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**EXETER AIRSPACE CHANGE PROPOSAL  
DEVON AND SOMERSET GLIDING CLUB  
OBJECTION WITH REASONS TO PROPOSALS FOR CLASS D AIRSPACE**

The Devon and Somerset Gliding Club (DSGC) objects *in the strongest possible terms* to the proposals for Class D airspace. *The ACP proposals are an unreasonable and disproportionate 'remedy' to a problem that has not been justified.* The ACP contains numerous misrepresentations both of facts and of the effects of its proposal, and Exeter Airport as change sponsor manifestly fails to meet its obligations to other aviation stakeholders under CAP 725.

Consider five basic points:

- 1) The proportion of Exeter's Air Transport Movements (ATMs) that connect to the Airway N864 north of Exeter Airport is around 30%. During DSGC's normal operating period of 10.00am to 6.00pm, the proportion of Exeter's ATMs using this route is only 13%, as most flights to and from Manchester, Newcastle, Edinburgh and Glasgow are early morning or late evening. *During DSGC's normal operating hours the actual number of ATMs using the northern sector of N864 averages only 5.5 aircraft movements per day.* [Appendix 1].
- 2) The case appears to be based almost entirely on projected figures for ATMs which have been exaggerated by the inclusion of a number of activities that are outside the statutory definition of ATMs; and for which, the change sponsor will not provide any further justification when requested by consultees. The ACP thus gives an unsubstantiated estimate of growth which consultees are therefore expected to take on trust after reading an estimate of 40,417 ATMs for 2017 when the total for the (legitimate) top 3 rows in the table is in fact 13,525.
- 3) In 2016, after 4 years of growth, Exeter passenger numbers were back up to a figure of 847,257, a figure marginally below the figure for 2005 which was 847,544.

- 4) Astonishingly, the volume of controlled airspace proposed in the ACP is greater than that for Gatwick Airport - for an airport that has 5% of the number of Gatwick's ATMs. In consultation, Exeter's consultants were emphatic that the size of this CAS was unable to be reduced.
- 5) The proposals are likely to lead to the closure of DSGC, one of the largest gliding clubs in the country, yet the ACP clearly shows that the authors do not grasp the nature of gliding and what is required for a gliding club to operate. Unsatisfactory 'mitigation' was offered in the form of a Glider Box concept, but the anticipated further discussions were dispensed with by the change sponsor and were published in the ACP. This demonstrates a regrettable approach to meaningful consultation.

This Response is set out in more detail in the sections shown below. In view of paragraph 5 above, it is considered necessary to explain in some detail what gliding entails, both generally and at DSGC, and the impacts upon the Club.

- 1.0 The Case for Change is Unproven.
- 2.0 The Nature of Gliding and Gliding at DSGC.
- 3.0 The Impact of the Proposals on DSGC.
- 4.0 Misrepresentations and Failures to Meet Design Objectives.
- 5.0 Options not Considered.
- 6.0 Conclusions.
- 7.0 Appendices.

## 1.0 THE CASE FOR CHANGE IS UNPROVEN

- 1.1 **Current airspace arrangements are safe.** Fundamentally – the existing airspace arrangements are safe. In the words of the ACP “Exeter ATC handles the current operational issues safely and effectively”. [Section 2.1]
- 1.2 **Controller interventions.** From figures for ATMs in Appendix 2, it will be noted that there have been, during Exeter's period of compiling a voluntary database of controller interventions from 2009 – 2016 inclusive, three years where the ATMs have been at 13,000, and four years where the ATMs have been at 12,000, giving figures up to the year 2015. The 2016 figure was also a rounded figure of 13,000, thereby giving a conveniently round figure of 100,000 ATMs in total in the same eight year period. From the voluntary database figures and analysis, it should be noted that during this time *“337 aircraft inbound to or outbound from Exeter required controller intervention to alter tracks and/or climb/descent profiles in accordance with requirements of a Deconfliction service.”* This means that of the 100,000 ATMs in eight years, 0.337% of ATMs in and out of Exeter needed such actions. Further comment is made on this point in paragraph 4.9 below.
- 1.3 **Latest forecasts of ATMs.** Exeter's projected increase in ATMs are contained in the ACP Section 2.2 in the table in **Figure 2 Projected Exeter Airport ATM**. This is taken from the **Exeter Airport Management Business Plan from October 2016**, and referred to in the References at the end of the ACP. DSGC has asked for a copy of this document to assist in preparation of this Response, but has been told it cannot be released due to commercial sensitivity.
- 1.4 **Misleading ATM statistics.** It should be noted that the data used in the ACP in the Projected Exeter Airport ATM misrepresents the appropriate statistics by including ground-based and other activities in the table that do not give rise to airborne traffic movements and therefore do not affect Airspace considerations. Only the top 3 categories in the table should be included, see Definition of ATMs [Appendix 3].

- 1.5 Current and estimated future ATMs.** Exeter estimates it will have 13,525 movements this year, an average of 37 a day. During DSGC's 16 day snapshot observation period [Appendix 1] the range was from 32 – 51 movements per day. A rise of 3% would be 1.1 extra movements per day, and after 5 years, the average would move from 37 to 43 per day. In 2007 Exeter handled 17,000 movements per annum, an average of 46.5 per day. Clearly a rise of 3% per annum in the forecast period (if achieved) should be well within the capability of the ATC team to handle. Indeed, it seems surprising that such a modest rise has been put forward as a reason for seeking Class D airspace.
- 1.6 Differing data sets.** It is clear looking at different data sources that data on ATMs is collated and recorded in differing ways for differing purposes. Nevertheless, data is available to show both the general trends and the reliability of forecast figures. The figures used below for differing years are from the same data sets, so do illustrate overall trends.
- 1.7 Air Transport Movements 2005 – 2015.** The ATM figures in Appendix 2 show that Exeter has never really moved much beyond its Movements for 2005 which can effectively be taken as a baseline figure. The exception is - 'the boom before the bust' - of the financial crash in 2008, when there were 3 peak years. Since 2009, annual figures have remained remarkably stable, fluctuating between 12000 and 13000 per annum, showing no real growth since the 12000 recorded in 2005.
- 1.8 Other data indicators and the reliability of forecasts.** In the absence of more detailed information on the latest forecasts (see 1.3 above) it is useful to look at Exeter's previous forecasts and associated data. Passenger numbers are not strictly relevant to the case for additional Airspace, but it is instructive to look at the forecasts [available on-line] from the **Draft Master Plan of September 2008**: *"Forecasts for Future Growth to 2015 and 2030. There has been significant passenger growth at Exeter Airport over the last few years, and the Master Plan forecasts that this will continue. It sets out a range of forecasts, through defining a planning figure, a low forecast and a high forecast for each year. The planning forecast for 2015 is 1.912 million passengers, with a low figure of 1.415 million and a high of 1.956 million. For 2030 the planning forecast is 3.368 million, with a low forecast of 1.964 million and a high of 4.037 million. These figures compare with the 2007 throughput of 1.026 million passengers."* These were used as the basis for the **Exeter International Airport Master Plan** in 2009. [Available on-line]. Compare these estimates to the actual figures achieved: **2005: 847,544**; **2015: 821,789**; and **2016: 847,257**. [From CAA datasets]. *Passenger numbers in 2016 are still marginally lower than the 2005 level, and the 2015 actual figure of 0.822 million is only 43% of the 2008/9 forecast of 1.912 million.* Moreover, the general comparability of the 2005 and 2015 figures confirm the conclusion in 1.7 above, namely, that with the exception of the short-term consumer boom before the financial crash, **Exeter is showing very little overall growth since 2005.**
- 1.9 Comparable Airports.** Comparable regional airports to Exeter are struggling to keep passenger numbers and thus ATMs to 2005 levels. Several are not succeeding, as the table on the following page shows. Only Bristol (an appreciably larger airport with a higher population catchment area, and the main competitor of Exeter) has actually expanded. Exeter is to this limited extent bucking the trend, but these figures are another strong indicator that expansion is unrealistic – see paragraphs 1.7 and 1.8 above.

