Dear XXXX

I am writing in respect of your recent request of 23 February 2014, for the release of information held by the Civil Aviation Authority (CAA).

In assessing your request in line with the provisions of the Freedom of Information Act 2000 (FOIA), we are able to provide the information below. For convenience we have repeated your request in italics followed by our response.

**Correspondence the CAA has received from Gatwick Airport as it applies to the purpose and duration of current trials which have altered the flight path to fly closer to Warnham.**

It is important to explain the various entities involved in the trial. Gatwick Airport is a corporate entity that contracts NATS to provide its air traffic services at the airport. Separate to that, NATS services include the production of instrument flight procedure designs (departure and arrival routes etc) and NATS is also the UK’s en-route air navigation service provider. Whilst your request refers to material provided to the CAA by Gatwick Airport, the design work required to bring the trial to fruition was undertaken by procedure designers at NATS, whilst the trial itself was sponsored by NATS (Gatwick), who provide air traffic services to the airport. Consequently, we have included information provided to the CAA from those sources. Personal details of NATS and CAA staff have been removed in accordance with section 40(2) of the FOIA as to release the information would be unfair to the individuals concerned and would therefore contravene the first data protection principle that personal data shall be processed fairly and lawfully. A copy of this exemption can be found below.

**The criteria in which the CAA will intervene in nuisance cases in trial situations**

There are no formal criteria established for the intervention of the CAA on environmental grounds in respect of trials, and any intervention by the CAA will be on a case-by-case basis. The current trial is one of several at various airports that aim to inform the Departure Enhancement Project (DEP) being progressed as part the UK’s Future Airspace Strategy (FAS). The FAS received strong support from the independent Airports Commission in its December 2013 Interim Report. DEP trials, such as ADNID, are designed to assess the track-keeping accuracy of aircraft using what is known as
Performance Based Navigation, where the aircraft uses satellite and other technologies to fly the safest and most environmentally efficient route. Satisfactory completion of these types of trials will enable the delivery of FAS because the data collected will enable advanced airspace designs to be identified and implemented.

The complaints process which should be followed if it is believed the CAA are not adequately fulfilling their duties

The CAA treats as a complaint, any expression of dissatisfaction with our service which calls for a response. This policy covers complaints about:

- The standard of service we provide
- The behaviour of our staff
- Any action or lack of action by our staff affecting an individual or group
- Any unfair treatment of stakeholders by members of our staff
- The administration of decisions we have made and the process we have followed (except where the process is separately set out in legislation)

The complaints procedure can be accessed using the following link:

http://www.caa.co.uk/default.aspx?catid=2630&pagetype=90

In this case, however, the decision to approve the trial was made in accordance with our statutory duties. Should you believe that the CAA has failed to act lawfully in accordance with its duties and requirements, you may wish to instigate legal action, taking such legal advice as you consider appropriate.

If you are not satisfied with how we have dealt with your request in the first instance you should approach the CAA in writing at:-

Mark Stevens
External Response Manager
Civil Aviation Authority
Aviation House
Gatwick Airport South
West Sussex
RH6 0YR

mark.stevens@caa.co.uk

The CAA has a formal internal review process for dealing with appeals or complaints in connection with Freedom of Information requests. The key steps in this process are set in the attachment.
Should you remain dissatisfied with the outcome you have a right under Section 50 of the Freedom of Information Act to appeal against the decision by contacting the Information Commissioner at:-

Information Commissioner’s Office
FOI/EIR Complaints Resolution
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF
www.ico.gov.uk/complaints.aspx

Should you wish to make further Freedom of Information requests, please use the e-form at http://www.caa.co.uk/foi.

Yours sincerely

Rick Chatfield
Information Rights and Enquiries Officer
CAA INTERNAL REVIEW & COMPLAINTS PROCEDURE

- The original case to which the appeal or complaint relates is identified and the case file is made available;
- The appeal or complaint is allocated to an Appeal Manager, the appeal is acknowledged and the details of the Appeal Manager are provided to the applicant;
- The Appeal Manager reviews the case to understand the nature of the appeal or complaint, reviews the actions and decisions taken in connection with the original case and takes account of any new information that may have been received. This will typically require contact with those persons involved in the original case and consultation with the CAA Legal Department;
- The Appeal Manager concludes the review and, after consultation with those involved with the case, and with the CAA Legal Department, agrees on the course of action to be taken;
- The Appeal Manager prepares the necessary response and collates any information to be provided to the applicant;
- The response and any necessary information is sent to the applicant, together with information about further rights of appeal to the Information Commissioners Office, including full contact details.
**Freedom of Information Act: Section 40**

(1) Any information to which a request for information relates is exempt information if it constitutes personal data of which the applicant is the data subject.

(2) Any information to which a request for information relates is also exempt information if-

(a) it constitutes personal data which do not fall within subsection (1), and

(b) either the first or the second condition below is satisfied.

(3) The first condition is-

(a) in a case where the information falls within any of paragraphs (a) to (d) of the definition of "data" in section 1(1) of the Data Protection Act 1998, that the disclosure of the information to a member of the public otherwise than under this Act would contravene-

(i) any of the data protection principles, or

(ii) section 10 of that Act (right to prevent processing likely to cause damage or distress), and

(b) in any other case, that the disclosure of the information to a member of the public otherwise than under this Act would contravene any of the data protection principles if the exemptions in section 33A(1) of the Data Protection Act 1998 (which relate to manual data held by public authorities) were disregarded.

(4) The second condition is that by virtue of any provision of Part IV of the Data Protection Act 1998 the information is exempt from section 7(1)(c) of that Act (data subject's right of access to personal data).

(5) The duty to confirm or deny-

(a) does not arise in relation to information which is (or if it were held by the public authority would be) exempt information by virtue of subsection (1), and

(b) does not arise in relation to other information if or to the extent that either-

(i) the giving to a member of the public of the confirmation or denial that would have to be given to comply with section 1(1)(a) would (apart from this Act) contravene any of the data protection principles or section 10 of the Data Protection Act 1998 or would do so if the exemptions in section 33A(1) of that Act were disregarded, or

(ii) by virtue of any provision of Part IV of the Data Protection Act 1998 the information is exempt from section 7(1)(a) of that Act (data subject's right to be informed whether personal data being processed).

(6) In determining for the purposes of this section whether anything done before 24th October 2007 would contravene any of the data protection principles, the exemptions in Part III of Schedule 8 to the Data Protection Act 1998 shall be disregarded.

(7) In this section-

"the data protection principles" means the principles set out in Part I of Schedule 1 to the Data Protection Act 1998, as read subject to Part II of that Schedule and section 27(1) of that Act;

"data subject" has the same meaning as in section 1(1) of that Act;

"personal data" has the same meaning as in section 1(1) of that Act.
UNCONFIRMED MINUTES – TO BE CONFIRMED AT THE NEXT MEETING OF GATCOM ON THURSDAY 10 APRIL 2014

GATCOM

Minutes of the meeting of the Gatwick Airport Consultative Committee held on 30 January 2014.

Present: Dr. John Godfrey DL (Chairman)

Matthew Balfour - Kent County Council
Pier Barrett - London Chamber of Commerce and Industry
John Byng - Environmental and Amenity Groups
Mike George - Horley Town Council
Peter Hall - Passenger Representative
Ken Harwood - Tandridge District Council
Chris Hersey - Mid Sussex District Council
Angie Hills - ABTA
Alan Jones - Burstow Parish Council
Liz Kitchen - Horsham District Council
Isobel Knox - BATA
Vivienne Michael (substitute) - Mole Valley District Council
Douglas Moule - Gatwick AOC
John Peel (substitute) - Coast to Capital LEP
Eddie Redfern - IACA
Bryan Reynolds - Which?
Dorothy Ross-Tomlin - Surrey County Council
Tony Schofield - Reigate and Banstead Borough Council
Jeremy Taylor - Gatwick Diamond Business
Ken Trussell - Crawley Borough Council
Charles Yarwood - Charlwood Parish Council

Also present:
Stewart Wingate - Chief Executive Officer, GAL
Alastair McDermid - Airports Commission Director, GAL
Tom Denton - Head of Corporate Responsibility, GAL
Gary Wallace - Head of Car Parks, GAL
Tim May - Department for Transport
Barry Smith - Deputy Honorary Secretary
Ros Howell - Independent Technical Adviser
Paula Street - Assistant Secretary

Apologies for absence were received from:
Martin Heffer (Coast to Capital LEP), Neil Maltby (Mole Valley District Council) and Pieter Montyn (West Sussex County Council)

CHAIRMAN’S UPDATE ON ACTIVITIES

114. The Chairman provided a number of updates on his activities on behalf of GATCOM since the last meeting. He had:

- Following consultation with members agreed a response to Gatwick Airport Limited’s (GAL) consultation on the draft of the reviewed noise action plan
- Attended the launch of the Airports Commission’s Interim Report
- With a delegation comprising the Vice-Chairman, GATCOM’s lead member for noise, the Independent Technical Adviser and the Secretariat discussed with GAL and NATS the consultation arrangements for the London Airspace consultation
- Participated in the Passenger Advisory Group’s (PAG) runway 2 (R2) project group looking at the passenger perspective of the design of development of options for R2
- Attended the Gatwick Area Conservation Campaign’s seminar and Annual General Meeting

115. It was also noted that on behalf of GATCOM the Vice-Chairman of PAG, together with other members and the Secretariat met another of the prospective bidders for the Thameslink franchise to set out GATCOM’s aspirations for future services. Tenders for the franchise were required to be submitted to the DfT on 24 December 2013.
MINUTES

116. Resolved - That the minutes of the meeting held on 17 October 2013 be approved as a correct record and that they be signed by the Chairman.

GATCOM STEERING GROUP – MATTERS CONSIDERED

117. GATCOM received the report of the Chairman summarising the matters considered at the meeting of the GATCOM Steering Group on 9 January 2014 (copy attached to the signed minutes).

Gatwick Station

118. Members welcomed the Government’s December 2013 National Infrastructure Plan which included a project for a further £50m contribution towards the redevelopment of the Gatwick Airport station to which others, including the airport, would be expected to contribute. It was noted that this project for the railway station was independent of the Airports Commission’s work examining a second runway at Gatwick. GAL would keep GATCOM informed as the scheme proposal progresses.

London Airspace Consultation

119. Members noted that the Steering Group had agreed on behalf of GATCOM the Committee’s response to the London Airspace Consultation.

END Noise Action Plan (NAP)

120. GATCOM was pleased to note that GAL was taking into account all the points raised in consultation responses by GATCOM, individual members and other interests which would be reflected in the reviewed NAP to be submitted to Defra and the DFT. The Steering Group’s concerns about the level of resource for GAL’s Noise Team as a result of additional work pressures were noted. GAL confirmed that that extra resource had been allocated to deal with developing proposals for R2 enabling the Head of the Corporate Responsibility Team to return to the day to day work of the team.

121. GAL was congratulated on the good response times to noise enquiries and complaints via the noiseline.

Implementation of P-RNAV

122. It was noted that the GATCOM Steering Group had, on behalf of GATCOM, endorsed Gatwick’s Flight Operations, Performance and Safety Committee’s (FLOPSC) request to support the roll-out of P-RNAV SID departures as expeditiously as possible. It was also noted that GAL and DfT had been reminded of GATCOM’s request for research into and action to improve the conditions of those suffering from greater concentration of aircraft tracks.

THE CAPACITY DEBATE

Airports Commission’s Interim Report and Draft Appraisal Framework

123. GATCOM considered the Secretariat’s report summarising the Airports Commission’s Interim Report and the consultation on the draft Appraisal Framework (copy attached to the signed minutes).

