ACP-2022-033
PROVISION OF GNSS IFP TO HENSTRIDGE
TO SUPPORT
DORSET & SOMERSET AIR AMBULANCE
CAP1616 (PART 1C) STAGE 3
STAKEHOLDER ENGAGEMENT STRATEGY

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GLOSSARY OF TERMS AND ABBREVIATIONS

DSAA's convention is to introduce abbreviations at first use within any document. Table 1, below, contains the list of abbreviations, acronyms and terms contained within this document and the accompanying ACP-2022-033 Stakeholder Engagement Materials.

Term/Abbreviation	Meaning
AA	Air ambulance.
ACP	Airspace change proposal.
ADV	Aerodrome control visual.
AFISO	Aerodrome flight information service officer.
AGCS	Air-ground communication service.
ADS-B	Automatic Dependent Surveillance-Broadcast. A surveillance technology and form of electronic conspicuity in which an aircraft determines its position via satellite navigation or other sensors and periodically broadcasts it, enabling it to be tracked.
AMSL	Above mean sea level.
ANSP	Air navigation service provider.
AOI	Area of Interest
AOC	Air operator certificate.
AOR	Area of responsibility.
APDO	(UK CAA-) Approved procedure design organisation
ATC/M	Air traffic control/management.
ATS	Air traffic service.
ATSU(s)	Air traffic service unit(s).
ATSOCAS	Air traffic service outside controlled airspace.
ATZ	Aerodrome traffic zone. Airspace of defined dimensions established around an aerodrome for the protection of aerodrome traffic.
(UK) CAA	(UK) Civil Aviation Authority (i.e. the UK's aviation regulatory body).
(UK CAA) CAP1616	UK CAA publication proffering guidance on the regulatory process(es) for changing the notified airspace design (*et al*). See References.
CAP2520	UK CAA policy and guidance for the implementation of helicopter point in space operations in the UK. See References.
DSAA	Dorset & Somerset Air Ambulance.
FATO	Final approach and take off (area). A defined area used for the final phase of the approach to a hover or a landing, and from which take-off is initiated. A FATO will incorporate a TLOF (see below).
FIR	Flight Information Region. An airspace of defined dimensions, extending from the surface to a specified upper limit, in which flight information and alerting services are provided.
FL	Flight Level.
GA	General aviation.
HAZID	Hazard identification.
IAP	Instrument approach procedure.
IFP	Instrument flight procedure.

Term/Abbreviation	Meaning
IFR	Instrument Flight Rules, i.e. the conduct of the flight without visual references and the pilot is utilising cockpit instrumentation.
km	Kilometre
LARS	Lower Airspace Radar Service
LOA(s)	Letter(s) of Agreement
MOD	Ministry of Defence.
MOU(s)	Memorandum (Memoranda) of Understanding.
NATMAC	National Air Traffic Management Advisory Committee. A non-statutory advisory body chaired by the CAA; the NATMAC is consulted for advice and views on any major matter concerned with airspace management and strategy matters.
nm	Nautical mile(s).
PinS	Point in Space (flight procedure). IFP designed for helicopters.
RNAS	Royal Naval Air Station.
RNP	Required navigation performance. Performance requirements are expressed in navigation specifications (e.g. RNP specification) in terms of accuracy, integrity, continuity, availability and functionality needed for the proposed operation in the context of a particular airspace concept.
RW	Runway. When referencing an aerodrome's RW(s), this abbreviation will be followed by 2 digits, which will correspond to the RW's magnetic heading to the nearest whole 10 degrees. For Henstridge this is RW24; the reciprocal is RW06. Combined, this RW might also be referred to as RW06/24.
(D)SATCO	(Deputy) Senior air traffic control officer.
TLOF	Touchdown and lift-off (area). A TLOF is a load-bearing (generally paved) area, normally centred in the FATO, on which the helicopter lands and/or takes-off.
VFR	Visual Flight Rules adhered to by flights outside controlled airspace, where the conduct of the flight is with visual reference to - *inter alia* - terrain and other airspace users.
VMC	Visual meteorological conditions. Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima.

Table 1 - Glossary of Terms and Abbreviations

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1. INTRODUCTION.

Helicopter Emergency Medical Services (HEMS) are the mainstay of air ambulance operations in the UK and allow specialist medical teams to be despatched rapidly to an incident, or critically ill patient, facilitating the delivery of essential prehospital treatment. Delays in this critical medical intervention before a patient's arrival at hospital could adversely impact patient survival and post-recovery quality of life.

Dorset and Somerset Air Ambulance (DSAA) is a key part of the emergency services network in the south-west and, since 2008, has been based at Henstridge Aerodrome, situated on the Dorset/Somerset border in Class G airspace and has no approach control services. Currently, the DSAA helicopter operates between the hours of 0700 and 0200, and recoveries to the airfield can only be undertaken in visual meteorological conditions (VMC).

DSAA, therefore, seeks to introduce Global Navigation Satellite System (GNSS) instrument flight procedures (IFPs) to enhance its HEMS operational capability at Henstridge Aerodrome during DSAA's existing operating hours and, in turn, its delivery of critical patient care.

The DSAA helicopter is operated under the AOC of Specialist Aviation Services Ltd (SAS), the sponsor of this ACP.

1.1. ACP-2022-033 DAP1916 Statement of Need.

Originally, DSAA submitted the ACP-2022-033 DAP1916 (including a corresponding Statement of Need) on 22 May 22. DSAA submitted a subsequent DAP1916 on 1 May 23, to meet the GNSS Roll-out Programme requirements; DSAA amended this latter DAP1916 on 16 May 23:[1]

> "[…] During inclement weather, most UK aviation operations are supported by surveillance-based air traffic services (i.e. radar), during which appropriately qualified pilots may fly under instrument flight rules. Given the nature of the HEMS task and locations, however, this surveillance capability is not always available to HEMS crews, who are appropriately qualified, and their ability to operate in adverse weather conditions can be unduly constrained. Critically, a HEMS crew being unable to either depart from or return to their operating base due to weather constraints impacts the availability of the service.
>
> A DSAA HEMS mission can last more than three hours and, having departed Henstridge in VMC, the weather can (and does) often deteriorate, regularly precipitating a recovery in marginal weather conditions. If weather conditions fall below those required for a Visual Flight Rules (VFR) recovery, this would result in the DSAA helicopter being unable to return Henstridge; in turn, this would mean that this important critical care asset would remain offline until it could be recovered (often the following day). If the aircraft had been left on a hospital helipad, then the helipad would not be available to other HEMS aircraft. Thus, being unable to recover the DSAA helicopter to Henstridge under instrument meteorological conditions (IMC) could put patients' lives at risk.
>
> A major benefit of introducing a Global Navigation Satellite System (GNSS) instrument approach procedure (IAP) is that it will allow the operation of the DSAA helicopter (particularly its recovery) under IMC, offering significant safety benefits over VFR flight in marginal VMC conditions, in turn, delivering vital continuity of this critical care service. An additional benefit could also be that the implementation of GNSS IFPs at Henstridge could lead to future operations in IMC to hospitals with their own GNSS IAPs. […]"

1. CAA, ACP-2022-033 portal (online), accessed on 28 Sep 23.

1.2. DSAA Operational Capability Enhancement.

The DSAA HEMS helicopter operates between the hours of 0700 and 0200 hrs, 7 days a week for 365 days a year; this equates to 1168 AA missions, an average of 3 missions per day.[2] Currently, DSAA departures from and recoveries to Henstridge can only be undertaken under VFR in VMC.