Airport	2005 Movements x 1000	2015 Movements x 1000
Bristol	55	61
Southampton	44	34
Norwich	22	17
Cardiff	21	14
Exeter	12	13

1.10 **Post-Brexit Forecast by IATA for falling demand.** Probably the most authoritative forecast available for air travel as a whole must come the International Air Travel Association (IATA). Its latest forecast which was issued in the middle of October 2016 (the same month as the Exeter Airport Management Business Plan used in Exeter’s forecast). This indicates: 1) that previous forecasts for aviation must be revised downwards; 2) “the problems of the weaker £ and changes to the relationship with the EU are likely to cut demand for air travel in the coming decade...” [Appendix 4].

1.11 **The fall in real incomes and declining growth.** The IATA forecast is in line with recent Office for National Statistics on-line data for both real earnings and the forecast slowdown in economic growth. Air travel is towards the luxury end of spending of disposable income, and falls in real income are likely to dampen the demand for air travel. As indicated, Brexit may well exacerbate this situation, at least due to the effects of the weaker pound.

1.12 **Exeter’s expansion plans.** It is clear from Exeter’s Master Plan 2009 (Airspace paragraphs) that the Airspace expansion plans were developed in the more optimistic times when passenger numbers were forecast to rise to 1.912 million in 2015 and 3.368 million in 2030. Both the economic climate and the reality indicate that any real growth is highly unlikely.

## Summary and Conclusion

- Regrettably for Exeter Airport, past growth forecasts have been - to use an apt phrase - flights of fancy. The reality to be drawn from these figures is that in the current economic climate and with the uncertainties following Brexit, Exeter will be doing well if it can continue to maintain ATMs around the 2005 level.
- The ACP states that “Exeter ATC handles the current operational issues safely and effectively”.
- In light of the evidence given, growth of even 3% seems optimistic and IATA forecasts a fall in the demand for air travel. 3% growth would result in an average of approximately 1.1 extra movements per day for every year it happened. **On no reasonable assessment can this justify any change to current Airspace arrangements, let alone the immediate and wholesale imposition of Class D over a large area around the Airport.**

## 2.0 THE NATURE OF GLIDING AND GLIDING AT DSGC

2.1 **Lack of understanding of gliding in the ACP.** Regrettably, it is apparent from the ACP that despite consultation meetings the authors do not fully grasp the nature of gliding and what is involved. Indeed, the wording of the last two paragraphs of Paragraph 5.4.3 imply that DSGC pilots ‘break the rules’, and

there is even the implication that they are alone in doing this. DSGC pilots are trained to and operate within the rules and practices of good airmanship laid down by the British Gliding Association, on the same basis as glider pilots worldwide, avoiding controlled Airspace, because soaring flight is not compatible with it.

- 2.2 **The essence of gliding.** This is difficult to compress into a few brief words but is important. Glider pilots throughout the world have for 70 years used principally thermals, plus other forms of lift, to gain sufficient height to fly cross country. The essence of this is freedom, developed skills and using atmospheric conditions to stay airborne: it is exciting, challenging and very rewarding. No two flights are the same. Most frequently, it involves gaining as much height as possible, with the target of soaring to just below cloudbase. On this basis, gliding clubs throughout the UK and around the world fly both locally and cross-country, with regional and national cross-country competitions in the UK, and worldwide. Pilots at DSGC fly within the same regulatory parameters as glider pilots throughout the UK.
- 2.3 **The importance of weather.** Learning to fly and fly well is just the essential stepping stone to soaring flight. After learning to fly, there is a possible lifetime of understanding and using weather – in the planning, understanding the implications of every aspect of available forecast data. And in the air, combining this preparation with an ability to read the sky and the changing lift conditions to make informed judgments, often from minute to minute. ‘Tasks’ around the many GPS turnpoints across the country provide soaring pilots with the opportunity to evaluate the weather for the day ahead and set a task appropriate to the conditions, and then to test their evaluation by using skill and judgement to complete the task – if conditions are indeed as evaluated.
- 2.4 **The two essentials.** For sustained soaring flight, the two inter-related essentials are height and lift. The greater the height, the further the glider can fly before having to top up with another source of lift. Limited height means limited distance. There are 4 main sources of lift that glider pilots use: thermal, ridge, wave, and convergence. Ridge soaring is limited to a relatively low altitude, whereas thermal, wave and convergence lift can be used to considerable altitudes. Sea Breeze convergence is a line of continuous lift usually marked by clouds, and normally parallel to the coast, the line can move inland through the day and is often used by DSGC pilots.
- 2.5 **The importance of clouds.** For the soaring pilot, cumulus clouds provide the best possible indication of lift. Formed by thermals, they are magnets attracting soaring pilots to go beneath them to find the strongest area of lift and climb as high as possible. Thermal lift is stronger and more reliable in the upper half of the convective layer, and weaker and harder to use at lower levels. Where there is lift, there will be sink - downward air movement – not far away; this is something the glider pilot must be vigilant to avoid. As an illustration of the importance of this cloud to glider pilots, RASP (‘Regional Atmospheric Soaring Prediction’) is a specialist meteorological website available to assist in the evaluation of soaring conditions for the day/days ahead; outputs are available for all BGA turnpoints, including NHL, North Hill. It indicates on graphs, inter alia, **likely heights of cloudbase and the Cu potential**, giving the day a rating from Poor to Excellent.
- 2.6 **Soaring from North Hill Airfield.** The developing post-solo pilot at DSGC is able to fly local cross-country tasks within gliding range of the airfield - provided he/she has sufficient height. These can be as far as Wellington and Taunton. For pilots who have passed an exam and further practical tests, longer tasks are available, for example to Yeovil, Okehampton, Dorchester and Salisbury Cathedral.
- 2.7 **Devon and Somerset Gliding Club – background and assets.** DSGC has been operating successfully at North Hill for over 50 years alongside Exeter Airport. During that time, the members have purchased the airfield, built clubhouse and hangars, improved the fleet and built a good membership, becoming the largest non-commercial gliding club in the south west, and the eighth largest