124. Mrs. Street highlighted the key points of interest to GATCOM in particular the fact that the Commission had recognised that the publication of its Interim Report might cause unwelcome uncertainty for communities close to the short-listed sites. Members noted that the Commission had encouraged the Government and those promoting schemes to consider what steps could be taken to address those concerns, particularly around the short-listed sites, and to consider what mitigations could be put in place. GAL highlighted that it already had in place two schemes to offset property blight. GAL was asked to consider whether its existing schemes were generous and wide ranging enough to address the current options under consideration.
UNCONFIRMED MINUTES – TO BE CONFIRMED AT THE NEXT MEETING OF GATCOM ON THURSDAY 10 APRIL 2014

125. GATCOM was pleased that the Airports Commission’s recommendations for short to medium term measures related to a number of surface transport proposals that had been highlighted by GAL and GATCOM over the years. GATCOM also cautiously welcomed the Airports Commission’s recommendation to the Government to establish an Independent Aviation Noise Authority. Members wished to learn more about the proposed role and powers of the Independent Aviation Noise Authority and asked that the GATCOM Steering Group and NATMAG look at the proposal in more detail.

126. GATCOM considered the set of appraisal modules contained in the Airports Commission’s draft Appraisal Framework. Mrs Street reported on the comments that had been received from member organisations prior to the meeting. GATCOM noted that appraisal modules which the Commission would use to assess options were comprehensive but felt that there were issues that required further clarification:

- appraisal assessment – it was noted that there was the intention to involve the Highways Agency and Network Rail on transport issues but it was not clear what role local authorities would have in assessing environmental impacts
- weightings applied – it was unclear whether there was any degree of weighting on the appraisal modules
- range of assessments relating to the cost and commercial impacts - it was hoped that the assessments would take into account the associated related impacts for businesses that would need to be relocated as a result of a proposed option.

127. It was agreed that GATCOM should respond to the consultation to reflect these points.

128. Resolved – That:

(1) subject to further discussion on the proposed role and powers of the Airports Commission’s recommendation for the establishment of an Independent Aviation Noise Authority, the Airports Commission’s Interim Report in respect of its recommendations for short to medium term measures be welcomed;

(2) the GATCOM Steering Group and NATMAG be asked to consider in more detail the Airports Commission’s recommendation on the establishment of an Independent Aviation Noise Authority and its proposed role and powers;

(3) a response to the Airports Commission’s consultation on the draft Appraisal Framework be submitted to outline the points that GATCOM feels requires further clarification.

Gatwick’s Runway 2 (R2) Work

129. Mr. McDermid, Airports Commission Director, GAL outlined in detail the Airports Commission’s process and timetable for phase 2 of its work examining the long term options for additional runway capacity at Gatwick and Heathrow. Members noted that at Gatwick the Commission’s analysis would be based on a new runway over 3,000m in length spaced sufficiently south of the existing runway to permit a fully independent operation.

130. He explained that GAL was required to submit to the Airports Commission its “refreshed” scheme and assessments with a preferred Gatwick option by 9 May 2014. However, members noted that GAL’s local consultation timetable did not fit with the Commission’s programme for submissions. Mr. McDermid confirmed that GAL would therefore submit to the Airports Commission the same information that was to be subject to its local consultation which might contain GAL’s provisional preferred option if a view had been reached by that time. He emphasised that at this stage GAL had no preference for a particular option. Members were reminded that the options under consideration were those reported to the last GATCOM meeting and were available on GAL’s website.

131. As regards GAL’s local consultation, Mr. McDermid outlined the key dates as follows:
UNCONFIRMED MINUTES – TO BE CONFIRMED AT THE NEXT MEETING OF GATCOM ON THURSDAY 10 APRIL 2014

- 4 April 2014 (provisional) – GAL to launch 6 weeks consultation on its proposed options for R2
- 9 May 2014 – Airports Commission’s requires “refreshed” scheme designs to be submitted together with assessments undertaken to support scheme options. GAL’s submission would contain the same information/scheme designs and assessments subject to the local consultation.
- 16 May 2014 (provisional) – close of GAL’s local consultation on options for R2.
- End July 2014 - GAL aims to submit to the Airports Commission its preferred option taking into account the results of the local consultation together a report on the feedback it received.
- Oct 2014 – Airports Commission to publish refreshed scheme designs and the Airports Commission’s appraisals.
- Autumn 2014 - Airports Commission to undertake a national consultation on refreshed scheme designs and its appraisal of schemes.

132. As part of GAL’s local consultation, GATCOM noted the suggested list of exhibition venues which had been discussed with the Gatwick Local Authorities. The suggested venues were: Crawley (centre), Crawley (Ifield/Langley Green), Crawley Down, Horley, Horsham, East Grinstead, Smallfield, Rusper, Charlwood, Lingfield, Edenbridge, Crowborough, Gatwick Airport Terminals – for passengers and staff. Tandridge District Council’s representative suggested that GAL might achieve better attendance if an exhibition was held in Felbridge rather than Lingfield. GAL would consider this suggestion together with any others from GATCOM members.

133. Mr. McDermid also outlined GAL’s joint working arrangements with the Gatwick Local Authorities’ Officers Group and advised that a number of working groups had been established to look at:

- Housing and employment
- Noise and airspace
- Air Quality
- Land use and other environmental impacts
- Surface access
- Air traffic forecasts
- Public engagement and consultation

134. GATCOM thanked GAL for providing a comprehensive update on its R2 work. GAL would provide a further report at the next meeting.

FLOODING AND POWER OUTAGE ON CHRISTMAS EVE

135. Mr. Wingate gave an overview of the severe disruption experienced at Gatwick on Christmas Eve as a result of the unusual high rainfall, of the review being undertaken by David McMillan, Non-Executive Director, GAL and of GAL’s evidence to the House of Commons Transport Committee. Members noted that David McMillan’s review would look at the lessons learned and what actions were required to avoid a reoccurrence. A report on the outcome of that review would be issued at the end of February. GATCOM was pleased to note that the PAG had been invited to participate in the review to give the passenger’s perspective on the contingency arrangements that had been put in place.

136. Mr. Wingate explained that the flood risk for Gatwick was last assessed with the Environment Agency in 2008 when the South Terminal was assessed as having a 1:20 years flood risk and the North Terminal with a much lower risk of between 1:100-1000 year flood risk. GAL’s investment had therefore been focused on flood alleviation and prevention for the South Terminal which was unaffected by the Christmas Eve flooding incident.

137. Members highlighted various concerns about flooding in the local area, balancing ponds pumping permissions and specific elements of GAL’s investment in flood mitigation schemes, particularly in respect of the Upper Mole Flood Alleviation Scheme. GAL was asked to ensure that David McMillan’s report would include details of the responsibilities and permissions in place. Mr. Wingate would write to members to give further details and clarification in response to the
UNCONFIRMED MINUTES – TO BE CONFIRMED AT THE NEXT MEETING OF
GATCOM ON THURSDAY 10 APRIL 2014

specific issues of concern/areas raised. A copy of the letter would be circulated to all GATCOM members for information.

138. Charlwood Parish Council’s representative advised that Surrey County Council was to establish a Local Flood Forum and it was hoped that GAL would participate in the work of that Forum. Mr. Wingate confirmed that GAL would fully participate in the Forum’s work and looked forward to receiving the invite to participate.

139. GAL was thanked for the update on situation. GATCOM looked forward to receiving the outcome of David McMillan’s review in due course.

AIRPORT COMMENTARY

140. GATCOM received the Chief Executive’s commentary on activity at the airport since the date of the last meeting (copy attached to the signed minutes).

Traffic

141. Mr. Wingate reported that over the last quarter traffic at Gatwick had seen a 4.4% growth in passenger numbers compared with the same period last year. Members noted that a number of airlines had announced expansion in routes/services for the summer season 2014. GAL was asked about the aircraft fleets that would be used and whether it would result in more night flights. GAL confirmed that the new routes and services were predominately long haul and he was aware that any had been scheduled in the night period. The Gatwick AOC representative advised that the aircraft on new services/routes would be Chapter 4 aircraft.

PASSENGER PICK-UP ARRANGEMENTS – LOCAL RESIDENT DISCOUNT SCHEME

142. Mr. Wallace, Head of Car Parks, GAL presented a proposal for a local resident discount scheme for passenger pick up at Gatwick which had been developed in response to concerns expressed by GATCOM and its Passenger Advisory Group at the last meeting (copy of presentation slides attached to the signed minutes). He explained that GAL had implemented a range of measures to assist passenger pick-up, including two hours free parking in the long stay car parks. The proposal to introduce a local resident discount scheme enabling passenger pick-up in the short stay car parks for a much reduce cost would complement the other measures that had been put in place and would preserve the integrity of the other elements of the forecourts management and enforcement.

143. GATCOM appreciated the efforts of GAL to find alternative ways to address local people’s concerns about the high cost of picking up relatives and friends from the airport including commuters using Gatwick railway station. Members felt it important to ensure Gatwick remained accessible for those local people from areas where public transport links are poor or non-existent. However, members remained of the view that the suggested local community scheme fell short in terms of the length of time to enable pick up in the short stay car parks and the cost. Members suggested that GAL reconsider the length of access time in the short stay car parks (20 mins was suggested) and the cost for joining the scheme. Mr. Wingate acknowledged the concerns of members and emphasised the difficult and sensitive balance that needed to be struck between all users of the airport (including users of the railway station), delivering the Surface Access Strategy commitments and targets and the needs of the local community. He agreed to give further consideration to the points raised before launching the scheme in April.

144. GATCOM also felt it important that the take up of the scheme was monitored, the problems/issues identified and a review its success or otherwise be undertaken. The Chairman asked that the PAG continues its work with GAL on the scheme to address the concerns of GATCOM.

145. GAL was also asked to give consideration to implementing a similar scheme for private taxis if the local resident discount scheme proves successful.
UNCONFIRMED MINUTES – TO BE CONFIRMED AT THE NEXT MEETING OF
GATCOM ON THURSDAY 10 APRIL 2014

GATWICK RELATED PLANNING APPLICATIONS
146. GATCOM noted the report by Crawley Borough Council’s Director for Environment and Housing on planning applications determined and outstanding in respect of Gatwick since the date of the last meeting (copy attached to the signed minutes).

PASSENGER ADVISORY GROUP (PAG)
147. Mr Hall, PAG Chairman, presented his report in respect of activities of the PAG since the date of the last meeting (copy attached to the signed minutes). He was pleased to report that the overall contingency plans, collaborative working and communication plan to minimise disruption from the railway line closure over the Christmas period to enable three major engineering projects to be carried out had been successful and effective. He had congratulated Network Rail on the timely completion of the engineering works despite the appalling weather.

148. Mr. Hall was also pleased that David McMillan had invited PAG to participate in the review of the disruption experienced over the Christmas period as a result of the flooding and high winds.

149. GATCOM was pleased to note that GAL was now providing baby buggies to assist arriving passengers with young families to move more easily from the point of disembarking the aircraft to the baggage reclaim hall.

150. It was also noted that PAG was working with GAL on identifying and implementing ways to improve arrivals baggage delivery. The Gatwick AOC’s representative advised that airlines were also committed to work with PAG and GAL on this project.

151. Resolved – That:
(1) PAG’s contribution to:
   (a) David McMillan’s review regarding the disruption caused by bad weather over the Christmas period be supported; and
   (b) GAL’s work in developing the passenger experience for R2 be supported:
(2) PAG’s continued monitoring of GAL’s actions to enhance the PRM experience be supported; and
(3) PAG’s involvement in a wide range of projects and operational matters be noted.

