be worked on. Resolving it may be quite difficult.

Agenda item 6 – Review of Aerodrome Safeguarding Circular – Annalise Wicks, Aviation Directorate, Department for Transport (DfT)

Annalise sits in the Domestic Aviation Safety Team at DfT. Feedback from the CAA has been received with regard to the Circular and DfT have started looking at revisions of the Safeguarding Circular and this has been a good baseline of what updates need to start looking at in the Circular. DfT have also had conversations with other policy teams in DfT such as Future of Flight for their views. We would also like to ask colleagues within CAST to join a select small SME Group to assist with a more indepth review. Leading from initial feedback notes, we can expand and have more conversations. It would also check all elements that need updating are identified. Need to ensure that it's designed in a way to cover future development within aviation and future flight. Please email the CAST mailbox (CAST@CAA.CO.UK). if you wish to join this group who can then liaise with Annalise to ensure the correct numbers and expertise are included.

CAST would encourage anybody who is an Aerodrome Safe guarder who would like to input to legislation change to join. There are focus groups in CAST that require contributors who have opinions and will follow through by delivering policy and procedure papers.

Agenda Item 7: ICAO OLS Update - Mike Sparrow, Policy Specialist Aerodromes

ICAO OLS Update: Mike attended the ICAO Obstacle Limitation Task Force meeting at Montreal, topics of discussion included:

(a) The review of guidance material for Doc 9137 Chapters 1 to 4 and the setting of tasks for the review and development of chapters 5 to 8 to provide guidance for the new obstacle limitation surfaces which will become applicable in 2030 with SARPS becoming effective in July 2025. Update to ICAO Doc 9137 Part 6 Control of Obstacles is progressing. Further editorial meetings planned in October and November with a final review planned for April 2025. The applicability date has been pushed back to 2030 to allow aerodromes more time to prepare as will be huge demand for aeronautical studies as well as the review of IFPs.

(b) ICAO key follow up areas include the check for consequential changes with other working groups such to ensure the new material going into Doc 9137 does not corrupt any data within this document. Other work includes the development of training materials, aids, seminars, webinars and workshops.

The next steps for the CAA is following industry consultation; the CAA will incorporate the new OLS guidance material into CAP168 and UK Reg (EU)139/2014 to allow for early transition before the 2030 applicability date. This will allow for Aerodromes to get ahead and CAA looking for early adoption and transition before the 2030 applicability date. The CAA does not anticipate there is any rulemaking requirement (subject to review). Timeframe looking at 2026/2027 for the material for CAP168 and UK Reg (EU)139/2014

 Question – On the Obstacle Evaluation Services, some developments are going to have to have hazard safety studies. Is there any guidance on what those studies should include?

This area is currently being worked on and the CAA is looking at the OLS and the Obstacle Protection Services and revising that text within those two areas. Hopefully that will become clearer as the documents mature.

• Question – When would you expect the CAP1732 surveys to change?

The CAP 1732 is currently under review. Until we have the final text coming through in 2025, there are no subsequent changes that can be made before then. CAA are looking at a two year lead indicator for regulation and other key documents like 232 for licenced aerodromes and 1732 being upgraded

Agenda Item 8: AOB – Diane Jackson, Aerodrome Safeguarding Officer, Manchester Airports Group (MAG) and Mike Sparrow, Policy Specialist Aerodromes, CAA.

• Question – Would members be agreeable to supplying obstruction data (cranes mainly) that they are notified of? Obstruction updates go via the CAA, would any be willing to notify Defence Geographic Centre at the same time?

There was no objection to this in the room or online. Diane suggested clarification is obtained to confirm what the routes should be and is everyone getting all they can from the Ops that should be. Kevin McMorrow will be contacted to discuss.

(a) Review of FAA Glint and Glare Policy: Diane explained that from an aerodrome safeguarding perspective, the FAA rules do not apply in the UK. However, they are continually quoted in the planning process. The CAA do not have an equivalent process beside some CAST guidance and believe there is lack of clarity on what glint and glare constitutes. Diane welcomed views from the group to share any examples of glint and glare concerns.