gliding club in the UK. The club fleet consists of four two-seater training aircraft, two single seat gliders suitable for early solo pilots and a Piper Pawnee tug aircraft for aerotows. 6 years ago the club invested £80,000 in a new gas-powered 400HP winch for the majority of launches. **Winch launch heights** are generally 1200 to 1400 feet height/QFE, with occasional launches to 1800ft, and on rare occasions dependent on wind speed and direction, to 2000ft. Aerotow launches can go to the base of Airway N864. In addition, there are currently 46 private gliders housed in trailers at the airfield. Photographs illustrate these points in Appendix 7. The club is run entirely by volunteer members, including the 30-strong team of trained Instructors.

2.8 **DSGC – activities.** While the main activity of the Club is training aspiring new pilots, improving skills, local soaring, aerobatics and the cross-country flying dealt with above, the Club also looks outward to the community and the wider public, and provides:

- trial lessons for members of the public wishing to experience the thrill of non-commercial flying; a particularly popular offering is the Club's "Mile High" aerotow flight to 5000ft amsl.
- a summer-long programme of evening flying for groups such as Air Cadets, scouts, Round Table, workplace groups and the like;
- from April to September, monthly week-long training courses for beginners and improvers which are open to members and non-members;
- an annual Open Day for members of the public to experience gliding;
- DSGC actively encourages young people to take up the sport of gliding by offering subsidised flying. Young pilots can go solo in gliders at 14 years. The Club has been awarded accreditation by the British Gliding Association as a Junior Gliding Centre.

2.9 **DSGC Local Rules.** DSGC has a long-standing published procedure, for gliders approaching the A30 with the intention of flying further south close to or across the Exeter extended centreline. Pilots will make a position report by radio contact with Exeter ATC. This procedure continues to work well for both parties.

### 3.0 THE IMPACT OF THE PROPOSALS ON DSGC

3.1 **Preliminary statement.** The proposals in Paragraph 5.4.3 of the ACP for opening up Glider Boxes were not and are not agreed, and are not accepted. This will be dealt with in 3.8 below.

3.2 **Class D over and surrounding North Hill Airfield.** As indicated by paragraph 2.0, the imposition of Class D airspace above and for a considerable distance around the airfield will have devastating results.

3.3 **Local soaring.** This will be limited to approximately 2000ft above the airfield before entering CTA4. For members who prefer local soaring to cross country, who have perhaps spent an hour or more driving to the airfield, the prospect of being limited to thermalling five or six hundred feet from a winch launch on a good soaring day without breaking the law will have little or no attraction.

3.4 **Post-solo developing pilots.** The proposed ceilings of usable Class G airspace would be too low for relatively inexperienced soaring pilots, or indeed any club pilots. Two examples will illustrate this. Their first 'adventure' is to fly solo to Cullompton and back so as to be at minimum circuit height of 800ft QFE. The first time, anxious to avoid the possibility of sink on the return leg, they would probably aim to turn Cullompton (CUL) at 2500ft QFE, 3420ft amsl. This is not possible. Similarly, to turn TIE ('Tiverton East' – the M5 junction with the North Devon Link Road), they might aim to be at 3000ft QFE to ensure a safe return. This is not achievable. Newly qualified pilots will be unable to develop properly their soaring skills and judgement of conditions.

**3.5 Experienced cross-country pilots and implications for cross-country.** As indicated above, height=gliding distance/more options. **Most cross-country pilots departing North Hill airfield on task aim to be at 3000' QFE/ 3920' amsl. This is clearly impossible with a ceiling of Class D at 3000' amsl.**

**3.6 Is access to Class D a possibility?** In theory, any pilot can ask consent to enter Class D airspace. For the glider pilot, this is impractical and potentially dangerous in relation to soaring flight. Three reasons will be sufficient.

- **Making a radio call – distraction at critical times.** Radio calls in straight and level flight are a normal part of flying. However, it is not uncommon for two or even three gliders to be circling around the same thermal. This requires 100% concentration and lookout – anything less is unsafe. One of the highest causes of accidents in aviation is known to be distraction. To approach the Class G ceiling while thermalling and then make a radio call asking consent to enter Class D - or even alone in a thermal - is too great a distraction which will endanger the key obligation of the glider pilot to himself and others in the sky – lookout.
- **Making a radio call – what do I say? ATC need to know – what is your heading.** Clearly – “to the cloud above me” is a non-starter as an intended route. (Vertical) transit time unknown. Heading – in circles, not a straight line.
- **VFR in Class D.** Only VFR flight is allowed in Class D Airspace. The glider pilot wishes to climb to cloudbase, but must stay 1000ft below it, and doesn't know how high it is until he checks it out with his altimeter by getting there.

**3.7 General factors.** There are more general factors arising from Class D Airspace above the airfield:

- **Loss of freedom.** As well as the specific points already covered, there is the more general and intangible loss of freedom that is the very nature of why glider pilots love their sport.
- **Instructors.** Instructors are the lifeblood of a gliding club, and a club cannot survive without them. A club run on a voluntary basis relies on their selfless and generous amounts of time spent bashing out circuits and nudging Bloggs towards going solo. DSGC has 30 Instructors, on rota. Many Instructors continue with this generous donation in the knowledge that they can also escape from teaching (which can of course also be rewarding in itself) to fly local soaring or cross-country. It is highly likely that without the raison d'être of freedom flying, many would move to other clubs or simply call it a day.
- **'Mile High Aerotows'.** The introduction of Mile High Aerotows for Trial Lessons [to 5000ft above sea level] has proved very popular with members of the public wishing to experience gliding for the first time. They make a real contribution to covering the costs of running the gliding club for members. These will not be possible within the ACP proposals.