NIGHT FLYING RESTRICTIONS AT HEATHROW, GATWICK AND STANSTED STAGE 2 CONSULTATION
152. GATCOM considered a report by the Independent Technical Adviser suggesting a response to the DfT’s stage 2 consultation on night flying restrictions for Heathrow, Gatwick and Stansted airports (copy attached to the signed minutes). There was a mix of views across the GATCOM membership ranging from the need to ban night flights, or seeking a significant reduction in the number of night flights permitted to those recognising the need and value of night flights to the industry, passengers and the economy. Members were generally of the view that GATCOM’s response struck the right balance in seeking to be constructive encapsulating the diverse mix of views but suggested a some minor amendments:
   • to better clarify GATCOM’s views in respect of annoyance from aircraft overflight and noise in the opening "additional points” paragraph
   • include in the response to Question 1 reference to the impact on health as well as quality of life
   • to provide further clarification in the response to Question 3 about the proposed environmental objectives
   • the deletion of the last sentence to the answer to Question 4

153. Resolved – That, subject to the inclusion of the minor amendments set out above, the suggested response to the DfT’s stage 2 consultation on the night flying restrictions at the three
noise regulated London airports set out in the Appendix to the report be agreed and submitted to the DfT.

**FLIGHT PERFORMANCE TEAM REPORT (FPT)**

154. GATCOM considered the quarterly report for the FPT covering the period July to September 2013 (copy attached to the signed minutes). Mr. Denton, Head of Corporate Responsibility, GAL was pleased to report that the summer period was good in terms of aircraft noise and track keeping performance but noise complaints had increased. This was probably due to the good summer weather as people did more outdoor activities and have windows open more often as well as the increased press and media coverage about the possible expansion of Gatwick. He advised that track keeping performance had shown another small improvement on the previous year’s performance. The greater use of P-RNAV by airlines had helped to achieve this. The member for Tandridge District Council thanked easyJet for the improvements in flight performance on the departure route over the Felbridge area.

155. Reference was made to the problem of the whine of Airbus A320 aircraft caused by the two small cavities on the underside of the wings and the fix that had been identified. GAL was asked to encourage airlines operating A320 aircraft to retrofit the fix to prevent the whine. Mr. Denton advised that GAL was working through the DfT’s ANMAC on seeking the retrofit fix. The Gatwick AOC representative advised that easyJet had invested in Airbus A320 neo aircraft which would come with the retrofit to fix the whine.

156. It was noted that a mobile noise monitor has been sited at Bidborough, Tunbridge Wells.

157. Reference was made to the implementation of P-RNAV and GAL was asked to pursue the commissioning of an independent analysis of the results of the P-RNAV trial. Mr. Denton confirmed that GAL was still in discussion with a Cambridge university about this.

**NOISE INSULATION SCHEME FOR RESIDENTIAL PROPERTIES**

158. Mr. Denton presented GAL’s new noise insulation scheme for residential properties which would be launched on 1 April 2014 (copy of presentation slides attached to the signed minutes). He explained that the new scheme would be more generous and would benefit a further 869 homes. GAL would pay a percentage contribution towards the cost of insulation works up to a maximum of £3000 per property. The scheme boundary would extend 15km to both the east and west of the airport and had been drawn flexibly to ensure entire roads and villages were included. The new scheme would also take into account the increased sensitivity people had towards noise levels as well as the frequency of how many times they might be overflown. GAL had placed details of its new scheme on its website: http://www.gatwickairport.com/business-community/aircraft-noise/consultations-and-schemes/noise-insulation-scheme/

159. GATCOM welcomed the new scheme and hoped that properties insulated a many years ago could also apply to benefit from the new modern, more effective insulation products on offer. GAL confirmed that properties would be eligible for funding of improvements to existing insulation and that the scheme also took into account listed buildings.

**TIME SEPARATION DEPARTURES TRIAL – ADNID ROUTE**

160. Mr. Taylor, NATS and Mr. Denton, GAL presented a departure routes time separation trial that would commence on 10 February 2014 for a period of six months (copy of presentation slides attached to the signed minutes). The operational trial would involve the creation of a new, but temporary, departure route (west of the BOGNA route) which would pass over farmland to the west of Billingshurst. The temporary route had been designed to avoid populated areas.

161. It was explained that the purpose of the trial was to gather data to help develop national standards for improved efficiency for runway use and establish whether it was operationally feasible to improve time separation between flights off Gatwick’s runway using P-RNAV technology. The trial route would also involve a reduction in the currently required angle of divergence between adjacent routes – from 45 degrees to 20 degrees.
UNCONFIRMED MINUTES – TO BE CONFIRMED AT THE NEXT MEETING OF GATCOM ON THURSDAY 10 APRIL 2014

162. Members asked whether local communities would be informed of the temporary change. It was felt that parish councils in particular should be advised of trial to enable them to respond to their constituents if problems arose. Mr. Denton would consider this but emphasised the need to obtain genuine feedback from those affected. If people were aware of the trial it was possible that they would be more alert to changes and feel obliged to comment. GATCOM looked forward to receiving the results of the trial.

NOISE AND TRACK MONITORING ADVISORY GROUP (NATMAG)

163. GATCOM received the unconfirmed minutes of the meeting of NATMAG held on 28 November 2013 (copy attached to the signed minutes). The key messages in relation to the implementation of the P-RNAV and the excellent ground noise management performance were noted.

DFT REVIEW OF GUIDELINES FOR AIRPORT CONSULTATIVE COMMITTEES

164. GATCOM considered a report by the Secretariat giving details about the DfT’s consultation with interested parties on the review of the guidelines for airport consultative committees and the suggested response (copy attached to the signed minutes). Members noted the DfT’s proposed additions to the guidelines and the points raised by the GATCOM Steering Group which had been included in the suggested draft response.

165. Resolved – That the suggested response set out in Appendix 2 to the Secretariat’s report be agreed and submitted to the DfT for consideration.

GATWICK AREA COMMUNITY TRUST

166. Mr. Redfern, GATCOM’s nominated member to serve on the Gatwick Airport Community Trust reported that the Trust was currently inviting applications for grants for deserving projects, particularly in those areas where people were directly affected by operations at Gatwick Airport. Members were asked to pass on details of the Trust’s invitation to any groups/organisations in their area to alert them to this potential source of project funding. The secretariat would send to all members a weblink to the Trust’s website (http://www.gact.org.uk/)

DATES OF NEXT MEETINGS OF GATCOM AND ITS SUB-GROUPS

167. Members noted the next meetings of GATCOM as follows:

GATCOM Steering Group – Thursday 20 March 2014 at 10.00 a.m.
Passenger Advisory Group – Thursday 20 March 2014 at 2.00 p.m.
GATCOM – Thursday 10 April 2014 at 2.00 p.m.

168. Members also noted that the next meeting of Gatwick Airport Limited’s Noise and Track Monitoring Advisory Group (NATMAG) would take place on Thursday 27 February 2014 at 10.00 a.m.

Chairman
Dear [Name],

Please find my responses to the remaining items attached. I have also attached the most recent proof of the AIP chart received from the cartography department. The chart is still being reviewed but any comments you have would be welcome.

Best regards,

[Name]

Heathrow House, Bath Road
Cranford, Middlesex, TW5 9AT
www.nats.co.uk

Hi [Name],

Thanks for your responses which I have assessed. There are 2 items (8 and 10) which remain open, please see attached doc for details.

Also see attached draft chart which you can send to AIS, any changes relating to item 8 and 10 from the comments doc can be amended as required before the final version are submitted for promulgation.

Regards

[Name]
Please find my responses attached. I have copied the relevant parts of the email in as well so that everything is contained in the one document.

Let me know if you have any further questions.

Best regards,

[Signature]

E: [Email]

Heathrow House, Bath Road
Cranford, Middlesex, TW5 9AT
www.nats.co.uk

From: [Email]
Sent: 04 October 2013 11:46
To: [Email]
Cc: [Email]
Subject: RE: Gatwick BOGNA Trial

Hi,

Thank you for the latest submission.

Please see attached doc with some further comments that need to be considered and addressed.

As this SID is a trial I don’t necessarily see the issues I raise as a show stopper but as I state in my comments, I need to know that they have been considered and what you believe the impacts to be.

I spoke to briefly this morning but he feels that you are best placed to respond to the comments.

If you can supply any input on this and want to contact me, please give me a call as I am in the office today.

Regards,

[Signature]

Airspace Regulator (IFP)
Airspace Regulation
Civil Aviation Authority

Tel: [Phone number]

www.caa.co.uk
Follow us on Twitter: @UK_CAA

Please consider the environment. Think before printing this email.
Hi

Please follow the link above to download v1.3 of the Gatwick BOGNA Trial package. I have only included the Calculations, Drawings, and Compliance Check folders as there have been no changes to the other folders. Please let me know if you have any questions or comments.

Best regards,

ShareFile is a tool for sending, receiving, and organizing your business files online. It can be used as a password-protected area for sharing information with clients and partners, and it's an easy way to send files that are too large to e-mail.

Trouble with the above link? You can copy and paste the following URL into your web browser:
https://uat.shn.io/file/d/vx44s1498283416

Powered By Chris ShareFile 2013

Before Printing consider the environment.

This e-mail and any attachment(s) are for authorised use by the intended recipient(s) only. It may contain proprietary material, confidential information and/or be subject to legal privilege. If you are not an intended recipient then please promptly delete this e-mail, as well as any associated attachment(s) and inform the sender. It should not be copied, disclosed to, retained or used by, any other party. Thank you.
Please note that all e-mail messages sent to the Civil Aviation Authority are subject to monitoring / interception for lawful business.

If you are not the intended recipient, please notify our Help Desk at Email Information.Solutions@nats.co.uk immediately. You should not copy or use this email or attachment(s) for any purpose nor disclose their contents to any other person.

NATS computer systems may be monitored and communications carried on them recorded, to secure the effective operation of the system.

Please note that neither NATS nor the sender accepts any responsibility for viruses or any losses caused as a result of viruses and it is your responsibility to scan or otherwise check this email and any attachments.

NATS means NATS (En Route) plc (company number: 4129273), NATS (Services) Ltd (company number 4129270), NATSNAV Ltd (company number: 4164590) or NATS Ltd (company number 3155567) or NATS Holdings Ltd (company number 4138218). All companies are registered in England and their registered office is at 4000 Parkway, Whiteley, Fareham, Hampshire, PO15 7FL.
CAA Comments on Gatwick BOGNA SID Trial (ADNID 1X 26L)

1. In para 1.1 of the report there is a reference to the WILLO hold. As the new SID is for repositioning the existing BOGNA/HARDY SID and ensuring separation from the WILLO hold, I need to see the BOGNA/HARDY SID and the WILLO hold in the drawing. Please ensure that these are all clearly labelled in the drawing with the protection area included.

   BTS – HARDY 5M, HARDY 1X, and WILLO Hold added to drawing.

   CAA - Closed

2. Also with the reference to the SAM/KENET 26L departures, I need to see these departures on a layer in the drawing. Please ensure that these are all clearly labelled in the drawing with the protection area included.

   BTS – SAM 2M and SAM 1X added to drawing.

   CAA - Closed

3. In para 2.4 there is reference made to 800ft, how was the value of 800ft calculated?

   BTS – Aerodrome elevation is 203ft. Add 500ft and round up to the next hundred feet is 800ft. This could be changed to 703ft if rounding up is considered to be too prohibitive.

   CAA – To try and ensure the turn occurs as close to KKW02 a CA at 800' may be the best option. See comment 9 below.

   BTS – CA leg to remain at 800ft.

   CAA – Closed.

4. In para 3.2 the CG of 3.9% needs to be addressed within the coding of the SID as per the previous GAT and LHR SIDs.

   BTS – The “At or above 3000” level restriction at KKW12 already requires a climb gradient of at least 4.94% to KKW12. However I am happy to add an “At or above 800” level restriction at KKW02 to enforce a 5.93% climb gradient on the first leg.