Between Apr 22 and Mar 23, the DSAA helicopter was declared offline for 449 hours due to weather constraints. This equated to 24 operating days, which could be seen to equate to 72 life-saving AA missions, acknowledging that HEMS is a demand-led service.

Accordingly, the introduction of GNSS IFPs to enhance DSAA HEMS operational capability at Henstridge could deliver an additional 72 AA missions, *per annum*, in turn delivering more critical prehospital care for patients in the existing DSAA 19-hour operation.

2. PURPOSE OF ACP-2022-33.

The purpose of this ACP is to implement GNSS IFPs to enhance DSAA HEMS operational capability at Henstridge; such operational procedures, designed specifically for helicopters, are known as Point-in-Space (PinS) procedures.

The operational feasibility of and safety case for PinS have been proven, and assured PinS procedures supporting the HEMS community have been implemented successfully throughout mainland Europe. SAS, therefore, seeks to introduce PinS procedures to support DSAA HEMS operations at Henstridge, thereby enhancing HEMS capability and increasing the availability of critical care in reduced weather minima.

This capability enhancement is also consistent with the DSAA Charity's ambition to transition the HEMS operation at Henstridge to H24 in the future.

3. CAP1616 PART 1C PROCESS REQUIREMENTS.

CAP1616 states that the introduction of RNP instrument approach procedures (IAPs) without an approach control (WAC) service will be progressed as a scaled Level 1 Airspace Change Proposal.[3]

At Stage 1 of the process, DSAA: completed the corresponding DAP1916 (Statement of Need); attended the required Initial Assessment Meeting with the CAA, to confirm the process steps and requirements, including assessment of the proposed ACP timeline; and published the agreed Initial Assessment Meeting minutes on the ACP-2022-33 Portal.[4] At the Initial Assessment Meeting, the CAA determined that GNSS PinS ACPs (and, therefore, ACP-2022-033) would be subject to the requirements of CAP1616, Part 1c.

At Stage 2 DSAA assessed all appropriate options that addressed the Statement of Need" and the application's Design Principles (DPs).[5]

At Stage 3, DSAA ensures that, through targeted engagement activities, relevant stakeholders' views have been considered and considered as part of the application's final proposal.[6]

2. DSAA data for the period Apr 22 to Mar 23, inclusive.
3. CAA (2021), "*CAP1616 […]*", Page 97 (online), accessed on 31 Jul 23.
4. ACP-2022-033 Portal (online), accessed on Fri 28 Jul 23.
5. CAA (2021), Page 98, (online), accessed on 31 Jul 23.
6. *id*, Page 100.

4. STAGE 3 SCOPE/OBJECTIVES

4.1. Scope.

CAP1616 acknowledges that the introduction of RNP IAPs (WAC) is likely to impact a relatively low number of stakeholders.[7] Following earlier discussion between DSAA and CAA, it was agreed that ACP-2022-033 Stage 3 engagement would be limited to aviation stakeholders.[8]

Acknowledging that HEMS is a demand-led service, the introduction of the proposed IFP design could deliver an additional 72 AA missions, *per annum*, in the existing DSAA 19-hour operation, which corresponds to a 6.16% increase in DSAA HEMS movements. Similarly, the nature of HEMS operations is such that an additional 72 missions cannot be distilled down to a *pro rata* number of sorties per calendar month/week.

Updated data from Henstridge shows that they recorded 2,248 non-DSAA aircraft movements during the period 1 Apr 22-31 Mar 23. During the same period, DSAA recorded 2,336 helicopter movements.

The introduction of the proposed IFP design would not introduce a corresponding variance in the aircraft types in operation at Henstridge. The additional 72 HEMS missions (i.e. 144 aircraft movements) would correspond to a 3.14% increase in Henstridge Aerodrome movements. Thus, the potential increase in number of aircraft movements as a result of the implementation of the proposed IFP design could be demonstrated to be negligible.

The introduction of the proposed IFP design:

- Could correspond to a 3.14% increase in Henstridge Aerodrome movements, which is well below the 10% threshold value quoted in CAP1616.
- Does not change the final approach path of aircraft to the runway within 1nm of the runway end and follows extant DSAA VFR flight profiles.
- Will not change the environmental impact of aircraft utilising other aerodromes.
- Given its limited scope, monetising and quantifying the potential impact of the proposed airspace change in line with CAP1616, Table E2, it is neither proportionate, nor possible.

As a result of the foregoing, ACP-2022-033 Stage engagement activities would be limited to aviation stakeholders.

4.2. Objectives.

The objectives of this stage of the CAP1616, Part 1c process are to engage with aviation stakeholders (i.e. airspace users, air navigation service providers and aerodromes) to establish what the potential operational impact(s) of the proposed IFP design might be on their respective operations.

The objectives of this strategy and associated activities are to:

- Outline the approach and methodology for aviation stakeholder engagement.
- Identify aviation stakeholders relevant to the Application.
- Engage identified stakeholders and request comments on the Application.
- Record, review and analyse stakeholder responses.
- Where appropriate, consider engagement responses to inform proposed IFP design and related activities.

7. CAA (2021), Page 100, (online), accessed on 31 Jul 23.
8. MS Teams meeting between CAA and Avigation to discuss ACP-2022-033 Stage 3 activities, held on 10 Aug 23.

5. SUMMARY OF AVIATION STAKEHOLDER ENGAGEMENT TO DATE.

5.1. General.

Since 2008 and over the course of its operation at Henstridge, DSAA has established and maintains strong relationships with its aviation neighbours (many of whom are the application's stakeholders), with whom DSAA enjoys regular and cordial dialogue. Accordingly, DSAA is well placed to conduct its "Stage 3" stakeholder engagement activities and has engaged many of the Application's stakeholders as part of the early stages of the ACP-2022-033 process.

Whilst no direct aviation stakeholder engagement has been undertaken to date relating to activities to which this document refers (i.e. ACP-2022-033), DSAA has undertaken some preparatory local stakeholder engagement activities.

5.2. Preparatory Local Aviation Stakeholder Engagement.

5.2.1. Early Stakeholder Discussions.

- RNAS Yeovilton and MOD Boscombe Down. Exploratory meetings and follow-on discussions have been held between DSAA and ATC, RNAS Yeovilton and ATC, MOD Boscombe Down, during which early design concepts were shared and discussed.

- South West Regional Airspace Users' Working Group. On Tue 5 Sep 23, DSAA attended the South West Regional Airspace Users' Working Group (SW RAUWG) at MOD Boscombe Down, at which the proposal was outlined and discussed with a range of aviation stakeholders adjacent to Henstridge.