**3.8 Reasons for Rejecting the Glider Box concept.** At meetings with DSGC, Exeter's Consultants stated that in view of the 'essential need', there was no alternative to Class D overhead and surrounding North Hill. In trying to rescue something from the situation, a Glider Box was tentatively discussed. It was understood that further discussions would take place. It was understood that this 'concession' was for DSGC pilots, at a local level, in the same way that previous Letters of Agreement have been reached with Exeter ATC in previous years. In the past, the Club has made clear to members what is expected of them in respect of the Letter of Agreement and this has generally worked well. 'Incursions', whether in Airspace or outside of informal agreements, are for ATC regrettably part of life and presumably part of the job.

3.9 **What happened next.** To the surprise of DSGC, the Glider Box concept was included in the ACP consultation document and not entirely in the form that had been discussed. It appears that the Consultation process was being pushed ahead regardless, to a timetable, and as a shortcut to further discussion on what the Club had understood. ***DSGC has re-examined the Glider Box concept put forward in the ACP consultation.***

- It can see no justification for it, in light of the number of ATMs in the glider operations period from 10.00am to 6.00pm.
- it is completely unreasonable to go forward for the future knowing that flying from day to day is only at the discretion of Exeter ATC, which might or might not be forthcoming, either short term or long term. Furthermore, it would be impossible to plan future investment decisions without the certain knowledge of our ability to continue flying.
- The proposals within and more widely around the Glider Box concept impose limitations which DSGC finds unacceptable.

3.10 **Summary.** ***Imposition of the proposed Class D would be a disaster for DSGC, and would be likely to cause its closure. Important note: Any alternative proposal that involved controlled airspace would have similar consequences for its location – virtual no-go areas for gliders. Gliders on cross-country cannot afford to get low, otherwise they risk being forced into a field landing, either on hitting sink or due to finding insufficient lift at low level. Thus the likelihood of field landings increases markedly - with attendant risks to pilot and aircraft.***

#### 4.0 ACP MISREPRESENTATIONS AND FAILURES TO MEET DESIGN OBJECTIVES

4.1 **Important Note.** Clearly, the ACP document refers to the outcome of the pre-publication design and consultations. In the case of DSGC, Exeter were aware that (a) DSGC considered the unmitigated Class D design would have unworkable and disastrous consequences for the Club; (b) there were only the most tentative discussions on a Glider Box after Exeter stated unequivocally that the design of the Class D could not be reduced. The ACP was published by Exeter Consultants before the completion of initial consultations - in the knowledge that, in any event, the outcome would might or might not have been considered acceptable to the DSGC committee and membership. It was also published in the knowledge that - *in the absence of any LoA* - the Club is thus faced with the attempted imposition of the unmitigated Class D design, in its entirety.

4.2 **Overview.** Throughout the ACP there are a number of misrepresentations of facts and of the effects of the proposals. Some of these are relatively trivial but many significant. These are highlighted because they indicate an unsatisfactory approach to the process of consultation and if unchallenged could mislead the CAA on the legitimacy of the initial consultations and of the ACP document. In following paragraphs, the Section within the ACP is noted, and then the paragraph containing the words highlighted.

4.3 **ACP 1.1** first paragraph: “Exeter considered various options, but in order to maintain levels of safety and enhance airspace efficiency, **whilst causing minimal disruption to all aviation stakeholders**, Exeter propose to establish Class D Controlled Airspace (CAS) around the existing Exeter Airport Aerodrome Traffic Zone (ATZ).” This is a knowingly false statement, and should not have been included.

4.4 **ACP 1.3** first paragraph: “Exeter wishes to engage with all aviation stakeholders that might be affected by the ACP. Constructive feedback will inform the proposal development, **ensuring that positive impact is enhanced and any negative impact is minimised.**” At present the negative impact is maximised: this aspiration remains a goal to be achieved, dependent upon review after the Consultation period closes.



- 4.5 **ACP 1.7**, first paragraph “**Although unlikely, should the issues identified require major changes to the proposal, a further consultation on the revisions would be required**”. This is not a misrepresentation, rather it is a welcome statement of what is still needed – major change.
- 4.6 **ACP 1.8** first paragraph: “**The full proposal submitted to the CAA will include the following: the full CAS design....and the results of the consultation to demonstrate that the proposal is balanced and that it meets stakeholder requirements**”. Clearly the design at present is *lacking any balance whatsoever*, being totally biased in favour of the change sponsor.
- 4.7 **ACP 1.9** third bullet point requiring the CAA to “Satisfy the requirements of operators and owners of all classes of aircraft;” At risk of repetition, this aspiration is yet to be met.
- 4.8 **ACP 2.1** first paragraph: “Although Exeter ATC handles the current operational issues safely and effectively on a tactical basis, any future increase in traffic may result in overload situations **as controllers try to accommodate more aircraft in a limited volume of airspace, particularly to the east of the Airport.**” As an observation, this seems a misleading statement as this is Class G airspace, and therefore by definition unlimited airspace.
- 4.9 **ACP 2.2** third paragraph: there are a number of statements within this paragraph that should be read in the context of the point made in paragraph 1.2 above regarding controller interventions. In particular the statement that...“*These incidents create a significant increase in workload and distract ATC from the task of providing a service in Class G airspace*”... sits uneasily with the fact that such incidents, where recorded, occur in 0.337% of ATMs. This would not appear to give rise to a “significant” increase in workload.
- 4.10 **ACP 2.2** fifth paragraph: **ATMs**. The misrepresentation of ATMs and the lack of any substantiation of forecasts is dealt with in 1.3 & 1.4 above and elsewhere.
- 4.11 **ACP 2.3** first paragraph “The safety, operational and navigational requirements of Exeter, its on-base flight operators **and local aerodromes**, have influenced the development of the proposed airspace design.” The existence of North Hill airfield and indeed Dunkeswell Aerodrome and Uptontery Airfield have made no difference to the current design, so this is completely untrue.
- 4.12 **ACP 2.4**: “Despite continued economic pressures in Europe, **Exeter reports that passenger numbers have increased by 20% between 2011/12 and 2016/17** with the introduction of new routes, which will continue to be added to in the coming years. The Exeter ACP has been designed with the intent to protect current day-to-day operations at the Airport, whilst providing the flexibility to incorporate, effectively and efficiently, projected growth (projected 3% year on year growth to the end of this decade) in CAT”. While the growth figure quoted may be correct, it is misleading to the extent that passenger numbers for 2016 are still slightly below those for 2005.
- 4.13 **ACP 3.1** fourth bullet point: “**Be of the minimum practicable dimensions**, commensurate with the regulatory and environmental requirements and the safe and efficient use of airspace.” Given that the proposed CAS is greater than that of Gatwick and is overhead or adjacent to four airfields north of the A30 [North Hill, Dunkeswell, Uptontery Airfield at Smeatharpe and Watchford Farm] any suggestion that this guideline has been complied with would be nothing short of absurd.
- 4.14 **3.3.1** second paragraph: “Exeter have considered several options in their development of potential solutions **and is keen to minimise the impact to local aviation stakeholders...**” Insufficient options have been considered to satisfy this aspiration.