   CAA – The response appears to be a contradiction of what is in the report paragraph 3.2 Procedure Design Gradient, which states the following:

   A procedure design climb gradient of 3.9% is required to 300ft AAL in order to clear obstacle 4597 by the requisite 16.76m. Following this the procedure design gradient returns to the standard 3.3% to 1600ft AMSL.

   Please explain the difference between the response above and what is in the report.

   BTS – The obstacle environment requires a procedure design climb gradient of 3.9% until 300ft AAL at which point aircraft can return to 3.3%. This ensures that aircraft do not collide with obstacles or terrain. The level restriction of “at or above 3000ft” at KKW12 ensures that aircraft stay within controlled airspace and results in an airspace climb gradient of over 4.9%. The coding of the procedure therefore already ensures that aircraft will exceed the procedure design climb gradient. However the procedure design gradient should still be published on the chart for reference in case an aircraft is unable to meet the procedure level restrictions. This allows pilots to follow the lateral SID profile as long as they comply with the procedure design climb gradient.
CAA - Above where you say that an a/c can return to 3.3% CG is only true for obstacle clearance. But as there are other restrictions for airspace containment etc, then a pilot cannot follow the SID if all restrictions/constraints cannot be met and would need to advise ATC of such. Therefore it is not correct to say that the lateral SID profile can be followed as long as the procedure design CG is complied with when there are other restrictions/constraints contained within the SID.

The chart being published with the note of the 3.9% CG until 300AAL requirement along with the WP altitude constraints is correct. But it is your report statement and comment above which are not correct, as a crew are not allowed to fly an IFP unless they can meet all of its restrictions/constraints without advising ATC, which could on occasions mean that an alternative clearance may need to be issued.

CAA – Closed.

5. In the list of close-in obstacles please indicate whether the “Elev” is metres or ft in the actual list. When the list goes to AIS for publishing you normally provide both metres and feet so why not include the same list format in the report?
   BTS – Metric and Imperial elevations added to report.
   CAA - Closed

6. It appears that CAA report forms are being incorporated into a NATS report with “NATS PRIVATE – CONFIDENTIAL” on them. CAA report forms when submitted have to be submitted separately to any other report document.
   BTS – The CAA “Appendix A” APD Validation Report is included in the “Compliance Check” folder but does not have any NATS protective marking on it. Is there another CAA form being included somewhere else?
   CAA - I was referring to the simulator/flight validation forms submitted in the flyability report.
   BTS – We will ensure that CAA forms are not incorporated into NATS reports in the future.
   CAA – Closed.

7. RVT is not a proven flyability software tool at this time, therefore can you please advise what is the intended methodology for the validation of this SID? Please be advised that a validation plan is required to be submitted to the CAA, therefore is such a plan available at this time?
   BTS – is addressing this comment.
   CAA - Closed

Further CAA Comments

03/9/2013.
8. When is the DEMETER analysis expected to be completed?
CN – DEMETER Analysis has been chased today and should be expected next week.
CAA – I acknowledge receipt of email from [redacted] which I need to check further.
CN – DEMETER Analysis sent to CAA on 15 October.

9. In the report paragraph 3.1 the “WP placement rationale” does not provide rationale for all of the placements. For example:
   a. Why was KKW02 placed 3000m from the DER, why did you use a FB instead of a FO?
   b. What was the NATS operational analysis rationale for KKW12 placement?
   c. Why is KKW18 3nm before KKW22?
   d. KKW27 is the only WP where rationale is supplied.
   Please document rationale for all WPs (only KKW27 rationale is acceptable).
CN – KKW02: Positioned on the extended runway centreline as close as possible to DER. 3000m chosen to provide 1NM of climb distance and 0.6NM of turn initiation distance.
KKW12: Positioned to provide adequate separation from the WILLO hold before further left turns occur. It offers some divergence from the straight-ahead track of the SAM/KENET SIDs that enables the capture of data relating to reduced angles of divergence on departure. The impact on local communities of the aircraft's track offers the final logic for its placement.
KKW18: Positioned purely for its vertical constraint. The below 5000ft restriction ensures procedural separation from LL MID/DOKEN departures for as long as is possible while still allowing subsequent level restrictions to be feasible. The minimum length of an RNAV segment on a SID outside 15NM from the ARP is 3NM.
KKW22: Positioned to provide adequate separation from the WILLO hold before further left turns occur. Its above 5500ft altitude restriction is to ensure that aircraft on the departure remain inside CAS which at LTMA-14 has a base of 5000ft. Impact on local communities below the flight path is the final driver for its position.
KKW27: Positioned purely for its vertical constraint of level at 6000ft which is necessary to ensure the procedure remains within CAS; LTMA-15 has a base of 5500ft.
ADNID: Positioned to provide adequate separation from the WILLO hold before aircraft route to pick up their filed airways. Impact on local communities below the flight path is also considered in its final position.

   CAA – My concern here is that the APD did not appear to be aware of the rationale for the WP placement. This is something that will need to be discussed outside of this project.

   CAA – Closed.

10. With the use of KKW02 as a FB WP, has the risk of a turn from the CA to KKW12 been considered?
a. Due to the early turn initiation of KKW02 there could be a risk of an a/c FMS executing the coding such that when the CA 800' is reached, a turn to KKW12 would commence instead of executing the CF to KKW02. This would mean that a/c would track south of the published track (closer to Horsham). Is this something that is acceptable under what this SID is trying to achieve?

b. The proposed coding is likely to provide track dispersal until KKW12, is this an issue for the SID in what it is trying to achieve?

c. Rather than using a FB WP was the possibility of using a FO WP at KKW02 considered?

d. Would the use of a lower speed restriction at KKW02 than the 250 KIAS proposed, help to ensure that more a/c will be closer to KKW02 before the turn to KKW12 is commenced, again was this considered?

e. As the flyability of this SID is via the trial, I need to know whether the issues I raise above have been considered by the APD and SID sponsor and what impact they may have on the SID trial.

BTS – The first waypoint at KKW02 was designed as a fly-by-turn in order to reduce track dispersion around the turn. A fly-over turn would create a much larger dispersion of tracks to the outside of the waypoint and would not meet the DEP objectives. As KKW02 was too close to DER to comply with the CAP778 requirements, an initial CA leg to 800ft was created. This prevents aircraft from initiating any turns below 500ft AAL. It is anticipated, however that most aircraft will reach 800ft well before the turn initiation point for the turn at KKW02. They would then sequence the CF leg to KKW02 and make a normal fly-by-turn to KKW12. Any aircraft that reach 800ft after the turn initiation point for KKW02 would then sequence the TF leg to KKW12 (CAA - the point is that some a/c may bypass KKW02 and in this case would go straight to KKW12, only if there was a CF from KKW02 to KKW12 would your explanation occur) and make a turn more closely approximating a fly-over turn to intercept the leg to KKW12. This would obviously produce some dispersal to the outside of the KKW02 turn but this expected to be minimal. The sponsor is aware of the potential areas of track dispersal and will examine those as part of the trial.

CAA – The query in (d) above has not been addressed in your response. How will the data that is collected as part of the trial be presented and submitted to demonstrate validation of SID flyability?

BS – Regarding query (d), a lower speed restriction would hypothetically reduce the track dispersion around the turn at KKW02. However, PANS-OPS indicates that the expected speed at this distance from DER would be between 192 and 200 KIAS. It was therefore felt to be unlikely that any aircraft would be flying this segment of the departure at anything over 220 KIAS.

CN – Data collection methodology sent to CAA on 16 October.

11. Comment 4 above needs to be clarified.

BTS – See further response under comment 4.

CAA - Closed.

04/10/2013
RNAV (DME/DME or GNSS)
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

DISTANCES IN NAUTICAL MILES
WARNING. TRACKS AND RADIALS ARE MAGNETIC.
ALTITUDES AND ELEVATIONS ARE IN FEET

LONDON GATWICK
RWY 26L
ADNID 1X

NOTE 1: RWY 26L obstacle requirement: minimum climb gradient 3.9% to 360 AAL.
NOTE 2: Close-in obstacles exist for RWY 26L departures. See Aerodrome Obstacle Chart and EGKK AD 2.10 Aerodrome Obstacles.
NOTE 3: Adhere to maximum speed limits where specified by waypoints indicated/4.
NOTE 4: Maximum 250 KIAS below FL180 unless authorised by ATC.

ADDITIONAL RNAV DATA
1. OME/CA only procedure: no critical points.
2. RNAV1 SID's are available only for approved aircraft that are either GNSS equipped or that have DME/DME and INS/IRU with automatic runway updating capability.

GENERAL INFORMATION
1. Note Navaids Procedures in accordance with EGKK AD 3.21 remain in force with the exception of paragraph 8.
2. En-route cruising levels will be issued after take-off by 'London Control'.
3. Callsign for ATC frequency used when instructed after take-off is 'London Control'. Report callsign, SID designator, current altitude and initial cleared altitude on final contact with 'London Control'.

WARNING - STEPPED CLIMB
Due to interaction with other routes pilots must ensure strict compliance with the specified climb profile unless cleared by ATC.

ADNID 1X Climb straight ahead to 880 AMSL - KKW03, left to KKW12, left to KKW18, left to KKW22, left to KKW27 - ADNID 1X, RWY 26L

WAYPOINTS
KKW02 : 510231.95N 0001518.20W
KKW12 : 510152.00N 0002533.00W
KKW18 : 510161.14N 0002291.54W
KKW22 : 505817.73N 0003150.45W
KKW27 : 505500.25N 0003055.88W
ADNID : 505137.56N 0002959.95W

NOTE 1: VFRNAV1 SID's are available only for approved aircraft that are either GNSS equipped or that have DME/DME and INS/IRU with automatic runway updating capability.

1. Note Navaids Procedures in accordance with EGKK AD 3.21 remain in force with the exception of paragraph 8.
2. En-route cruising levels will be issued after take-off by 'London Control'.
3. Callsign for ATC frequency used when instructed after take-off is 'London Control'. Report callsign, SID designator, current altitude and initial cleared altitude on final contact with 'London Control'.
# Standard Instrument Departure Coding Tables

**London Gatwick Runway 26L ADNID 1X**

<table>
<thead>
<tr>
<th>Designator</th>
<th>Sequence Number</th>
<th>Path Terminator</th>
<th>Waypoint Name</th>
<th>Waypoint Co-ordinates</th>
<th>Fly-over</th>
<th>Course/ Track <em>M (°)</em></th>
<th>Magnetic Variation</th>
<th>Distance (NM)</th>
<th>Turn Direction</th>
<th>Level Constraint</th>
<th>Speed Constraint</th>
<th>Navigation Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADNID 1X</td>
<td>001</td>
<td>CA</td>
<td></td>
<td></td>
<td>259°</td>
<td>259°</td>
<td>-1.0</td>
<td>-</td>
<td></td>
<td>-</td>
<td>+800</td>
<td>RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>002</td>
<td>CF</td>
<td>KKW02</td>
<td>510820.96N 0001519.20W</td>
<td>259°</td>
<td>259°</td>
<td>-1.0</td>
<td>1.6</td>
<td>LEFT</td>
<td>-250</td>
<td>-250</td>
<td>RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>003</td>
<td>TF</td>
<td>KKW12</td>
<td>510413.00N 002533.00W</td>
<td>259°</td>
<td>259°</td>
<td>-1.0</td>
<td>7.7</td>
<td>LEFT</td>
<td>-250</td>
<td>-250</td>
<td>RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>004</td>
<td>TF</td>
<td>KKW16</td>
<td>510047.14N 0002911.96W</td>
<td>259°</td>
<td>259°</td>
<td>-1.0</td>
<td>4.1</td>
<td>-</td>
<td>-5000</td>
<td>-250</td>
<td>RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>005</td>
<td>TF</td>
<td>KKW22</td>
<td>505617.73N 0003150.45W</td>
<td>259°</td>
<td>259°</td>
<td>-1.0</td>
<td>3.0</td>
<td>LEFT</td>
<td>-250</td>
<td>-250</td>
<td>RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>006</td>
<td>TF</td>
<td>KKW27</td>
<td>505500.25N 0003095.88W</td>
<td>259°</td>
<td>259°</td>
<td>-1.0</td>
<td>3.3</td>
<td>-</td>
<td>-6000</td>
<td>-250</td>
<td>RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>007</td>
<td>TF</td>
<td>ADNID</td>
<td>505137.56N 0002659.80W</td>
<td>259°</td>
<td>259°</td>
<td>-1.0</td>
<td>3.4</td>
<td>-</td>
<td>-6000</td>
<td>-250</td>
<td>RNAV1</td>
</tr>
</tbody>
</table>

---

2013-05_LONDON GATWICK RNAV1 EGHK ADNID 1X Runway 26L CODING 14 OCT 13
Chatfield Rick

From:        04 October 2013 17:07
Sent:        To:        Subject: FW: Gatwick BOGNA Trial _ ADNID SID

I spoke to the mail below. He will discuss with and GAL next week about the initial departure and present the rationale for the proposed coding.