  DSAA had already identified its local aviation stakeholders with whom DSAA would engage at Stage 3, some stakeholders were RAUWG invitees. Not all RAUWG attendees/invitees are relevant to the ACP; however, no new stakeholders were identified as a result of DSAA attending and briefing the RAUWG.

  The SW RAUWG meets biannually and is scheduled to reconvene in March 2024, which is outside the Stage 3 stakeholder engagement period.

Regular dialogue and engagement with local aviation stakeholders will continue after the implementation of the proposed PinS procedure (and thereafter). Relevant aeronautical and locally-produced information distributed and displayed at local flying organisations and air traffic service units (ATSUs) would also be produced.

5.2.2. Extant Operational Agreements.

Extant arrangements, which include letters of agreement (LOAs) and/or memoranda of understanding (MOUs), with local stakeholders (e.g. RNAS Yeovilton, Yeovil (Leonardo) and Compton Abbas) are being reviewed and, where necessary, corresponding revisions reflecting the addition of proposed PinS procedures at Henstridge proffered to act as the catalyst for the appropriate discussions between DSAA and the relevant parties.

Should a potential issue arise from the proposed airspace change, it will be discussed and, where appropriate, mitigated through engagement with those parties potentially impacted. Where necessary, LOAs/MOUs will be revised commensurate with feedback from the relevant stakeholders.

6. AUDIENCE - THE STAKEHOLDERS.

6.1. Context.

An activity's stakeholders can be a diverse group of individuals and organisations whose expectations must be managed to varying degrees, commensurate with their levels of interest and influence on the activity. The relationship between stakeholders and the activity works both ways: stakeholders may have a positive or negative impact on the activity, and *vice versa*.

The Application's aviation stakeholders (hereinafter referred to as "stakeholders") are those aviation (individuals and) organisations that could have a direct or indirect interest or influence on the Application and associated outcomes and activities. Where non-aviation stakeholders (i.e. national or international bodies and governments) are referred to, specific demarcation will be made.

The aviation stakeholders to whom this strategy refers are external to the Applicant's organisation; as such, they are third-party stakeholders and comprise local and, where appropriate, national organisations that could impact and/or be impacted by the Application and its outcomes.

Relationships are the first steps in good influencing but knowing who to invest time and energy in building good relationships with is the first part of that.

6.2. Identification of Stakeholders.

Henstridge is a small, unlicenced, general aviation (GA) aerodrome located in East Somerset, between RNAS Yeovilton and Compton Abbas aerodrome, indicated by the red circle in Figure 1, below.

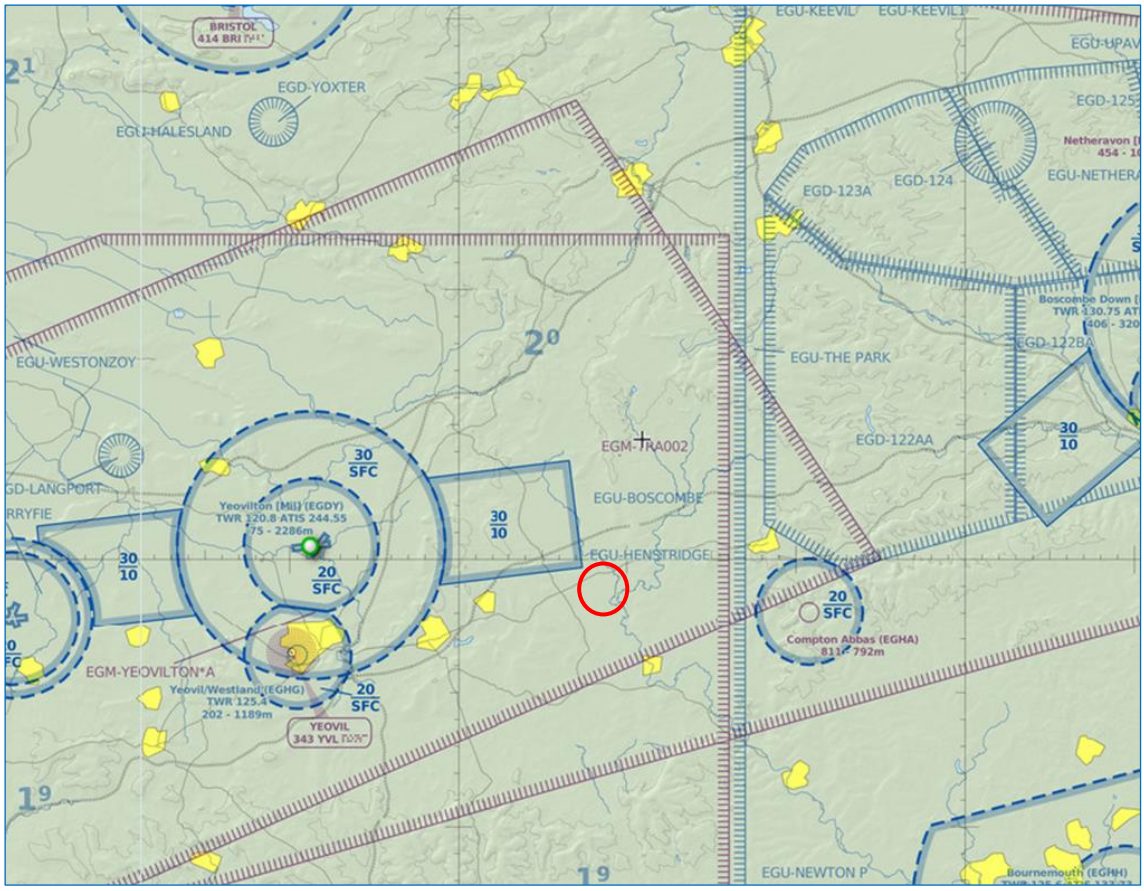

Image Source: SkyVector

Figure 1 - Henstridge Aerodrome Airspace/Aviation Stakeholder Context

DSAA acknowledges that the introduction of the proposed IFP design might constitute "new activity" in the surrounding aviation landscape, as depicted in Figure 1, above. Accordingly, DSAA has a well-established understanding of its neighbouring aviation stakeholders, with whom DSAA engages regularly.

Building on ongoing interactions with local aviation stakeholders, augmented by the National Air Traffic Management Advisory Committee (NATMAC) list provided by the CAA and further discussed with the GNSS Facilitation Team, DSAA established a list of local and national aviation stakeholders relevant to the Application. Identification of local stakeholders (e.g. airfields/airports, helicopter operators, GA etc) was based on DSAA's 15 years' operating knowledge.

For each stakeholder, a primary point of contact (POC) was established and, where possible, this included a name and email address, as a minimum. The list of aviation stakeholders is provided at Annex A.

Additionally, DSAA reviewed the NATMAC list and determined that certain organisations listed were not relevant stakeholders for this ACP and would, therefore, not be engaged. This list of stakeholders discounted from the Stage 3 engagement activities, with a corresponding rationale, is at Annex B.