## 5.0 OPTIONS NOT CONSIDERED

- 5.1 **Background.** Any Airspace decision is of course a compromise between the needs and aspirations of different parties, and a balancing of the importance of sometimes conflicting criteria. However, with no compromise whatsoever, the ACP in effect offers a false choice between all or nothing, and dismisses the status quo as unsatisfactory. It is therefore worth reviewing from Section 3.1, the principal objectives of the ACP. For convenience, bullet points are numbered instead:
1. As a minimum, to maintain the current level of safety;
  2. To make the airspace more efficient for all users;
  3. Provide protection to public transport passenger aircraft in the critical stages of flight prior to landing and after departure;
  4. Be of the minimum practicable dimensions, commensurate with the regulatory and environmental requirements and the safe and efficient use of airspace;
  5. Provide for access to the maximum extent practicable by all classes of aircraft.
- 5.2 **The status quo – do nothing.** In terms of these objectives, the status quo option has advantages: **(a)** It satisfies 1 above and in the circumstances where there is no substantiation of any increase in ATMs (indeed a forecast fall by IATA) and where movements 10 years ago were 25% higher than now, and were handled with no declared problem. Additionally, if 1. is satisfied, then 3. above has also been satisfied – Exeter ATC is handling current operational issues safely and effectively. **(b)** It satisfies 2. above. ATC has the maximum flexibility to route traffic at its discretion, whilst remaining aviation stakeholders continue to enjoy their existing rights of access to airspace. **(c)** It obviously satisfies the “minimum practicable dimensions” clause of 4. Regarding “...efficient use of airspace” of clause 4 - as an aside - it is worth noting that although the ACP refers to potential fuel savings in 2.3 (third paragraph) there is no quantification given. Thus it is a superficially attractive statement, but is not supported. Knowledgeable aviation-industry opinion within DSGC states that while this might be a factor, these fuel savings from the ACP’s design are at the margins and relatively minimal.
- 5.3 **Controller Interventions.** *The need for these have effectively been put forward as the other driver for the ACP, in addition to a projected increase in ATMs.* ACP 2.2 states “In the eight years (2009-2016) there have been over 600 recorded instances of controller intervention due to unknown aircraft, and 3 AIRPROX incidents during 2016”, in the vicinity of Exeter airport. The clarification from Exeter ATC provided data, and stated that as the recording of Controller Intervention was voluntary, many went unreported, so the number was only a minimum. *Nevertheless, in statistical terms these recorded instances amount to one every five days or so, or 0.337% of ATMs [see paragraphs 1.2 and 4.9 above], which would thus appear to be part of the overall normal deconfliction role of ATC.*
- 5.4 **Analysis of Controller Interventions.** This data showed a total of 632 recorded instances, and that 613 (97%) of these crossed the extended runway centre line or flew within 3nm of it without contacting Exeter ATC. 176 flew within the first 5nm from the overhead, 413 within the next 5nm, and 43 within the third 5 nm. The data does not state how these numbers are apportioned to the east or west of the airport.
- 5.5 **Analysis of AIRPROX reports.** During the same eight year period there were 6 AIRPROX incidents. Of these, three were ‘close’ to the ILS feathers, one was 5nm from the centreline, and two were actually within the Exeter ATZ. It should therefore be noted that five out of six AIRPROX were in close proximity to the extended runway centre line.
- 5.6 **Possible alternative Option 1 – Class D Airspace similar to Military Air Traffic Zone (MATZ),** see Appendix 5. As was clear from the analysis above, it is the area close to the extended runway centre line that is of concern. Under this proposal, this area could be protected by the MATZ-based design of

a 5nm radius around the airport and together with a 5nm long and 4nm wide stub centred on the extended centreline in each direction.

- 5.7 **Advantages.** This design does offer a solution that meets the Objective 4 above (Be of minimum practical dimensions, commensurate with the regulatory and environmental requirements and the safe and efficient use of airspace). It provides the protected approach and departure routes which Exeter is seeking, while avoiding major impact upon DSGC and other aviation stakeholders caused by the ACP. DSGC cross-country gliders are able to continue to take the southerly departure-and-return route to the south of Dunkeswell if on tasks to the east. Additionally, it substantially alleviates any funnelling of traffic into the North Hill airfield circuit and the pinchpoint created by the ACP proposal. The avoidance of these hazards was made a CAA requirement during 'Exeter International Airport Proposed Controlled Airspace Framework Briefing' of 28 June 2016. See explanation below.
- 5.8 **Explanation of funnelling and pinchpoint under the ACP.** Under the ACP design, some GA traffic approaching Dunkeswell from the west is likely to fly eastwards along the northerly edge of CTA-3, under the 3000ft amsl floor of CTA-4. This will put this traffic into the normal southerly circuits for gliders landing at North Hill Airfield, whether landing to west or to east on the airfield. It should be borne in mind that there is a ridge running south from the east end of North Hill airfield to Hembury Hill (a BGA turnpoint); this ridge is of similar elevation to North Hill.
- 5.9 **Possible alternative Option 2 – Class D Airspace as in Option 1 above with the addition of Class D to the south – see Appendix 6.** If controlled airspace is required from Airport to Airway, a 6nm block of Class D to the south of the stubs would be sufficient to permit this, with traffic to and from the north remaining in the Airway and overflying Exeter Airport. Thus both designs avoid the massive impact on long-established aviation stakeholders, and provide a proportionate and balanced solution. The reduction of funnelling through the pinchpoint also applies.