So I await an email from as to the next steps.

Regards

From: @nats.co.uk]
Sent: 04 October 2013 16:36
To:    Cc:    Subject: RE: Gatwick BOGNA Trial

Thanks for the comments, you’ve been very busy on the phone today as I’ve not managed to get through – I’ll answer what I can here but I think the lion’s share of this will need to come from as I’m not best placed to comment without further clarification myself.

CAA Comment 8: DEMETER Analysis has been chased today and should be expected next week.

With regards to positioning of WP I have set up this Map in Google Earth to help with the latter WPs as it shows airspace boundaries and I can offer the following descriptions:
WP KKW12 is positioned to provide adequate separation from the WILLO hold before further left turns occur. It offers some divergence from the straight-ahead track of the SAM/KENET SIDs that enables the capture of data relating to reduced angles of divergence on departure. The impact on local communities of the aircraft's track offers the final logic for its placement.

WP KKW18 is positioned purely for its vertical constraint. The below 5000ft restriction ensures procedural separation from LL MID/DOKEN departures for as long as is possible while still allowing subsequent level restrictions to be feasible.

WP KKW22 is positioned to provide adequate separation from the WILLO hold before further left turns occur. Its above 5500ft altitude restriction is to ensure that aircraft on the departure remain inside CAS which at LTMA-14 has a base of 5000ft. Impact on local communities below the flight path is the final driver for its position.

WP KKW27 is positioned purely for its vertical constraint of level at 6000ft which is necessary to ensure the procedure remains within CAS; LTMA-15 has a base of 5500ft.

WP ADNID is positioned to provide adequate separation from the WILLO hold before aircraft route to pick up their filed airways. Impact on local communities below the flight path is also considered in its final position.
I'll look to discuss the questions relating to track containment/dispersal in the design with [redacted] next week so myself/GAL are clear on the implications going forward.

I hope this helps and if you require the data in another form please let me know.

Regards

NATS Private

NATS

NATS Swanwick, Room 3324, Sopwith Way,
Swanwick, Hampshire, SO31 7AY
www.nats.co.uk

From: [redacted]@caa.co.uk
Sent: 04 October 2013 11:47
To: [redacted]
Cc: [redacted]
Subject: RE: Gatwick BOGNA Trial

Hi [redacted],

Thank you for the latest submission.

Please see attached doc with some further comments that need to be considered and addressed.

As this SID is a trial I don't necessarily see the issues I raise as a show stopper but as I state in my comments, I need to know that they have been considered and what you believe the impacts to be.

I spoke to [redacted] briefly this morning but he feels that you are best placed to respond to the comments.

If you can supply any input on this and want to contact me, please give me a call as I am in the office today.

Regards

[redacted]

Airspace Regulator (IFP)
Note From [Redacted]

Hi [Redacted]

Please follow the link above to download v1.3 of the Gatwick BOGNA Trial package. I have only included the Calculations, Drawings, and Compliance Check folders as there have been no changes to the other folders. Please let me know if you have any questions or comments.

Best regards,

[Redacted]

ShareFile is a tool for sending, receiving, and organizing your business files online. It can be used as a password-protected area for sharing information with clients and partners, and it's an easy way to send files that are too large to e-mail.

Trouble with the above link? You can copy and paste the following URL into your web browser:

https://nats.sharefile.com/d/e84981465243416a
Before Printing consider the environment.

This e-mail and any attachment(s) are for authorised use by the intended recipient(s) only. It may contain proprietary material, confidential information and/or be subject to legal privilege. If you are not an intended recipient then please promptly delete this e-mail, as well as any associated attachment(s) and inform the sender. It should not be copied, disclosed to, retained or used by, any other party. 

Thank you.

Please note that all e-mail messages sent to the Civil Aviation Authority are subject to monitoring / interception for lawful business.

If you are not the intended recipient, please notify our Help Desk at Email Information.Solutions@nats.co.uk immediately. You should not copy or use this email or attachment(s) for any purpose nor disclose their contents to any other person.

NATS computer systems may be monitored and communications carried on them recorded, to secure the effective operation of the system.

Please note that neither NATS nor the sender accepts any responsibility for viruses or any losses caused as a result of viruses and it is your responsibility to scan or otherwise check this email and any attachments.

NATS means NATS (En Route) plc (company number: 4129273), NATS (Services) Ltd (company number 4129270), NATSNAV Ltd (company number: 4164590) or NATS Ltd (company number 3155567) or NATS Holdings Ltd (company number 4138218). All companies are registered in England and their registered office is at 4000 Parkway, Whiteley, Fareham, Hampshire, PO15 7FL.
Dear [Name]

I have pleasure in attaching a letter of no objection from the CAA for the commencement of the ADNID Trial, which is part of the Departure Enhancement Programme.

Kind regards,

[Name]

Airspace Regulator
SARG Airspace
Safety and Airspace Regulation Group

Swanwick Centre
Sopwith Way
Swanwick
Hampshire
SO31 7AY

31 January 2014

Dear [Redacted]

Departure Enhancement Programme – Gatwick ADNID SID Trial

As you are aware, several trials are being proposed by NATS, associated with Heathrow and Gatwick Airports, to evaluate various concepts regarding performance based navigation (PBN). These trials all come under the title of Departure Enhancement Programme (DEP) and comprise several new RNAV SIDs.

The ADNID SID trial will be the second operational procedure in a series of trials contributing to DEP and will commence on Monday 10th February 2014 concluding six months later on Friday 8th August 2014.

The trial, which is in full support of the UK Future Airspace Strategy, will provide invaluable data that will ultimately inform the case for potentially reducing PBN lateral route spacing.

In accordance with CAP 670, Part B, Section 4 GEN 03, this letter is to inform you that the CAA has no objection to the commencement of the ADNID SID trial.

This decision is based on the review of the information provided by the project, mainly the Route Spacing Assurance Document (4987/SAF/18 Issue 1), and it is subject to the following conditions:

- The trial will only be undertaken when the operational conditions contained in the AIP Supplement (112014) are met and continue to be met;
- On completion of the trial a final report, detailing the outcome of the activity against the stated objectives, will be provided to the CAA.

This approval relates solely to the ADNID SID part of the DEP trial, as defined, and does not constitute agreement for permanent implementation or further stages of the trial.

Yours sincerely,

[Signature]

S Lindsey
Head of Airspace

Cc: Mr D. Snowden – Civil Aviation Authority, Head of En-Route and College Regulation
    [Redacted] (Swanwick) – Manager Future ATM Development
    [Redacted] (Swanwick) – Project Safety Manager
SALIENT COMMENTS CONFIRMING LOCAL IMPACT CONSIDERATION

Attachment to email from [redacted] sent to [redacted] with regard to comments upon ADNID procedure design.

Email from [redacted]

Sent: Fri 18/10/2013 17:31

To: [redacted]

Cc: [redacted]

20131018_RE Gatwilck BOGNA Trial

CAA Comments on Gatwick BOGNA SID Trial v1.0 rev BTS3.docx (36kb) Paragraph 9

KKW12: Positioned to provide adequate separation from the WILLO hold before further left turns occur. It offers some divergence from the straight-ahead track of the SAM/KENET SIDs that enables the capture of data relating to reduced angles of divergence on departure. The impact on local communities of the aircraft’s track offers the final logic for its placement.

KKW18: Positioned purely for its vertical constraint. The below 5000ft restriction ensures procedural separation from LL MID/DOKEN departures for as long as is possible while still allowing subsequent level restrictions to be feasible. The minimum length of an RNAV segment on a SID outside 15NM from the ARP is 3NM.

KKW22: Positioned to provide adequate separation from the WILLO hold before further left turns occur. Its above 5500ft altitude restriction is to ensure that aircraft on the departure remain inside CAS which at LTMA-14 has a base of 5000ft. Impact on local communities below the flight path is the final driver for its position.

KKW27: Positioned purely for its vertical constraint of level at 6000ft which is necessary to ensure the procedure remains within CAS; LTMA-15 has a base of 5500ft.

ADNID: Positioned to provide adequate separation from the WILLO hold before aircraft route to pick up their filed airways. Impact on local communities below the flight path is also considered in its final position.

Email from [redacted]

Sent: Fri 04/10/2013 16:36

To: [redacted]

Cc: [redacted]
CAA Comment 8: DEMETER Analysis has been chased today and should be expected next week.

With regards to positioning of WP I have set up this Map in Google Earth to help with the latter WPs as it shows airspace boundaries and I can offer the following descriptions:

WP KKW12 is positioned to provide adequate separation from the WILLO hold before further left turns occur. It offers some divergence from the straight-ahead track of the SAM/KENET SIDs that
enables the capture of data relating to reduced angles of divergence on departure. The impact on local communities of the aircraft’s track offers the final logic for its placement.

WP KKW18 is positioned purely for its vertical constraint. The below 5000ft restriction ensures procedural separation from LL MID/DOKEN departures for as long as is possible while still allowing subsequent level restrictions to be feasible.

WP KKW22 is positioned to provide adequate separation from the WILLO hold before further left turns occur. Its above 5500ft altitude restriction is to ensure that aircraft on the departure remain inside CAS which at LTMA-14 has a base of 5000ft. Impact on local communities below the flight path is the final driver for its position.

WP KKW27 is positioned purely for its vertical constraint of level at 6000ft which is necessary to ensure the procedure remains within CAS; LTMA-15 has a base of 5500ft.

WP ADNID is positioned to provide adequate separation from the WILLO hold before aircraft route to pick up their filed airways. Impact on local communities below the flight path is also considered in its final position.

ADNID SUP EG_SUP_2014_001_en_2014-01-23

Paragraph 1.2 “The trial (RNAV1) ADNID 1X SID has been designed to reflect ATC tactical vectoring of aircraft that flight plan the current BOGNA/HARDY westerly SID while allowing critical track-keeping and environmental data to be captured.”
CAA Comments on Gatwick BOGNA SID Trial (ADNID 1X 26L)

1. In para 1.1 of the report there is a reference to the WILLO hold. As the new SID is for repositioning the existing BOGNA/HARDY SID and ensuring separation from the WILLO hold, I need to see the BOGNA/HARDY SID and the WILLO hold in the drawing. Please ensure that these are all clearly labelled in the drawing with the protection area included.
   BTS – HARDY 5M, HARDY 1X, and WILLO Hold added to drawing.
   CAA - Closed

2. Also with the reference to the SAM/KENET 26L departures, I need to see these departures on a layer in the drawing. Please ensure that these are all clearly labelled in the drawing with the protection area included.
   BTS – SAM 2M and SAM 1X added to drawing.
   CAA - Closed

3. In para 2.4 there is reference made to 800ft, how was the value of 800ft calculated?
   BTS – Aerodrome elevation is 203ft. Add 500ft and round up to the next hundred feet is 800ft. This could be changed to 703ft if rounding up is considered to be too prohibitive.
   CAA – To try and ensure the turn occurs as close to KKW02 a CA at 800’ may be the best option. See comment 9 below.
   BTS – CA leg to remain at 800ft.
   CAA – Closed.