Ultimately, DSAA seeks to engage identified aviation stakeholders to understand and, if necessary, mitigate the potential impacts of the introduction and operation of the proposed IFP design on stakeholders' existing operations.

7. ENGAGEMENT APPROACH.

From the stakeholder list determined at Para 6.2, DSAA will actively engage stakeholders with direct and focused engagement, managing the relationships carefully, to gain opinions and comments that could have an influence on the proposed IFP design and/or related activities.

DSAA will employ the following methods of engagement:

- Email notification with corresponding links to the ACP-2022-033 portal and engagement materials and response proforma.
- Confirmation of subsequent preferred methods, frequency and levels of engagement.
- Where appropriate, direct bilateral engagement meetings and discussions with stakeholders will be recorded, minuted, agreed and distributed, accordingly.

7.1. Stakeholder Engagement Materials

A common set of stakeholder engagement materials has been created to inform all stakeholders. These materials provide:

- Introduction.
- CAP1616 Part 1c Process Requirements.
- Henstridge Location, Airspace, DSAA Tasking and Operations Context.
- ACP-2022-033 Proposed Design Option.
- Anticipated Utilisation.
- Qualitative Statements on Potential Impacts.[9]
- Stakeholder Engagement Process.
- What Happens Next.

A copy of the ACP-2022-033 Stakeholder Engagement materials is at Annex C.

7.2. Stakeholder Feedback Proforma.

A copy of the ACP-2022-033 Stakeholder Feedback Proforma is at Annex D.

7.3. Supporting Engagement Documentation and Artefacts.

In addition to the engagement materials and corresponding feedback proforma, DSAA's introductory email will direct stakeholders to this strategy document, the Stage 2 Submission document and remaining artefacts on the ACP-2022-033 portal.

9. As defined in CAA (2021), Para 364, (online), accessed on 5 Dec 23.

7.4. Timescales.

DSAA will commence stakeholder engagement on Wed 6 Dec 23. To accommodate the festive holiday period, Stakeholders' feedback proforma responses will be requested within an 8-week period; the engagement period will, therefore, conclude on Tue 30 Jan 24. DSAA will send a reminder email to all stakeholders at the mid-point of the engagement period and one week prior to the conclusion date.

7.5. Management of Stakeholder Responses.

Stakeholders will be requested to submit their completed response proformas and, where appropriate, additional comments to airspace@avigation.co.uk by no later than Tue 30 Jan 24.

DSAA will record receipt of stakeholder responses, noting stakeholder organisation, respondent, date and time of receipts and contents. This data will be used to evidence stakeholder engagement and included in the concomitant Stakeholder Engagement Summary Report.

All completed forms will be retained as evidence of DSAA's engagement with stakeholders and other interested parties. Any Personal Data supplied by respondents will be retained confidentially and managed under the principles of the UK Data Protection Act (DPA) (2018) and the UK General Data Protection Regulation (GDPR).

8. POST ENGAGEMENT ACTIVITIES

8.1. Analyses of Engagement Responses.

DSAA will undertake an analysis of stakeholder responses and a determination of any influence on the Application's proposed IFP design.

DSAA will record the associated findings for inclusion in the Stakeholder Engagement Summary Report.

8.2. Stakeholder Engagement Summary Report.

Once all engagement activities have been satisfactorily completed, DSAA will produce a stakeholder engagement summary report that provides an overview of the feedback received through the engagement activities and, where appropriate, a description of how stakeholder feedback has influenced the final IFP design.

All engagement activity correspondence and documentation sent and received will be included in the Stakeholder Engagement Summary Report, which will be included with the final ACP submission at Stage 4.

ANNEXES

A. ACP-2022-033 Aviation Stakeholder List.
B. ACP-2022-033 Aviation Stakeholders Discounted From Engagement Activities.
C. ACP-2022-033 Stakeholder Engagement Materials.
D. ACP-2022-033 Stakeholder Engagement Response Proforma.

REFERENCES.

1. (UK) CAA (2021), "*CAP1616, Airspace Change […]*" (online).
2. CAA (2023), "CAP2520, Policy and Guidance for the implementation of helicopter Point in Space operations in the UK" (online).

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Annex A to
ACP-2022-033 Stakeholder Engagement Strategy
Dated 5 Dec 23

ACP-2022-033 AVIATION STAKEHOLDER LIST

Ser	Organisation	Role/Title	Name	Email Address
1	Airfield Operators Group (AOG)			
2	Airfield Operators Group (AOG)			
3	Aircraft Owners and Pilots Association (AOPA)			
4	Airspace Change Organising Group (ACOG)			
5	Association of Remotely Piloted Aircraft Systems UK (ARPAS-UK)			
6	Aviation Environment Federation (AEF)			
7	British Balloon and Airship Club			
8	British Business and General Aviation Association (BBGA)			
9	British Gliding Association (BGA)			
10	British Helicopter Association (BHA)			
11	British Hang Gliding and Paragliding Association (BHPA)			
12	British Hang Gliding and Paragliding Association (BHPA)			
13	British Microlight Aircraft Association (BMAA)			
14	British Microlight Aircraft Association (BMAA)			
15	British Model Flying Association (BMFA)			
16	British Skydiving			
17	CAA			
18	CAA			
19	General Aviation Alliance (GAA)			

Ser	Organisation	Role/Title	Name	Email Address
20	General Aviation Alliance (GAA)			
21	Helicopter Club of Great Britain (HCGB)			
22	Helicopter Club of Great Britain (HCGB)			
23	Light Aircraft Association (LAA)			
24	Military Aviation Authority (MAA)			
25	Ministry of Defence- Defence Airspace and Air Traffic Management (MOD DAATM)			
26	MOD DAATM			
27	MOD DAATM			
28	NATS			
29	NATS			
30	UK Airprox Board (UKAB)			
31	UK Airprox Board (UKAB)			
32	UK Flight Safety Committee (UKFSC)			
33	Henstridge Aerodrome			
34	RNAS Yeovilton			
35	RNAS Yeovilton			
36	Compton Abbas Airfield			
37	Compton Abbas Airfield			
38	Yeovil (Leonardo)			
39	MOD Boscombe Down			
40	The Park Gliding Site (Bath, Wilts & N Dorset Gliding Club)			
41	Bournemouth Airport			

Ser	Organisation	Role/Title	Name	Email Address
42	Bristol Airport			
43	National Police Aviation Service			
44	Neighbouring Air Ambulances - Wiltshire Air Ambulance			
45	Neighbouring Air Ambulances - Hants & Isle of Wight			
46	Neighbouring Air Ambulances - GWAA			
47	Gutchpool Farm Strip (N of Gillingham)			

Table 2 - ACP-2022-033 Stakeholder List

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Annex B to
ACP-2022-033 Stakeholder Engagement Strategy
Dated 5 Dec 23