## SUMMARY AND CONCLUSIONS

1. On the evidence put forward, the ACP has failed to substantiate the need for any change to the existing Airspace arrangements.
2. While not expressed in this form, the main driver for change arises from the projected growth of a very small 3% year-on-year in ATMs, against the background of the ongoing need for 'Controller Interventions'.
3. With reference to projected growth, as already noted - a key statement in the ACP is that "Exeter ATC handles current operational issues safely and effectively."
4. Exeter's estimated ATMs for 2017 are 13,525 (not the 40,417 indicated in the ACP). Passenger numbers, although not strictly relevant, were in 2016 still slightly below the figure for 2005. For three years, 2006, 2007 and 2008 ATMs were 15,000, 17,000, 15,000 respectively. 17,000 is 26% above the estimated figure for the end of 2017: it therefore seems surprising that nowhere in the ACP is there any statement that Exeter struggled to deal with these numbers at that time, to support its current case.
5. Although the case for the change is made based on a projected increase of 3%, year-on-year, no evidence is provided. Nor is any further indication given of how this is expected to be achieved. However, even if were to be achieved, the increase would appear to be marginal in terms of ATMs, and

within Exeter ATC's past capability for response – it would be useful to refer back to paragraph 1.5 at this point.

6. With regard to the secondary 'main driver' put forward as a basis for change in the ACP - the need for Controller Interventions - the ACP makes clear that Exeter ATC is currently capable of dealing with these, as outlined in the document. The failure of pilots to follow established rules and protocols is not, and should not be, acceptable. However, as it is within the 'normal' remit of ATC to monitor and act in such cases, a statistical occurrence of one such intervention every five days (for those occurrences that were recorded), or expressed differently, in 0.337% of ATMs, would not, to the non-specialist, seem excessive.
7. In the event that this reasoned evaluation is not accepted, the ACP would clearly need very substantial modification and reduction in size if it were to avoid the consequences set out earlier.
8. The analysis of controller interventions indicated that in 97% of cases the aircraft concerned crossed the Exeter final approach tracks, runway climb out areas or flew within 3nm of them, without calling Exeter ATC. Notwithstanding the facts highlighted above, if greater control is deemed necessary to be put in place, the approach and climb-out areas would seem to be where the enhancement should be focussed. It is for this reason that DSGC has proposed two options that would provide such enhancement, without the overwhelming impact of the ACP as tabled.
9. An effective consultation process is vital for all aviation stakeholders affected. A guiding principle is set down in CAP 725 where it is stated that "Commitment is key to effective consultation. The Change Sponsor must be prepared to respond to what it learns and to make changes, even if this requires major modifications, if it is appropriate"; [paragraph 4.7 of CAP 725]. DSGC would add to this, that *any* change at all from the status quo should only take place if a case has been made for that change. Rises of approximately one additional aircraft movement per day, every year for five years, do not satisfy this criterion.
- 10. DSGC rejects the current ACP, which should be withdrawn. If the Change Sponsor can find new justification for an airspace change then the whole consultation process should start again including a modification to move the 'EX' NDB Hold.**

### **Closing Note**

DSGC has for many years had a good and amicable working relationship with Exeter ATC. Regardless of the outcome of this process, it is hoped and anticipated that this will continue to be the case.

**Jill Harmer**

Secretary

Devon and Somerset Gliding Club Ltd

on behalf of the DSGC Management Committee

**Observations of Scheduled Flights 20 May to 4 June 2107.**

DSGC monitored departures and arrivals at Exeter between these dates which included the Spring Bank Holiday, during which flights increased by about 25%. In many cases flight tracks were noted from Flight Radar 24. Although this is essentially a snapshot of activities at that time, it was able to provide some useful background information. The main focus of interest was in the number of movements to and from the northerly section of the Airway N864.

This information noted was as follows:

Average number of total movements in/out of Exeter per day - 42.8, range 32 – 51.

Average number of total movements using N864 per day - 12.4, range 8 – 14.

Average number of movements using N864 between 10:00 and 18:00 per day - 5.5, range 4 – 7.

Air transport Movements 2005 - 2015 (in thousands)

Table 4.2

Appendix 2

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Percentage change on past year
<b>London Area Airports</b>												
GATWICK	252	254	259	256	245	234	245	240	244	255	263	3
HEATHROW	472	471	476	473	460	449	476	471	470	471	472	-
LONDON CITY	61	66	77	84	67	60	61	64	68	70	79	13
LUTON	75	79	83	86	75	69	72	72	71	76	87	16
SOUTHEND	-	-	-	-	-	-	1	7	9	12	9	-22
STANSTED	178	190	192	177	156	143	137	131	132	143	154	8
<b>Total London Area Airports</b>	<b>1 038</b>	<b>1 061</b>	<b>1 088</b>	<b>1 077</b>	<b>1 004</b>	<b>954</b>	<b>992</b>	<b>986</b>	<b>994</b>	<b>1 026</b>	<b>1 065</b>	<b>4</b>
<b>Other UK Airports</b>												
ABERDEEN	89	98	103	100	94	88	95	99	100	106	96	-10
BARRA	1	1	1	1	1	1	1	1	-	-	-	-
BELFAST CITY (GEORGE BEST)	37	37	40	40	38	39	41	36	37	36	41	13
BELFAST INTERNATIONAL	48	48	52	54	44	39	37	39	37	35	36	4
BEMBRIDGE	-	-	-	-	-	-	-	-	-	-	-	-
BENBECULA	3	3	3	3	3	3	3	2	2	2	2	-
BIGGIN HILL	-	-	-	-	-	-	-	-	-	-	-	-
BIRMINGHAM	113	109	104	103	94	85	84	84	85	89	90	-
BLACKPOOL	13	13	13	11	11	10	9	10	10	8	7	-20
BOURNEMOUTH	12	12	12	12	9	7	6	7	7	7	9	27
BRISTOL	61	66	59	60	54	54	53	51	54	53	55	4
CAMBRIDGE	-	-	-	-	-	-	-	-	-	1	-	-
CAMPBELTOWN	-	-	-	-	-	-	-	-	1	1	-	-
CARDIFF WALES	21	22	23	23	20	17	16	14	14	14	14	-1
CITY OF DERRY (EGLINTON)	4	5	6	6	4	4	4	3	3	3	2	-24
COVENTRY	10	8	7	4	1	-	-	-	-	-	-	-
DONCASTER SHEFFIELD	5	8	9	7	6	7	6	4	4	5	6	9
DUNDEE	2	2	3	4	4	4	3	3	1	1	1	-2
DURHAM TEES VALLEY	12	12	11	9	6	6	5	4	4	4	4	-3
EAST MIDLANDS INTERNATIONAL	54	56	61	66	57	52	54	55	57	57	56	-1
EDINBURGH	116	116	115	114	106	101	105	103	104	101	107	6
EXETER	12	15	17	15	13	12	12	12	13	12	13	4
GLASGOW	97	97	94	87	74	69	70	72	73	74	80	8
GLOUCESTERSHIRE	-	-	-	2	2	2	1	1	1	1	1	-1
HAWARDEN	2	-	-	-	-	-	-	-	-	-	-	-
HUMBERSIDE	11	13	13	13	14	13	13	13	12	12	11	-9
INVERNESS	16	17	15	14	12	10	10	10	10	10	11	10
ISLAY	1	1	1	1	1	1	2	1	2	2	2	5
ISLES OF SCILLY (ST.MARYS)	11	11	12	11	11	10	11	10	11	9	11	12
ISLES OF SCILLY (TRESKO)	3	3	3	3	2	2	2	2	-	-	-	-
KIRKWALL	9	10	11	11	11	10	11	10	11	11	11	-
LANDS END (ST JUST)	4	4	5	5	5	5	5	6	7	6	8	46
LEEDS BRADFORD	36	37	40	38	33	33	33	30	30	30	31	4
LERWICK (TINGWALL)	1	1	2	2	2	1	2	2	1	1	1	11
LIVERPOOL (JOHN LENNON)	49	48	46	44	42	43	46	36	33	30	33	10