4. In para 3.2 the CG of 3.9% needs to be addressed within the coding of the SID as per the previous GAT and LHR SIDs.
   BTS – The “At or above 3000” level restriction at KKW12 already requires a climb gradient of at least 4.94% to KKW12. However I am happy to add an “At or above 800” level restriction at KKW02 to enforce a 5.93% climb gradient on the first leg.

   CAA – The response appears to be a contradiction of what is in the report paragraph 3.2 Procedure Design Gradient, which states the following:

   A procedure design climb gradient of 3.9% is required to 300ft AAL in order to clear obstacle 4597 by the requisite 16.76m. Following this the procedure design gradient returns to the standard 3.3% to 1600ft AMSL.

   Please explain the difference between the response above and what is in the report.
   BTS – The obstacle environment requires a procedure design climb gradient of 3.9% until 300ft AAL at which point aircraft can return to 3.3%. This ensures that aircraft do not collide with obstacles or terrain. The level restriction of “at or above 3000ft” at KKW12 ensures that aircraft stay within controlled airspace and results in an airspace climb gradient of over 4.9%. The coding of the procedure therefore already ensures that aircraft will exceed the procedure design climb gradient. However the procedure design gradient should still be published on the chart for reference in case an aircraft is unable to meet the procedure level restrictions. This allows pilots to follow the lateral SID profile as long as they comply with the procedure design climb gradient.
CAA - Above where you say that an a/c can return to 3.3% CG is only true for obstacle clearance. But as there are other restrictions for airspace containment etc, then a pilot cannot follow the SID if all restrictions/constraints cannot be met and would need to advise ATC of such. Therefore it is not correct to say that the lateral SID profile can be followed as long as the procedure design CG is complied with when there are other restrictions/constraints contained within the SID.

The chart being published with the note of the 3.9% CG until 300AAL requirement along with the WP altitude constraints is correct. But it is your report statement and comment above which are not correct, as a crew are not allowed to fly an IFP unless they can meet all of its restrictions/constraints without advising ATC, which could on occasions mean that an alternative clearance may need to be issued.

CAA – Closed.

5. In the list of close-in obstacles please indicate whether the “Elev” is metres or ft in the actual list. When the list goes to AIS for publishing you normally provide both metres and feet so why not include the same list format in the report?
BTS – Metric and Imperial elevations added to report.
CAA - Closed

6. It appears that CAA report forms are being incorporated into a NATS report with “NATS PRIVATE – CONFIDENTIAL” on them. CAA report forms when submitted have to be submitted separately to any other report document.
BTS – The CAA "Appendix A" APD Validation Report is included in the “Compliance Check” folder but does not have any NATS protective marking on it. Is there another CAA form being included somewhere else?
CAA - I was referring to the simulator/flight validation forms submitted in the flyability report.
BTS – We will ensure that CAA forms are not incorporated into NATS reports in the future.
CAA – Closed.

7. RVT is not a proven flyability software tool at this time, therefore can you please advise what is the intended methodology for the validation of this SID? Please be advised that a validation plan is required to be submitted to the CAA, therefore is such a plan available at this time?
BTS – is addressing this comment.
CAA - Closed

03/9/2013.

Further CAA Comments
8. When is the DEMETER analysis expected to be completed?
   CN – DEMETER Analysis has been chased today and should be expected next week.
   CAA – I acknowledge receipt of email from [redacted] which I need to check further.
   CN – DEMETER Analysis sent to CAA on 15 October.

9. In the report paragraph 3.1 the "WP placement rationale" does not provide rationale for all of the placements. For example:
   a. Why was KKW02 placed 3000m from the DER, why did you use a FB instead of a FO?
   b. What was the NATS operational analysis rationale for KKW12 placement?
   c. Why is KKW18 3nm before KKW22?
   d. KKW27 is the only WP where rationale is supplied.

Please document rationale for all WPs (only KKW27 rationale is acceptable).

   CN – KKW02: Positioned on the extended runway centreline as close as possible to DER. 3000m chosen to provide 1NM of climb distance and 0.6NM of turn initiation distance.
   KKW12: Positioned to provide adequate separation from the WILLO hold before further left turns occur. It offers some divergence from the straight-ahead track of the SAM/KENET SIDs that enables the capture of data relating to reduced angles of divergence on departure. The impact on local communities of the aircraft's track offers the final logic for its placement.
   KKW18: Positioned purely for its vertical constraint. The below 5000ft restriction ensures procedural separation from LL MID/DOKEN departures for as long as is possible while still allowing subsequent level restrictions to be feasible. The minimum length of an RNAV segment on a SID outside 15NM from the ARP is 3NM.
   KKW22: Positioned to provide adequate separation from the WILLO hold before further left turns occur. Its above 5500ft altitude restriction is to ensure that aircraft on the departure remain inside CAS which at LTMA-14 has a base of 5000ft. Impact on local communities below the flight path is the final driver for its position.
   KKW27: Positioned purely for its vertical constraint of level at 6000ft which is necessary to ensure the procedure remains within CAS; LTMA-15 has a base of 5500ft.
   ADNID: Positioned to provide adequate separation from the WILLO hold before aircraft route to pick up their filed airways. Impact on local communities below the flight path is also considered in its final position.

   CAA – My concern here is that the APD did not appear to be aware of the rationale for the WP placement. This is something that will need to be discussed outside of this project.

   CAA - Closed.

10. With the use of KKW02 as a FB WP, has the risk of a turn from the CA to KKW12 been considered?
a. Due to the early turn initiation of KKW02 there could be a risk of an a/c FMS executing the coding such that when the CA 800’ is reached, a turn to KKW12 would commence instead of executing the CF to KKW02. This would mean that a/c would track south of the published track (closer to Horsham). Is this something that is acceptable under what this SID is trying to achieve?

b. The proposed coding is likely to provide track dispersal until KKW12, is this an issue for the SID in what it is trying to achieve?

c. Rather than using a FB WP was the possibility of using a FO WP at KKW02 considered?

d. Would the use of a lower speed restriction at KKW02 than the 250 KIAS proposed, help to ensure that more a/c will be closer to KKW02 before the turn to KKW12 is commenced, again was this considered?

e. As the flyability of this SID is via the trial, I need to know whether the issues I raise above have been considered by the APD and SID sponsor and what impact they may have on the SID trial.

BTS – The first waypoint at KKW02 was designed as a fly-by turn in order to reduce track dispersion around the turn. A fly-over turn would create a much larger dispersion of tracks to the outside of the waypoint and would not meet the DEP objectives. As KKW02 was too close to DER to comply with the CAP778 requirements, an initial CA leg to 800ft was created. This prevents aircraft from initiating any turns below 500ft AAL. It is anticipated, however that most aircraft will reach 800ft well before the turn initiation point for the turn at KKW02. They would then sequence the CF leg to KKW02 and make a normal fly-by turn to KKW12. Any aircraft that reach 800ft after the turn initiation point for KKW02 would then sequence the TF leg to KKW12 (CAA - the point is that some a/c may bypass KKW02 and in this case would go straight to KKW12, only if there was a CF from KKW02 to KKW12 would your explanation occur) and make a turn more closely approximating a fly-over turn to intercept the leg to KKW12. This would obviously produce some dispersal to the outside of the KKW02 turn but this expected to be minimal. The sponsor is aware of the potential areas of track dispersal and will examine those as part of the trial.

CAA – The query in (d) above has not been addressed in your response. How will the data that is collected as part of the trial be presented and submitted to demonstrate validation of SID flyability?

BS – Regarding query (d), a lower speed restriction would hypothetically reduce the track dispersion around the turn at KKW02. However, PANS-OPS indicates that the expected speed at this distance from DER would be between 192 and 200 KIAS. It was therefore felt to be unlikely that any aircraft would be flying this segment of the departure at anything over 220 KIAS.

CN – Data collection methodology sent to CAA on 16 October.

11. Comment 4 above needs to be clarified.

BTS – See further response under comment 4.

CAA - Closed.

04/10/2013
RNAV1 (DME/DME or GNSS) STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

LONDON GATWICK RWY 26L ADNID 1X

DISTANCES IN NAUTICAL MILES
BEARINGS, TRACKS AND RADIALS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET

NOTE 1. RWY 26L obstacle requirement minimum climb gradient 3.9% to 360 AAL.
NOTE 2. Cross-in obstacles exist for RWY 26L departures. See Aerodrome Obstacle Chart and EGKK AD 2.10 Aerodrome Obstacles.
NOTE 3. Adhere to maximum speed limits where specified by waypoint constraints.
NOTE 4. Maximum 250 KIAS below FL100 unless authorised by ATC.

ADDITIONAL RNAV DATA
1. DME/DME only procedure, no circling required.
2. RNAV1 SIDs are available only for approved aircraft that are either GNSS equipped or that have DME/DME and INS/IRU with automatic runway updating capability.

GENERAL INFORMATION
1. Noise Abatement Procedures in accordance with EGKK AD 2.21 remain in force with the exception of paragraph 6.
2. En-route cruising levels will be issued after take-off by ‘London Control’.

WARNING - STEPPED CLIMB
Due to intersection with other routes pilots must ensure strict compliance with the specified climb profile unless cleared by ATC.

ATTENTION - NO TURN BELOW 703 QNH (500 QFE)

SCALE: 1:500,000

WARNING

Note: The diagram includes a map with waypoints and flight paths, along with textual instructions and warnings. The content is a standard departure chart with specific navigation and procedural information for pilots. The chart details the RNAV1 (DME/DME or GNSS) standard departure for London Gatwick RWY 26L, with guidance on distances, bearings, and altitudes. Additionally, it emphasizes the importance of following the specified climb profile and ensuring compliance with ATC instructions. The chart also highlights specific waypoints and the need for noise abatement procedures.
## Standard Instrument Departure Coding Tables

### London Gatwick Runway 26L ADNID 1X

<table>
<thead>
<tr>
<th>Designator</th>
<th>Sequence Number</th>
<th>Path Terminator</th>
<th>Waypoint Name</th>
<th>Waypoint Co-ordinates</th>
<th>Fly-over</th>
<th>Course Track (M * °T)</th>
<th>Magnetic Variation (NM)</th>
<th>Distance (NM)</th>
<th>Turn Direction</th>
<th>Level Constraint</th>
<th>Speed Constraint</th>
<th>Navigation Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADNID 1X</td>
<td>001</td>
<td>CA</td>
<td></td>
<td></td>
<td></td>
<td>259° (257.6°)</td>
<td>-1.0</td>
<td></td>
<td></td>
<td></td>
<td>800</td>
<td>RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>002</td>
<td>CF</td>
<td>KKW02</td>
<td>510820.95N 0001519.20W</td>
<td>N</td>
<td>259° (257.6°)</td>
<td>-1.0</td>
<td>1.6</td>
<td>LEFT</td>
<td></td>
<td>-250</td>
<td>RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>003</td>
<td>TF</td>
<td>KKW12</td>
<td>510413.90N 002533.90W</td>
<td>N</td>
<td>236° (237.4°)</td>
<td>-1.0</td>
<td>7.7</td>
<td>LEFT</td>
<td></td>
<td>-300</td>
<td>-250 RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>004</td>
<td>TF</td>
<td>KKW18</td>
<td>510047.14N 0002911.90W</td>
<td>N</td>
<td>215° (213.9°)</td>
<td>-1.0</td>
<td>4.1</td>
<td></td>
<td>-500</td>
<td>-250</td>
<td>RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>005</td>
<td>TF</td>
<td>KKW22</td>
<td>505817.73N 0003150.45W</td>
<td>N</td>
<td>215° (213.8°)</td>
<td>-1.0</td>
<td>3.0</td>
<td>LEFT</td>
<td></td>
<td>+550</td>
<td>-250 RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>006</td>
<td>TF</td>
<td>KKW27</td>
<td>505500.25N 0003055.88W</td>
<td>N</td>
<td>171° (170.1°)</td>
<td>-1.0</td>
<td>3.3</td>
<td></td>
<td></td>
<td>6000</td>
<td>-250 RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>007</td>
<td>TF</td>
<td>ADNID</td>
<td>505137.85N 0002959.99W</td>
<td>N</td>
<td>171° (170.1°)</td>
<td>-1.0</td>
<td>3.4</td>
<td></td>
<td></td>
<td>6000</td>
<td>-250 RNAV1</td>
</tr>
</tbody>
</table>