ACP-2022-033-AVIATION STAKEHOLDERS DISCOUNTED FROM ENGAGEMENT ACTIVITIES

Ser	NATMAC/Locally Derived	Organisation	Rationale
1	NATMAC	Airlines UK	Not necessary to engage directly, any UK airline flight in the vicinity of Henstridge would be receiving an ATSOCAS.
2	NATMAC	Airport Operators Association (AOA)	Industry trade association representing airports - not applicable to this ACP
3	NATMAC	British Airways (BA)	Not necessary to engage directly, any BA flight in the vicinity of Henstridge would be receiving an ATSOCAS.
4	NATMAC	BAe Systems	Not required; no independent BAeS aviation footprint in the vicinity of Henstridge.
5	NATMAC	British Airline Pilots Association (BALPA)	Not required; pilots' association, *vice* an operational stakeholder.
6	NATMAC	Drone Major	Individual UAV/S company; ARPAS-UK is already included.
7	NATMAC	Guild of Air Traffic Control Officers (GATCO)	Not required; ATCOs' association, *vice* an operational stakeholder.
8	NATMAC	Honourable Company of Air Pilots (HCAP)	Not required; pilots' association, *vice* an operational stakeholder.
9	NATMAC	Heavy Airlines	Industry body and not required. Any heavy airlines in the vicinity of Henstridge would be in receipt of an ATSOCAS.
11	NATMAC	Isle of Man CAA	Not required; well outside their AOR/AOI.
12	NATMAC	Low Fare Airlines	Industry body and not required. Any low-fare airline in the vicinity of Henstridge would be in receipt of an ATSOCAS.
13	NATMAC	Navy Command HQ	DAATM should liaise. DSAA are also engaging ATC at RNAS Yeovilton.
14	NATMAC	PPL/IR (Europe)	Not required
15	NATMAC	United States Visiting Forces (USVF), HQ United States Country Rep-UK (HQ USCR-UK).	DAATM is confirmed as sole MOD POC.
16	Locally Derived	Salisbury Plain Training Area	DAATM is confirmed as sole MOD POC.

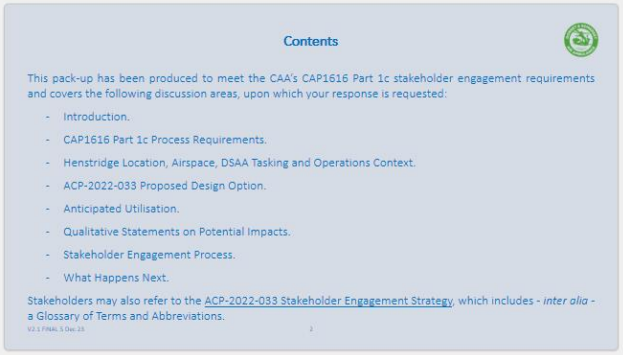
Ser	NATMAC/Locally Derived	Organisation	Rationale
17	Locally Derived	MOD Ops Low Flying	DAATM is confirmed as sole MOD POC.
18	Locally Derived	AAC Middle Wallop	DAATM is confirmed as sole MOD POC.

Table 3 - ACP-2022-033 Discounted Stakeholder List

Annex C to
ACP-2022-033 Stakeholder Engagement Strategy
Dated 5 Dec 23

ACP-2022-033 STAKEHOLDER ENGAGEMENT MATERIALS

1



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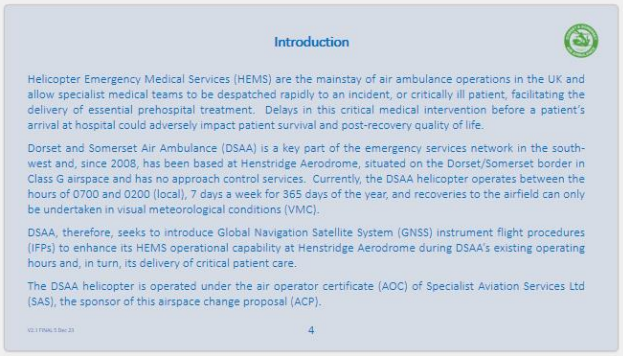

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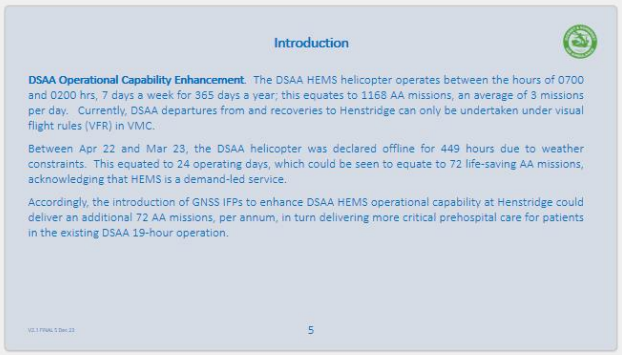

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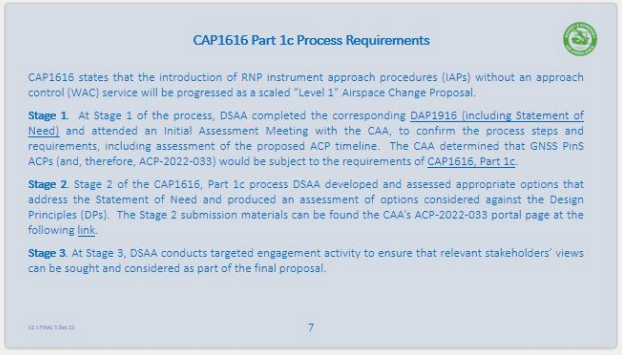

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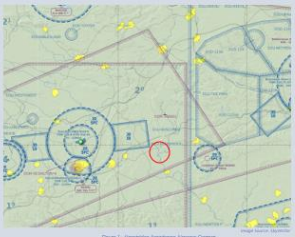
Henstridge Location and Airspace Context

Henstridge is a small, unlicenced, general aviation (GA) aerodrome located in East Somerset, between RNAS Yeovilton and Compton Abbas aerodrome, indicated by the red circle in Figure 1. Henstridge has no aerodrome traffic zone (ATZ), resides within Class G airspace and has one non-instrument runway (RW06/24).

The flying activity in the vicinity of Henstridge is military and GA.



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Henstridge Location and Airspace Context

Henstridge has no air traffic services (ADV or AFISO) and a limited AGCS (weekend only). Currently, there are no instrument approaches at Henstridge. The nearest controlled airspace that has a bearing on DSAA HEMS operations is Class D airspace, the Control Zones (CTZs) at Bournemouth and Bristol airports, approximately 15nm SE and 20nm NW, respectively.

An air traffic service (ATS) is available from RNAS Yeovilton, during their operating hours, capacity and coverage, and a limited ATS is available from BRS and BOH ATC. Where no surveillance-based ATS is available, a Basic Service can be obtained from "London Information".

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DSAA Tasking

Figure 2 offers a geographical representation of the locations of all the incidents to which the DSAA teams have been mobilised over the period Apr 22 to Mar 23.

Colour coding has been applied to differentiate between the team types; HEMS is depicted in yellow and Critical Care Car in blue. The size of the corresponding circles in Figure 2 relates to the number of incidents attended in that area.