**Definition of ATMs** (most relevant section in bold)Appendix Definitions - UK Airport Statistics (including Channel Islands & Isle of Man)

There are some differences between the definitions used in this publication and those used in "UK Airlines - Monthly Operating Traffic and Financial Statistics". These arise mainly because UK Airlines are not asked to report non-revenue passengers or non-revenue cargo. The classification of European traffic differs between the publications. Airport statistics include all traffic with an origin or destination within the Community: Airline statistics analyse activity within the liberalised area, the geographic boundary of which may vary from time to time.

MOVEMENTS

Aircraft movement. An aircraft take-off or landing at an airport. For airport traffic purposes one arrival and one departure are counted as two movements.

Commercial Movements

**Air transport movements are landings or take-offs of aircraft engaged on the transport of passengers, cargo or mail on commercial terms.** All scheduled movements, including those operated empty, loaded charter and air taxi movements are included. For the purpose of these statistics where flights are operated on a sub charter basis the operator is identified according to the flight number. In the case of code sharing and franchise services the flight is allocated to the operator who has commercial responsibility for the service.

Source:

[https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard\\_Content/Data\\_and\\_analysis/Datasets/Airline\\_data/2016/April/Foreword.pdf](https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Datasets/Airline_data/2016/April/Foreword.pdf) (page 4).

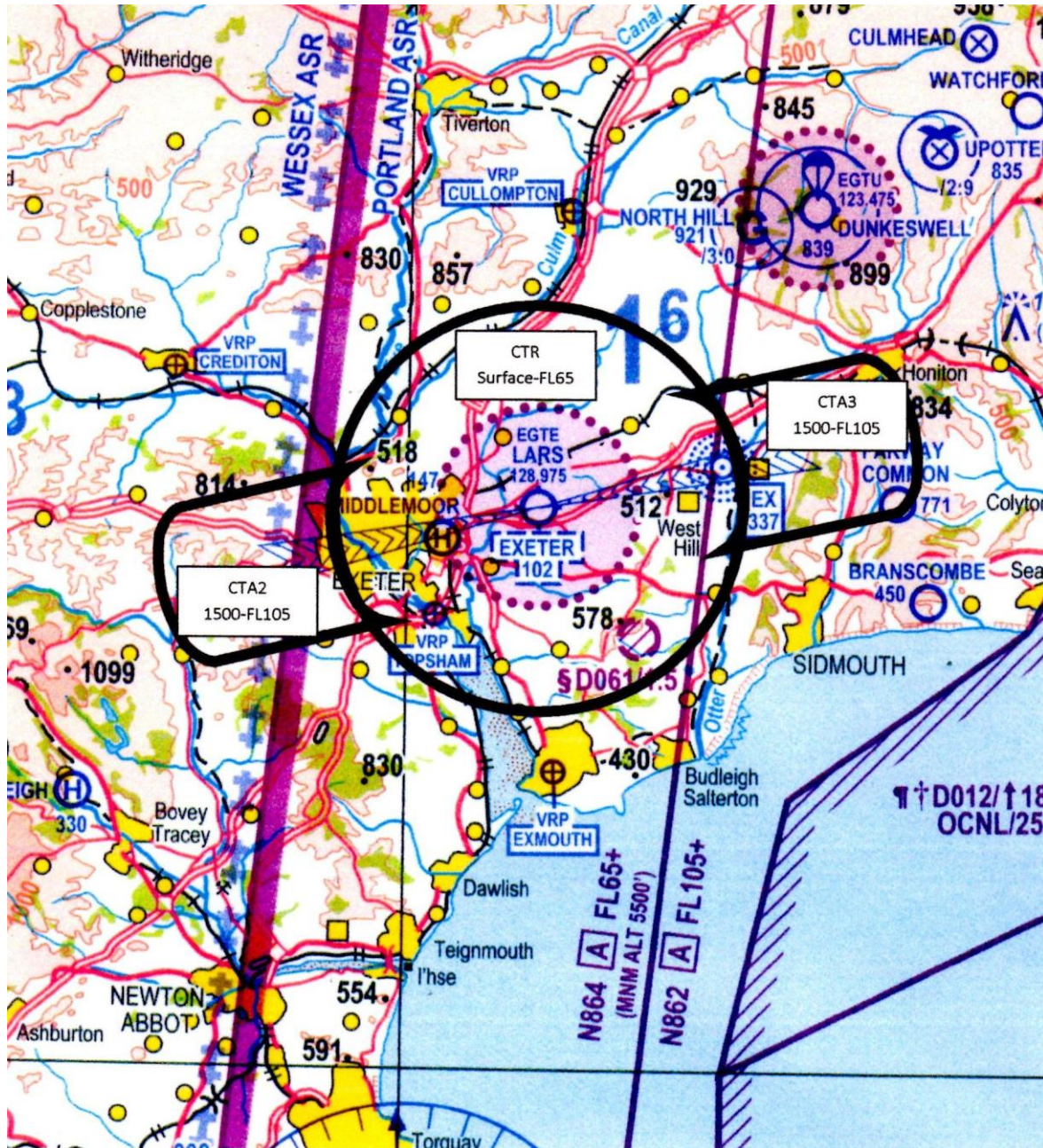
The screenshot shows the 'airportwatch' website. The header features the logo and a navigation menu with links: Home, About us, Join our mailing list, Read the blog, and Contact us. A left sidebar contains a list of categories: Latest News, UK Airports, Thames Estuary Airport, The Problems, European Airports, Briefings and Information, Publications, Airports Commission, Biofuels, EU ETS and ICAO, Air Freight, Air Passenger Duty, The Campaign Community, Links, Jet Fuel Price, Recent airport passenger figures, Some useful dates, and What you can do.