2013-05 LONDON GATWICK RNAV1 ENR/K/ADNID 1X RWY 22L CODING 14 OCT 13
Chatfield Rick

From: [redacted] @nats.co.uk
Sent: 18 October 2013 17:31
To: [redacted]
Cc: [redacted]
Subject: RE: Gatwick BOGNA Trial
Attachments:
CAA Comments on Gatwick BOGNA SID Trial v1 0 rev BTS3.docx; EGKK ADNID 1X RWY 26L Proof.pdf

Dear [redacted],

Please find my responses to the remaining items attached. I have also attached the most recent proof of the AIP chart received from the cartography department. The chart is still being reviewed but any comments you have would be welcome.

Best regards,

E: [redacted]@nats.co.uk
Heathrow House, Bath Road
Cranford, Middlesex, TW5 9AT
www.nats.co.uk

Hi [redacted],

Thanks for your responses which I have assessed. There are 2 items (8 and 10) which remain open, please see attached doc for details.

Also see attached draft chart which you can send to AIS, any changes relating to item 8 and 10 from the comments doc can be amended as required before the final version are submitted for promulgation.

Regards

Hi [redacted],

Hi [redacted],
Please find my responses attached. I have copied the relevant parts of the email in as well so that everything is contained in the one document.

Let me know if you have any further questions.

Best regards,

E:\username@nats.co.uk

Heathrow House, Bath Road
Cranford, Middlesex, TW5 9AT
www.nats.co.uk

From: [Redacted]@caa.co.uk
Sent: 04 October 2013 11:46
To: [Redacted]
Cc: [Redacted]
Subject: RE: Gatwick BOGNA Trial

Hi [Redacted]

Thank you for the latest submission.

Please see attached doc with some further comments that need to be considered and addressed.

As this SID is a trial I don’t necessarily see the issues I raise as a show stopper but as I state in my comments, I need to know that they have been considered and what you believe the impacts to be.

I spoke [Redacted] briefly this morning but he feels that you are best placed to respond to the comments.

[Redacted] if you can supply any input on this and want to contact me, please give me a call as I am in the office today.

Regards

[Redacted]

Airspace Regulator (IFP)
Airspace Regulation
Civil Aviation Authority

Tel: [Redacted]

www.caa.co.uk
Follow us on Twitter: @UK_CAA

Please consider the environment. Think before printing this email.
has sent you files.

Note From

Hi

Please follow the link above to download v1.3 of the Gatwick BOGNA Trial package. I have only included the Calculations, Drawings, and Compliance Check folders as there have been no changes to the other folders. Please let me know if you have any questions or comments.

Best regards,

ShareFile is a tool for sending, receiving, and organizing your business files online. It can be used as a password-protected area for sharing information with clients and partners, and it's an easy way to send files that are too large to e-mail.

Trouble with the above link? You can copy and paste the following URL into your web browser:
https://notes.sharefile.com/d/64881400523416a

Powered By Chris ShareFile 2013

Before Printing consider the environment.

This e-mail and any attachment(s) are for authorised use by the intended recipient(s) only. It may contain proprietary material, confidential information and/or be subject to legal privilege. If you are not an intended recipient then please promptly delete this e-mail, as well as any associated attachment(s) and inform the sender. It should not be copied, disclosed to, retained or used by, any other party. Thank you.
Please note that all e-mail messages sent to the Civil Aviation Authority are subject to monitoring / interception for lawful business.

If you are not the intended recipient, please notify our Help Desk at Email Information.Solutions@nats.co.uk immediately. You should not copy or use this email or attachment(s) for any purpose nor disclose their contents to any other person.

NATS computer systems may be monitored and communications carried on them recorded, to secure the effective operation of the system.

Please note that neither NATS nor the sender accepts any responsibility for viruses or any losses caused as a result of viruses and it is your responsibility to scan or otherwise check this email and any attachments.

NATS means NATS (En Route) plc (company number: 4129273), NATS (Services) Ltd (company number 4129270), NATSNAV Ltd (company number: 4164590) or NATS Ltd (company number 3155567) or NATS Holdings Ltd (company number 4138218). All companies are registered in England and their registered office is at 4000 Parkway, Whiteley, Fareham, Hampshire, PO15 7FL.
Thank you

Regards

-----Original Message-----
From: [Redacted]@nats.co.uk
Received: Tuesday, 04 Mar 2014, 22:14
To: [Redacted]@nats.co.uk,[Redacted]@nats.co.uk
CC: [Redacted]@caa.co.uk
Subject: RE: GACC Interpretation of NATMAG

That was not my recollection. There was however, a call for its immediate cessation by a member of NATMAG stated the objectives of the trial, which I restated.

There was a request for the trial's cessation when sufficient data had been collected, whose purpose is thrice fold. Data for route spacing, data for containment against WILLO and also SID intervals through a possible reduced angle of divergence between departing aircraft.

Regards,

Sent from my iPad

-----Original Message-----
From: [Redacted]@nats.co.uk
Sent: Tuesday, March 04, 2014 04:53 PM GMT Standard Time
To: [Redacted]@nats.co.uk
Cc: [Redacted]@caa.co.uk
Subject: GACC Interpretation of NATMAG

In the following GACC document:

http://www.google.co.uk/url?q=sa=t&source=web&cd=4&cad=rja&ved=0CD4QFjAD&url=http%3A%2F%2Fwww.gacc.org.uk%2Fresources%2FWarnham%2520doc%25206.doc&ei=MAEWUTLbA5ToTAaC9wE&usg=AFQjCNGLbmbQD4_dYpqacnKQtymCAGPHYg&bvm=bv.62286460,d.ZGU
There seems to be a view that the CAA are supporting removal of the trial at the earliest opportunity. Is this a fair reflection of the NATMAG?

Regards

[Signature]

4000 Parkway, Whiteley, Fareham, Hants PO15 7FL
www.nats.co.uk

NATS PRIVATE

If you are not the intended recipient, please notify our Help Desk at Email Information.Solutions@nats.co.uk immediately. You should not copy or use this email or attachment(s) for any purpose nor disclose their contents to any other person.

NATS computer systems may be monitored and communications carried on them recorded, to secure the effective operation of the system.

Please note that neither NATS nor the sender accepts any responsibility for viruses or any losses caused as a result of viruses and it is your responsibility to scan or otherwise check this email and any attachments.

NATS means NATS (En Route) plc (company number: 4129273), NATS (Services) Ltd (company number 4129270), NATSNAV Ltd (company number: 4164590) or NATS Ltd (company number 3155567) or NATS Holdings Ltd (company number 4138218). All companies are registered in England and their registered office is at 4000 Parkway, Whiteley, Fareham, Hampshire, PO15 7FL.

-------------------------------------------------------------------------------------------------------------------

Before Printing consider the environment.

This e-mail and any attachment(s) are for authorised use by the intended recipient(s) only. It may contain proprietary material, confidential information and/or be subject to legal privilege. If you are not an intended recipient then please promptly delete this e-mail, as well as any associated attachment(s) and inform the sender. It should not be copied, disclosed to, retained or used by, any other party.

Thank you.
Thanks for the comments, you've been very busy on the phone today as I've not managed to get through – I'll answer what I can here but I think the lion's share of this will need to come from [redacted], as I'm not best placed to comment without further clarification myself.

CAA Comment 8: DEMETER Analysis has been chased today and should be expected next week.

With regards to positioning of WP I have set up this Map in Google Earth to help with the latter WPs as it shows airspace boundaries and I can offer the following descriptions:
WP KKW12 is positioned to provide adequate separation from the WILLO hold before further left turns occur. It offers some divergence from the straight-ahead track of the SAM/KENET SIDs that enables the capture of data relating to reduced angles of divergence on departure. The impact on local communities of the aircraft's track offers the final logic for its placement.

WP KKW18 is positioned purely for its vertical constraint. The below 5000ft restriction ensures procedural separation from LL MID/DOKEN departures for as long as is possible while still allowing subsequent level restrictions to be feasible.

WP KKW22 is positioned to provide adequate separation from the WILLO hold before further left turns occur. Its above 5500ft altitude restriction is to ensure that aircraft on the departure remain inside CAS which at LTMA-14 has a base of 5000ft. Impact on local communities below the flight path is the final driver for its position.

WP KKW27 is positioned purely for its vertical constraint of level at 6000ft which is necessary to ensure the procedure remains within CAS; LTMA-15 has a base of 5500ft.

WP ADNID is positioned to provide adequate separation from the WILLO hold before aircraft route to pick up their filed airways. Impact on local communities below the flight path is also considered in its final position.
I'll look to discuss the questions relating to track containment/dispersal in the design with [next week so myself/GAL are clear on the implications going forward.

I hope this helps and if you require the data in another form please let me know.

Regards

NATS Private

NATS

D: [Redacted]
M: [Redacted]
E: [Redacted]

NATS Swanwick, Room 3324, Sopwith Way, Swanwick, Hampshire, SO31 7AY
www.nats.co.uk

Hi

Thank you for the latest submission.

Please see attached doc with some further comments that need to be considered and addressed.

As this SID is a trial I don't necessarily see the issues I raise as a show stopper but as I state in my comments, I need to know that they have been considered and what you believe the impacts to be.

I spoke to [Redacted] briefly this morning but he feels that you are best placed to respond to the comments.

If you can supply any input on this and want to contact me, please give me a call as I am in the office today.

Regards

Airspace Regulator (IFP)
Hi [name],

Please follow the link above to download v1.3 of the Gatwick BOGNA Trial package. I have only included the Calculations, Drawings, and Compliance Check folders as there have been no changes to the other folders. Please let me know if you have any questions or comments.

Best regards,

ShareFile is a tool for sending, receiving, and organizing your business files online. It can be used as a password-protected area for sharing information with clients and partners, and it's an easy way to send files that are too large to e-mail.

Trouble with the above link? You can copy and paste the following URL into your web browser:

https://nats.sharefile.com/die94981405243416a
Before Printing consider the environment.

This e-mail and any attachment(s) are for authorised use by the intended recipient(s) only. It may contain proprietary material, confidential information and/or be subject to legal privilege. If you are not an intended recipient then please promptly delete this e-mail, as well as any associated attachment(s) and inform the sender. It should not be copied, disclosed to, retained or used by, any other party. Thank you.

Please note that all e-mail messages sent to the Civil Aviation Authority are subject to monitoring / interception for lawful business

If you are not the intended recipient, please notify our Help Desk at Email Information.Solutions@nats.co.uk immediately. You should not copy or use this email or attachment(s) for any purpose nor disclose their contents to any other person.