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DSAA Tasking

As evidenced in Figure 2, the nature of HEMS operations is such that the DSAA helicopter can be tasked to any location within its area of responsibility (AOR) and beyond. Moreover, the instances where the DSAA helicopter is tasked beyond its immediate AOR reflect the joint and integrated approach to HEMS tasking in the south-west region. Consequently, recovery to Henstridge can be from any direction.

HEMS is very much a demand-led service, consequently, a *typical* year cannot truly be considered as such; Figure 2, however, is broadly representative of DSAA's annual activities.

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Henstridge Aerodrome Flying Operations

DSAA helicopter operations are to and from their operating area at the north side of the Henstridge runway (highlighted by the red circle in Figure 3).

Once clear of the airfield boundary, DSAA departure and arrival profiles are dependent upon tasking and, as such, are not fixed.

DSAA HEMS helicopter arrivals are normally flown to the runway (i.e. the final approach and take-off area (FATO)) followed by a hover transition to the DSAA helipad (i.e. the touchdown and lift-off (TLOF) area) to land (the reverse for departures). If, however, the visual circuit is busy, or use the runway is precluded, then approaches can be made directly to the helipad (TLOF).

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Henstridge Aerodrome Flying Operations

DSAA helicopter and Henstridge visual GA movements are integrated by compliance with simple local flying instructions, supported during weekend day flying ops by a manned air-to-ground radio frequency ("Henstridge Radio"). When Henstridge Radio is unmanned, pilots in the visual circuit area make "blind" air-to-air calls to enable situational awareness for all.

Prior to recovery to the visual circuit area, DSAA helicopter arrivals make a blind call on the Henstridge Radio frequency no later than 5 mins' flying time/10nm from Henstridge.

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DSAA VFR Approach and Departure Profiles

VFR approach and departure routings are depicted in Figure 4.

Subject to the prevailing Henstridge visual activity, DSAA VFR arrivals approach from the north east of the aerodrome, avoiding known and publicised noise sensitive areas around local villages. Departures are predominantly to the south west, again avoiding noise sensitive areas, before proceeding on task.

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ACP-2022-033 PROPOSED DESIGN OPTION

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ACP-2022-033 Design Principles

The ACP-2022-033 Design Principles (DPs) are:

- *DP1*. The proposed design must maintain a high level of safety.
- *DP2*. The proposed design should avoid overflight of densely-populated areas, where possible.
- *DP3*. The proposed design should avoid unnecessary complexity.
- *DP4*. The proposed design should have minimal impact on other airspace users.

DPs 1 and 2 are drawn from CAP1616, Part 1c and must be included in the application; DPs 3 and 4 are additional DPs created by the sponsor to reflect local considerations and/or impacts to other airspace users.

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ACP-2022-033 Proposed IFP Design Option

Baseline. Acknowledging that HEMS is a demand-led service, between Apr 22 and Mar 23, DSAA conducted 1168 AA missions - an average of 3 missions per day. Over the same period, the DSAA helicopter was declared offline for 449 hours due to weather constraints. This equated to 24 operating days, which could be seen to equate to 72 life-saving AA missions.

DSAA Operational Capability Enhancement. DSAA, therefore, seeks to implement a proposed IFP design that would enhance HEMS operational capability at Henstridge and deliver an additional 72 AA missions, *per annum*, in turn delivering more critical prehospital care for patients in the existing DSAA 19-hour operation.

"Do Nothing" Option. A "Do Nothing" option (i.e. maintaining the extant operational *status quo*) neither enhances DSAA HEMS operational capability at Henstridge, nor does it meet the application's DAP1916 and associated Statement of Need (see ACP-2022-033 portal).

Accordingly, a "Do Nothing" option is not being presented.

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ACP-2022-033 Proposed IFP Design Option

Developing the Proposed Design Option. A PinS procedure is exactly as described (i.e. to a specific point in space). As evidenced in Figure 2 (Slide 10), the nature of HEMS operations is such that the DSAA helicopter is tasked to any location within its area of responsibility (AOR) and beyond; consequently, recovery to Henstridge can be from any direction.

At this early juncture of PinS development and implementation in the UK, however, it was considered more amenable from a regulatory perspective to align and design the proposed IFPs to the RW at Henstridge. This overarching tenet informed the approach to the design of the proposed IFPs to support DSAA operations at Henstridge.

The prevailing winds in the Henstridge area are westerly; therefore, aligning and designing the proposed IFPs to Henstridge's RW24 is preferrable. Accordingly, IFPs aligned to RW06 and other non-RW-aligned directions have been considered but discounted (see ACP-2022-033 Stage 2 Submission, Section 7).

Ultimately, this approach to the development of the proposed IFP design (i.e. to RW24) enables alignment with the existing DSAA VFR flight profiles, while remaining cognisant of associated flying operations at RNAS Yeovilton, Yeovil (Leonardo), MOD Boscombe Down and Compton Abbas and, therefore, minimising potential impact(s) on local airspace users.

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Design Option 1 - Approach Azimuth

A preliminary azimuth view of the ACP-2022-033 Design Option 1 concept is provided at Figure 5 and will be subject to further refinement and amendment.

Design Option 1's approach and departure profiles broadly replicate current DSAA VFR routings, thereby avoiding any unnecessary complexity and potential disruption to existing local airspace users.

A second missed approach transition fix has been incorporated into the downwind leg to ensure lateral displacement from the Compton Abbas ATZ, if carrying out a second approach following a missed approach.

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Design Option 1 - Approach Azimuth

Design Option 1 would be accessible from the north (i.e. the Bristol area) and the south-east (i.e. the Bournemouth/Southampton areas), which is consistent with Figure 2 and would ensure that recoveries remained clear of RNAS Yeovilton operations. Recoveries from westerly directions could easily be coordinated with flying operations at RNAS Yeovilton and Yeovil (Leonardo) during their respective operating hours.

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Design Option 1 - Departure Azimuth

In addition, the proposed approach and departure routes continue to avoid overflight of densely-populated areas.

Departures in reduced weather minima during RNAS Yeovilton operating hours would be pre-notified to "Yeovil Radar", which would include a brief outline of the preferred transit direction and destination.

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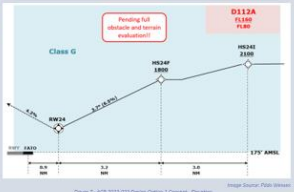
Design Option 1 - Approach Elevation

A preliminary elevation view of the ACP-2022-033 Design Option 1 approach concept is provided at Figure 6 and will be subject to further refinement and amendment.



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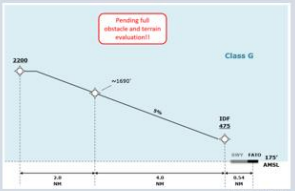
Design Option 1 - Departure Elevation

A preliminary elevation view of the ACP-2022-033 Design Option 1 departure concept is provided at Figure 6 and will be subject to further refinement and amendment.



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Anticipated Utilisation

One of the critical drivers is being able to recover to Henstridge (i.e. having completed the HEMS task) in inclement weather and being available for subsequent HEMS tasking.

As outlined earlier, the introduction of the proposed IFP design could deliver an additional 72 DSAA HEMS missions, *per annum*.