A member of CAST shared a glint and glare example at Leonardo Helicopters in Yeovil which is situated at the western edge of the town. The operator installed solar panels on the roof of their building following a comprehensive glint and glare survey. The operator, however, had to remove all the netting around the building to enable the instalment of solar panels which posed a challenge with bird control management. All new requests they have received require the removal of nets and bird control measures which are not as good as with nets. Beside this issue, solar panels work quite well. The member shared that the Hawk and Owl Trust installed nesting

boxes on a church east of the airfield without prior consultation and asked for views from other members if anything similar has happened to them.

Diane accepted a view of another CAST member who is an expert in bird control management. They shared that the best practice is to initially approach the trust and get an understanding whether they understand the issues this poses to aerodrome safeguarding, because it could be down to lack of knowledge. Once they have the knowledge, share literature and invite them to working groups to explain the implications this has on aerodromes.

Diane mentioned that CAST could support with a PR or communication initiative to raise awareness of this issue and include it as a topic in the newly established Renewables Focus Group.

It was also mentioned that in the UK, glint and glare is considered by the CAA. When it comes to planning of solar farms, it must go through the CAP 791 process and risk assessment of the aerodrome development. So, while it is not widely publicised, it is certainly something that is done in the UK and when it comes to off-aerodrome development. Likewise, the FAA do not really have a stance on that just like the UK.

A comment was raised on the potential impact of PV panels on digital towers. There is one in the UK at the moment, but there is no current guidance which addresses this. The way cameras or optical sensors can be affected is totally different from the human eye and the impact there can be quite different or unknown. Similarly, Tesla have started to sell solar walls for domestic dwellings and floating solar bodies, so the impact of future developments is unknown.

(b) Renewables Focus Group: The group is looking at a couple of challenges in the renewable energy domain. One key issue is the use of biomass which is not regulated or looked at in the UK. Currently, when safeguarding a biomass, the height, emissions and bird attraction is assessed. Looking at the future new types of power plants producing new jet fuel will need to be considered due to being very close to aerodromes. There is also the battery energy systems that often require D/C to A/C and different conversion processes that can generate potential electromagnetic interference, which is something that is part of the new energy infrastructure being developed currently which will need to be looked at more in detail.

Diane mentioned if anyone is interested to share their expertise in this domain, to get in touch through the CAST mailbox (<u>CAST@CAA.CO.UK</u>).

• Question – Is the potential thermal effect from solar developments an area to be considered?

The CAA are building some evidence in that area because there have been a few accidents in GA aerodromes. The CAA are trying to get some more information on how to support the case for other future solar farm developments. There is a model being looked at by a company regarding aircraft upset, turbulence encounters and it is split between different aircraft types. The CAA also supports this company to do the thermal analysis.

Question – Do CAST work with Renewables UK?

Diane answered that CAST did not currently, but it is something the Renewables Focus Group could start doing.

- (c) CAP 1732 Update: CAP 1732 is at a very early stage, the CAA have started a routine update to the CAP. It will address any lessons learned since the first edition was published, any feedback provided by the surveyors and AIS and any changes to the regulatory environment and/or CAA policy. The CAA will arrange a session with AIS and surveyors most likely after the summer break it will be an opportunity to share and discuss issues and suggestions whilst the proposed amendments are still being drafted. Aerodromes are encouraged to speak with their surveyor if they have any concerns or suggestions or contact AIMR directly at <a href="maintenant-main
- Question When would the CAA expect the CAP 1732 surveys to change?
 - Mike answered that since CAP 1732 is currently under review, until the CAA have the final text coming through in 2025, the CAA does not foresee any subsequent changes that can be made before then. The CAA is looking at the two-year lead indicator to get the regulation in order and other key documents like CAP 232 for licences and CAP 1732 upgrading those. Will take time to get through our internal system.
- (d) **STEM programme**: Obtaining feedback regarding the skills that you are struggling to recruit is important us. If anyone wants to collaborate with us regarding STEM and educational outreach, CAA are always happy to have that discussion.

Agenda Item 9: Date & Venue of the next meeting (CAST/14)

Diane mentioned that the next meeting will be held virtually over MS Teams around October-November 2024. Further details will be provided in due course.

If you have any queries or need any further information, please contact any member of your CAST team at CAST@CAA.CO.UK