NATS computer systems may be monitored and communications carried on them recorded, to secure the effective operation of the system.

Please note that neither NATS nor the sender accepts any responsibility for viruses or any losses caused as a result of viruses and it is your responsibility to scan or otherwise check this email and any attachments.

NATS means NATS (En Route) plc (company number: 4129273), NATS (Services) Ltd (company number 4129270), NATSNAV Ltd (company number: 4164590) or NATS Ltd (company number 3155567) or NATS Holdings Ltd (company number 4138218). All companies are registered in England and their registered office is at 4000 Parkway, Whiteley, Fareham, Hampshire, PO15 7FL.
1 Introduction

1.1 The purpose of this AIP Supplement is to detail the trial operation of the RNAV1 ADNID 1X SID from London Gatwick Airport. All Carriers that are RNAV1 equipped and route via BOGNA/HARDY must have the RNAV1 ADNID 1X SID coded and available for use when the trial commences on 10 February 2014. The trial will finish on 8 August 2014. Carriers not suitably equipped for RNAV1 operations will be issued conventional BOGNA/HARDY SIDs.

1.2 The trial (RNAV1) ADNID 1X SID has been designed to reflect ATC tactical vectoring of aircraft that fly eastbound RPS-TGL-10, or equivalent, and where the operator has been approved by their State of Registry for RNAV1 operations.

1.3 The trial (RNAV1) ADNID 1X SID will be issued to conventional BOGNA/HARDY SlDs. Details of the SID plates can be found at Annex A of this document.

1.4 This trial will introduce the following RNAV1 SID:

- ADNID 1X – Runway 26L

1.5 Departures from Runway 26R will use the BOGNA/HARDY conventional SID.

1.6 The trial (RNAV1) ADNID 1X SID is only available to aircraft that are either GNSS equipped or that have a DME/DME and INS/IRU with automatic runway updates.

1.7 There are no critical navaids associated with this RNAV1 SID assuming the use of GNSS or INS/IRU for initial guidance up to an altitude of 2000 ft.

2 Purpose of the (RNAV1) ADNID 1X SID Trial

2.1 The purpose of the trial is:

(a) To continue to gain ATC and aircraft operator experience of RNAV1 operations within the UK;

(b) To assess track keeping accuracy of aircraft flying (RNAV1) ADNID 1X SID;

(c) To assess route placement against holding aircraft;

(d) To assess the suitability of design criteria for RNAV1 procedures;

(e) To confirm the flyability of (RNAV1) ADNID 1X SID design.

3 RNAV1 Trial Procedure

3.1 The trial (RNAV1) ADNID 1X SID is detailed at Annex A to this supplement together with the appropriate navigation database coding tables.

3.2 The trial (RNAV1) ADNID 1X SID will not be available between the hours of 2300-0600 winter and 2200-0500 summer. During these hours pilots can expect to be issued with the conventional or RNAV1 SFD SID depending on their equipage.

3.3 The trial (RNAV1) ADNID 1X SID will be clearly identified and be distinguishable from the conventional and (RNAV1) BOGNA/HARDY SIDs by using the new waypoint designator ADNID 1X as the prefix and a route identifier: ADNID 1X.

3.4 Crews of suitably equipped aircraft will be issued the trial (RNAV1) ADNID 1X SID clearance by Gatwick ATC GMP. Aircraft which are not equipped to the appropriate standard will be issued the conventional BOGNA/HARDY SID clearance.

3.5 As part of the requirements for initial call on departure, participating flight crews are to advise ATC by stating the SID that they are flying, e.g.'(Callsign), ADNID 1X, passing xxxx feet, climbing altitude xxxx feet'.
3.6 Speed limits apply at specified waypoints for track containment purposes. Aircraft must adhere to the specified speeds when following this trial. If the specified speeds cannot be adhered to flight crew must advise ATC of non-compliance as soon as it is safe to do so.

3.7 Aircraft flying the trial (RNAV1) ADNID 1X SID may receive radar vectors from ATC in keeping with operating procedures, although the purpose of the trial is to gather track-keeping data which should see the majority of aircraft left on their own navigation following the standard instrument departure.

3.8 Throughout the trial period of six months the conventional and RNAV1 BOGNA/HARDY SIDs, as detailed in the UK AIP, will remain available. Conventional SIDs will be used by any aircraft not suitably equipped/certified for RNAV1 operations and for any other occasion when the trial RNAV1 ADNID 1X SID cannot be issued.

3.9 The RNAV1 versions of the BOGNA/HARDY SIDs will be available, for suitably equipped aircraft at any other occasion when the trial SID cannot be issued or is not available.

3.10 Radio Communication Failure Procedures: Aircraft experiencing loss of communications having been cleared for an (RNAV1) ADNID 1X SID should continue in accordance with UK AIP ENR 1-1-3 General Flight Procedures, Paragraph 3.4.2.4.2 (b) (ii), which stipulates: 'If failure occurs when the aircraft is following a notified departure procedure such as a Standard Instrument Departure (SID) and clearance to climb, or rerouting instructions have not been given, the procedure should be flown in accordance with the published lateral track and vertical profile, including any stepped climbs, until the last position, fix, or waypoint, published for the procedure, has been reached. Then, for that part of the period of seven minutes that may remain, maintain the current speed and last assigned level or minimum safe altitude if this is higher.'

3.11 Aircraft avionics failure: if such an event should occur, the flight crew should make their intentions known to ATC as soon as possible and follow their standard procedures for such an occurrence.

3.12 In the event that the required navigation equipment fails, the flight crew shall advise ATC that they can no longer continue with the procedure, or are unable to accept the procedure, with the phraseology:

'(Callsign), unable RNAV due equipment.'

In such an event, ATC shall provide radar vectors and climb instructions in accordance with standard procedures.

4 Air Navigation Order

4.1 For the Purpose of the trial these procedures are hereby notified for the purposes of Articles 124(1) and 125(1) of the Air Navigation: The Order and the Regulations, CAP 393, Third edition incorporating amendments up to 1/2012.

5 Flight Planning

5.1 For this trial all suitably equipped aircraft, as detailed in their flight plan, will be issued the (RNAV1) ADNID 1X SID when flight planning via BOGNA/HARDY when Runway 26L is in use. Aircraft Operators do not need to change the manner in which they file flight plans for this trial. Allocation of the appropriate SID will be handled by NATS Systems. However the ADNID 1X SID may be flight planned and it is important to note that flight plans will not be rejected if ADNID 1X is selected.

5.2 Upon reaching ADNID and according to the airway that has been flight planned, carriers can expect to flight plan and route as follows:

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>SID</th>
<th>Destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>M189</td>
<td>DCT</td>
<td>DRAKE</td>
</tr>
<tr>
<td>L151</td>
<td>DCT</td>
<td>DRAKE</td>
</tr>
<tr>
<td>N815</td>
<td>DCT</td>
<td>BENBO</td>
</tr>
<tr>
<td>M605</td>
<td>DCT</td>
<td>HARDY</td>
</tr>
</tbody>
</table>

6 Trial Implementation Date

6.1 This trial will be effective from the 10 February 2014 at 0001 and end at 2359 8 August 2014.

Note:
- The end of this trial may be subject to change due to data gathering requirements;
- The end date of this trial will be confirmed by NOTAM, following which this supplement and the associated procedures will be withdrawn.

7 Trial Contact

7.1 Should any operator require further assistance please email NATS Customer Affairs at the following email address, quoting this AIP Supplement: CustomerAffairs@nats.co.uk

SUP 1/2014-2 CIVIL AVIATION AUTHORITY
ANNEX A

RNAV (DME/DME or GNSS) STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

DISTANCES IN NAUTICAL MILES
TRACKS AND RADIALS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET

LONDON GATWICK
RWY 26L
ADNI 1X

NOTE 1: RWY 26L obstacle requirement - minimum climb gradient 3.9% is 308 AAL.
NOTE 2: Cine-in obstacles exist for RWY 26L. Departure. See Aerodrome Obstacle Chart and EGK AD 2.10 Aerodrome Obstacles.
NOTE 3: Adhere to minimum speed limits where specified by waypoint constraints.
NOTE 4: Maximum 200 KIAS below FL010 unless authorized by ATC.

ADDITIONAL RNAV DATA
1. DME/DME only procedure. No critical nav aids.
2. RNAV SID are available only for approved aircraft that are either GNSS equipped or that have DME/DME and INS/IRU with automatic runway updating capability.

GENERAL INFORMATION
1. Noise Abatement Procedures in accordance with EGK AD 2.21 remain in force with the exception of paragraph 8.
2. En-route cruising levels will be issued after take-off by London Control.
3. Callsign for RTF frequency used when instructed after take-off is London Control. Report callsign. SID designates current altitude and initial cleared altitude on first contact with London Control.
4. ADNI 1X will not be available between the hours of 2300-0600 winter and 2200-0500 summer. During these hours pilots will be issued a SID 1X SID.
## Standard Instrument Departure Coding Tables

**London Gatwick Runway 26L ADNID 1X**

<table>
<thead>
<tr>
<th>Designator</th>
<th>Sequence Number</th>
<th>Path Terminator</th>
<th>Waypoint Name</th>
<th>Waypoint Co-ordinates</th>
<th>Fly-over</th>
<th>Course/Track °M (°T)</th>
<th>Magnetic Variation</th>
<th>Distance (NM)</th>
<th>Turn Direction</th>
<th>Level Constraint</th>
<th>Speed Constraint</th>
<th>Navigation Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADNID 1X</td>
<td>001 CA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>259°</td>
<td>(257.6°)</td>
<td>-1.0</td>
<td>-</td>
<td>-</td>
<td>+800</td>
<td>-</td>
<td>RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>002 CF</td>
<td>KKW02</td>
<td>510620.95N</td>
<td>0001510.20W</td>
<td>N</td>
<td>259°</td>
<td>(257.6°)</td>
<td>-1.0</td>
<td>1.6</td>
<td>LEFT</td>
<td>-220</td>
<td>RNAV1</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>003 TF</td>
<td>KKW12</td>
<td>510413.00N</td>
<td>0002533.00W</td>
<td>N</td>
<td>238°</td>
<td>(237.4°)</td>
<td>-1.0</td>
<td>7.7</td>
<td>LEFT</td>
<td>+3000</td>
<td>-250</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>004 TF</td>
<td>KKW18</td>
<td>510047.14N</td>
<td>0002911.96W</td>
<td>N</td>
<td>215°</td>
<td>(213.9°)</td>
<td>-1.0</td>
<td>4.1</td>
<td>-</td>
<td>-5000</td>
<td>-250</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>005 TF</td>
<td>KKW22</td>
<td>505817.78N</td>
<td>0003150.45W</td>
<td>N</td>
<td>210°</td>
<td>(213.8°)</td>
<td>-1.0</td>
<td>3.0</td>
<td>LEFT</td>
<td>+5500</td>
<td>-250</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>006 TF</td>
<td>KKW27</td>
<td>505500.25N</td>
<td>0003056.88W</td>
<td>N</td>
<td>171°</td>
<td>(170.1°)</td>
<td>-1.0</td>
<td>3.3</td>
<td>-</td>
<td>6000</td>
<td>-250</td>
</tr>
<tr>
<td>ADNID 1X</td>
<td>007 TF</td>
<td>ADN1D</td>
<td>505137.56N</td>
<td>0002959.99W</td>
<td>N</td>
<td>171°</td>
<td>(170.1°)</td>
<td>-1.0</td>
<td>3.4</td>
<td>-</td>
<td>6000</td>
<td>-250</td>
</tr>
</tbody>
</table>

2013-65_LONDON GATWICK RNAV1 EGKK ADNID 1X RWY 226L CODING 22 OCT 13

SUP 1/2014-4

CIVIL AVIATION AUTHORITY