Restrictions on Use. Use of the proposed IFPs would be restricted to DSAA aircraft and crews only. In addition, only one DSAA HEMS aircraft operating on any one occasion further reduces risk.

DSAA's Future Aspirations. Whilst DSAA's future aspirations (i.e. 2-3 years) are for a second airframe, only one would be in operation at any one time.

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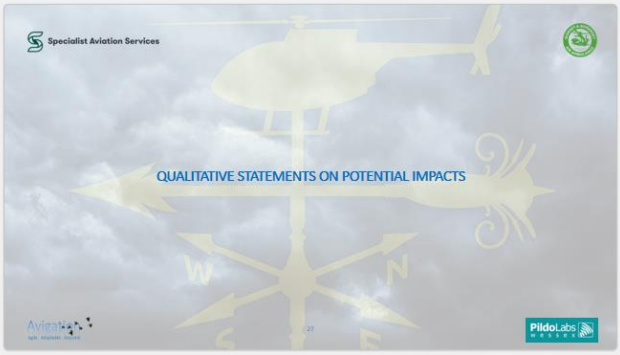

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Qualitative Statement on Potential Impact on Safety

From ACP-2022-033's Stage 2 Submission:

"9.2.1. Safety of the Proposed Procedure Design.

Design Option 1's approach and departure profiles broadly replicate current DSAA HEMS helicopter VFR routings (Figure 4, above) and the development of the design is being undertaken by a UK CAA-approved procedure design organisation with extensive and demonstrable IFP and PinS design pedigree (Pildo Wessex Ltd). The design is being conducted in IAW PANS-OPS, and, at this stage, no safety issues or concerns have been identified or are anticipated."

"9.2.2. CAP2304-related HAZID and Risk Analyses.

If CAP2304-related HAZID and risk analyses and assessments highlight a need for further operational agreements associated with the implementation of the proposed PinS procedures warrants, DSAA will work with the relevant parties to establish the requisite LOAs/MOUs.

Ultimately, any CAP2304-related HAZID and risk analyses and assessments would dictate the level of discussions, mitigation actions and, where necessary, agreements required between DSAA and the relevant parties."

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Qualitative Statement on Potential Environmental Impact

Updated data from Henstridge shows that they recorded 2,248 non-DSAA aircraft movements during the period 1 Apr 22-31 Mar 23. During the same period, DSAA recorded 2,336 helicopter movements.

The implementation of the proposed IFPs could deliver an additional 72 HEMS missions, per annum, which would correspond to a 6.16% increase in DSAA annual movements. In turn, this corresponds to a 3.14% increase in overall Henstridge Aerodrome movements. Therefore, introducing the proposed IFPs to support DSAA operations at Henstridge does not constitute a significant change from the extant DSAA operations at the airfield and, as such, would have minimal environmental impact.

Accordingly, undertaking a full/detailed environmental assessment and associated analyses for this Level 1 airspace change, as detailed in CAP1616, is not required, as the potential increase (i.e. 3.14%) is well below the 10% or more value quoted in CAP1616.

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Qualitative Statement on Potential Economic Impact(s)

From ACP-2022-033's Stage 2 Submission:

"9.3.3. Economic Impact.

Given the limited scope of the proposal (potentially an increase of 144 Henstridge Aerodrome movements, i.e. [3.14]%) and that the proposed procedure replicates, to a great extent, the current operation, monetising and quantifying the potential impact of the proposed airspace change in line with CAP1616, Table E2, it is neither proportionate, nor possible."

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Qualitative Statement on Potential Impact on Airspace Users

The introduction of the proposed IFPs to support DSAA operations at Henstridge constitutes no significant change to the extant Henstridge airfield operations.

The predominance of flying activity in the vicinity of Henstridge is either military or GA; the latter is undertaken under VFR. Thus, were the need to arise to use the proposed PinS procedure in IMC, then the likelihood of either conflict or displacement of GA is assessed as minimal to zero. Similarly, military flying in the local area would invariably be associated with either RNAS Yeovilton or MOD Boscombe Down and supported by their respective ATSUs, from whom the DSAA already receive an ATS when available.

At this stage, the impact - positive or negative - on other airspace users is not known and will be determined by stakeholder engagement feedback/responses.

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Qualitative Statement on Potential Impact on Airspace Users

From ACP-2022-033's Stage 2 Submission:

"**Extant Operational Agreements**. Extant arrangements, which include letters of agreement (LOAs) and/or memoranda of understanding (MOUs), with local stakeholders (e.g. RNAS Yeovilton, Yeovil (Leonardo) and Compton Abbas) are being reviewed and, where necessary, corresponding revisions reflecting the addition of proposed PinS procedures at Henstridge proffered to act as the catalyst for the appropriate discussions between DSAA and the relevant parties.

Should a potential issue arise from the proposed airspace change, it will be discussed and, where appropriate, mitigated through engagement with those parties potentially impacted."

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Specialist Aviation Services
STAKEHOLDER ENGAGEMENT PROCESS

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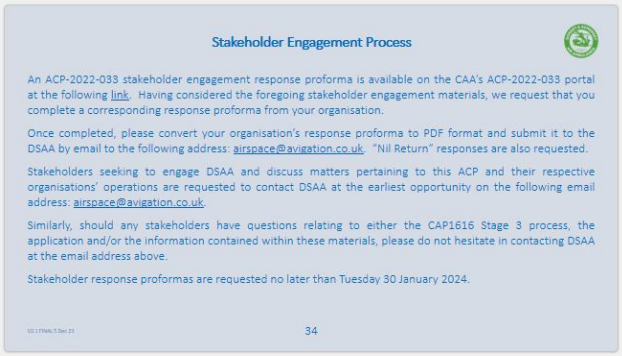
Stakeholder Engagement Process
An ACP-2022-033 stakeholder engagement response proforma is available on the CAA's ACP-2022-033 portal at the following link. Having considered the foregoing stakeholder engagement materials, we request that you complete a corresponding response proforma from your organisation.
Once completed, please convert your organisation's response proforma to PDF format and submit it to the DSAA by email to the following address: airspace@avigation.co.uk. "Nil Return" responses are also requested.
Stakeholders seeking to engage DSAA and discuss matters pertaining to this ACP and their respective organisations' operations are requested to contact DSAA at the earliest opportunity on the following email address: airspace@avigation.co.uk.
Similarly, should any stakeholders have questions relating to either the CAP1616 Stage 3 process, the application and/or the information contained within these materials, please do not hesitate in contacting DSAA at the email address above.
Stakeholder response proformas are requested no later than Tuesday 30 January 2024.
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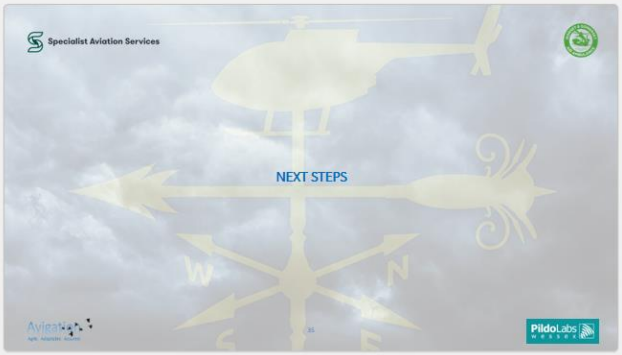
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NEXT STEPS

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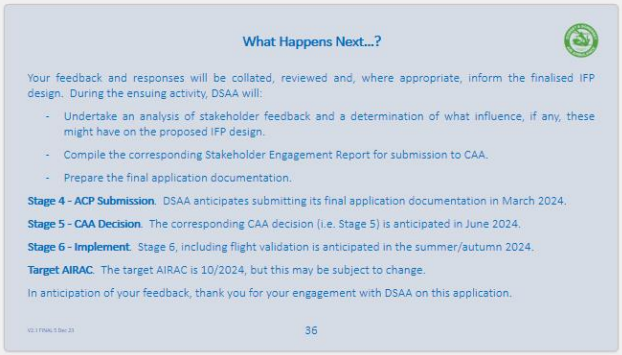
What Happens Next...?
Your feedback and responses will be collated, reviewed and, where appropriate, inform the finalised IFP design. During the ensuing activity, DSAA will:
- Undertake an analysis of stakeholder feedback and a determination of what influence, if any, these might have on the proposed IFP design.
- Compile the corresponding Stakeholder Engagement Report for submission to CAA.
- Prepare the final application documentation.
Stage 4 - ACP Submission. DSAA anticipates submitting its final application documentation in March 2024.
Stage 5 - CAA Decision. The corresponding CAA decision (i.e. Stage 5) is anticipated in June 2024.
Stage 6 - Implement. Stage 6, including flight validation is anticipated in the summer/autumn 2024.
Target AIRAC. The target AIRAC is 10/2024, but this may be subject to change.
In anticipation of your feedback, thank you for your engagement with DSAA on this application.
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Specialist Aviation Services
Conclusion
- Introduction.
- CAP1616 Part 1c Process Requirements.
- Henstridge Location, Airspace, DSAA Tasking and Operations Context.
- ACP-2022-033 Proposed Design Option.
- Anticipated Utilisation.
- Qualitative Statements on Potential Impacts.
- Stakeholder Engagement Process.
- What Happens Next.

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Annex D to
ACP-2022-033 Stakeholder Engagement Strategy
Dated 5 Dec 23

ACP-2022-033 STAKEHOLDER ENGAGEMENT RESPONSE PROFORMA

Airspace change ID: ACP-2022-033

PROVISION OF GNSS IAP TO HENSTRIDGE TO SUPPORT DORSET & SOMERSET AIR AMBULANCE CAP1616 (PART 1C) STAGE 3 STAKEHOLDER ENGAGEMENT RESPONSE PROFORMA

Stakeholder Organisation: _____
(Please insert your organisation name)

Introduction

Helicopter Emergency Medical Services (HEMS) are the mainstay of air ambulance operations in the UK and allow specialist medical teams to be despatched rapidly to an incident, or critically ill patient, facilitating the delivery of essential prehospital treatment. Delays in this critical medical intervention before a patient's arrival at hospital could adversely impact patient survival and post-recovery quality of life.

Dorset and Somerset Air Ambulance (DSAA) is a key part of the emergency services network in the south-west and, since 2008, has been based at Henstridge Aerodrome, situated on the Dorset/Somerset border in Class G airspace and has no approach control services. Currently, the DSAA helicopter operates between the hours of 0700 and 0200, and recoveries to the airfield can only be undertaken in visual meteorological conditions (VMC) and under visual flight rules (VFR).

DSAA seeks to introduce Global Navigation Satellite System (GNSS) instrument flight procedures (IFPs) to enhance its HEMS operational capability at Henstridge during DSAA's existing operating hours and, in turn, its delivery of critical patient care.

DSAA is, therefore, seeking stakeholders' opinions and comments to inform its instrument procedure design activities and, in turn, the corresponding ACP application. DSAA's application for this airspace change can be viewed on the Civil Aviation Authority (CAA)'s ACP portal at the following link: ACP-2022-033.

Responding to the Survey

A set of engagement materials pertinent to this application has been uploaded to the CAA's ACP portal (at the link above) to inform stakeholders about the application and its proposed design. Stakeholders are requested to review these materials before completing this brief survey questionnaire.

This proforma features questions and statements pertinent to the application and targeted at aviation stakeholders. Please reply to all questions and statements that you feel are relevant to your organisation. Should any stakeholders have questions relating to either the CAP1616 Stage 3 process, the application and/or the information contained within these materials, please do not hesitate in contacting DSAA at the email address below.

Completed questionnaires should be returned to the following email address airspace@avigation.co.uk.

To enable DSAA to collate and review as many stakeholder responses as possible, stakeholders' responses are requested by no later than Tuesday 30 January 2024.

Response Proforma

1. The proposed design of the instrument flight procedure (IFP) is appropriate to the application's Statement of Need.		
Your Response	**Agree ***	**Disagree ***
Additional Comments (As Required):		

2. Design Principle 1 (DP1) states that the "[t]he proposed design must maintain a high level of safety"; the proposed IFP design meets DP1.		
Your Response	**Agree ***	**Disagree ***
Additional Comments (As Required):		

* Delete as appropriate

3. DP2 states that the "[t]he proposed design should avoid overflight of densely-populated areas, where possible"; the proposed IFP design meets DP2.		
Your Response	**Agree ***	**Disagree ***
Additional Comments (As Required):		
4. DP3 states that the "[t]he proposed design should avoid unnecessary complexity"; the proposed IFP design meets DP3.		
Your Response	**Agree ***	**Disagree ***
Additional Comments (As Required):		

* Delete as appropriate

5. DP4 states that the "[t]he proposed design should have minimal impact on other airspace users"; the proposed IFP design meets DP4.		
Your Response	**Agree ***	**Disagree ***
Additional Comments (As Required):		
6. In general terms, to what extent do you/does your organisation support the ACP-2022-033 proposal?		
Your Comments (As Required):		

* Delete as appropriate

7. What impact(s) do you perceive that DSAA's operation of the proposed IFP design might have on your/your organisation's operations?
Your Response:
8. DSAA is keen to mitigate the impact(s) of its operation on its local and wider stakeholders. What mitigations would you suggest that could ameliorate any concern(s) that you/your organisation might have?
Your Response:
9. Please comment on any other issues or constraints you feel the Sponsor should consider incorporating into the IFP design.
Your Comments (As Required):

* Delete as appropriate

Thank you for your engagement. Your response will provide valuable input to aid the development of the Application.

All completed forms must be retained as evidence of the Applicant's engagement with stakeholders and other interested parties. Personal Data supplied by respondents will be retained confidentially and managed under the principles of the UK Data Protection Act (DPA) (2018) and the UK General Data Protection Regulation (GDPR).

Signed .....

INITIALS AND SURNAME .....

Role/Position .....

Organisation .....

Email Address .....

Telephone No .....

Date .....

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