The main content area displays a news article with the following details:

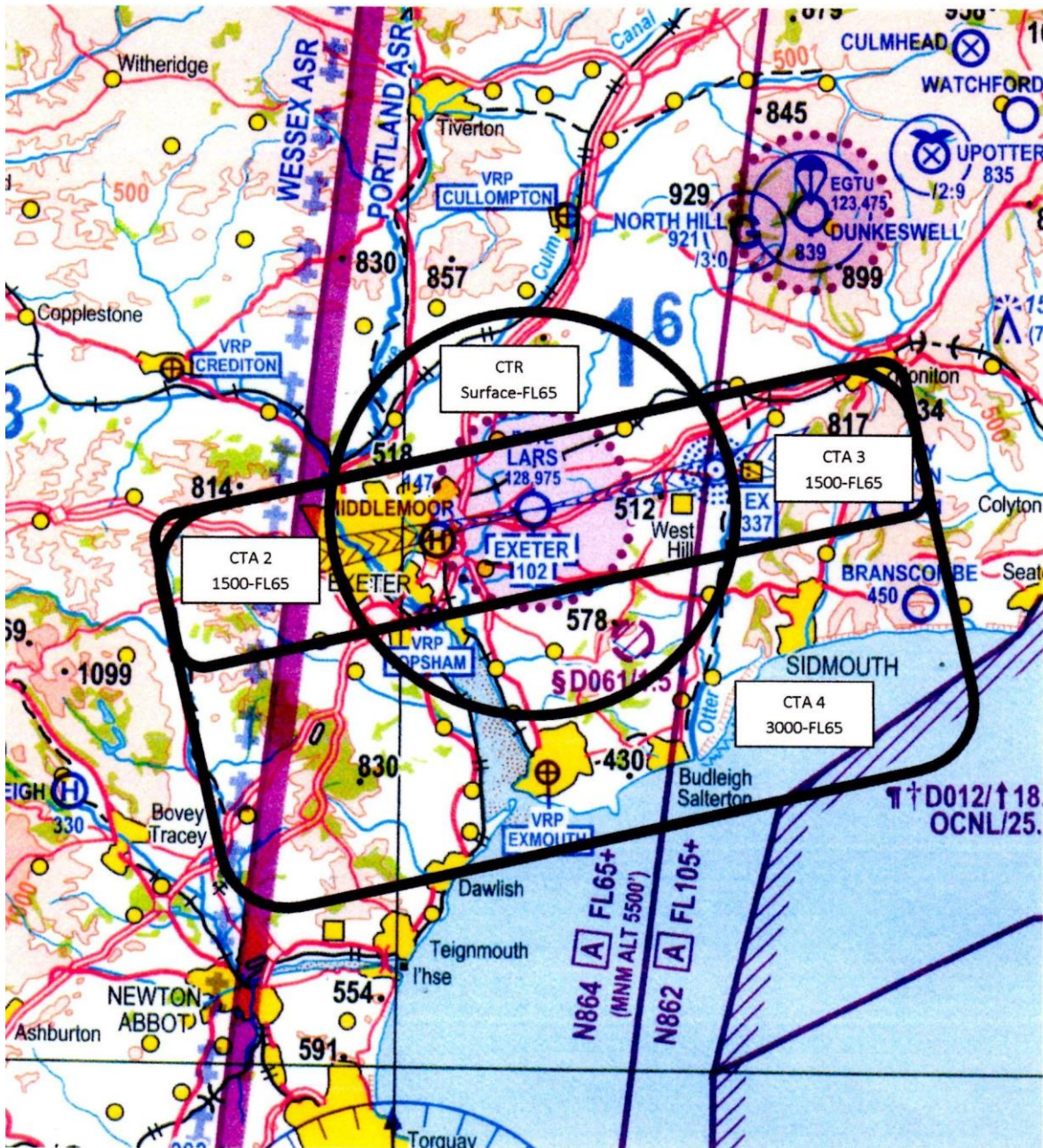
- Article Title:** IATA forecasts UK air passengers by 2030 perhaps 25 million below DfT – so no need for a runway as early as 2030
- Date added:** October 19, 2016
- Text:** IATA, the airlines' trade association, expects that with a "hard Brexit" the number of UK air passengers could be 25 million fewer than government forecasts. 25 million passengers is about the entire annual throughput of Stansted. Though all forecasts are bound to be inaccurate, the problems of the weaker £ and changes to the relationship with the EU are likely to cut demand for air travel in the coming decade. Heathrow etc are keen to claim (having been totally against Brexit before the Referendum) that the UK now needs even more airport capacity. The reality is more than demand may fall, after 4 years of rapid growth before the EU referendum. IATA expect a hard Brexit (more likely) could cause air traffic to be 8-9% lower than with a soft Brexit (less likely). IATA's forecast of 257 million UK flyers would equate to a total of just over 290 million passengers, including transfers, by 2030. (About 251 million in 2015). The Airports Commission believed, based on DfT forecasts, that a new runway should be constructed in the UK by 2030, predicted an increase to 315 million passengers by 2030. With the lower forecasts, that would not be till 2040. IATA's revised forecasts indicate air passenger demand near the lower limit of the DfT forecasts.
- Interaction:** A blue 'Tweet' button is visible below the article text.
- Section Header:** Hard Brexit 'will reduce need for airport expansion'
- Text:** Airlines' trade association says number of UK air passengers could be 25 million fewer than government forecast
- Byline:** By Gwyn Topham Transport correspondent  
Tuesday 18 October 2016



**DSGC – Possible Option 1**



**DSGC – Possible Option 2**

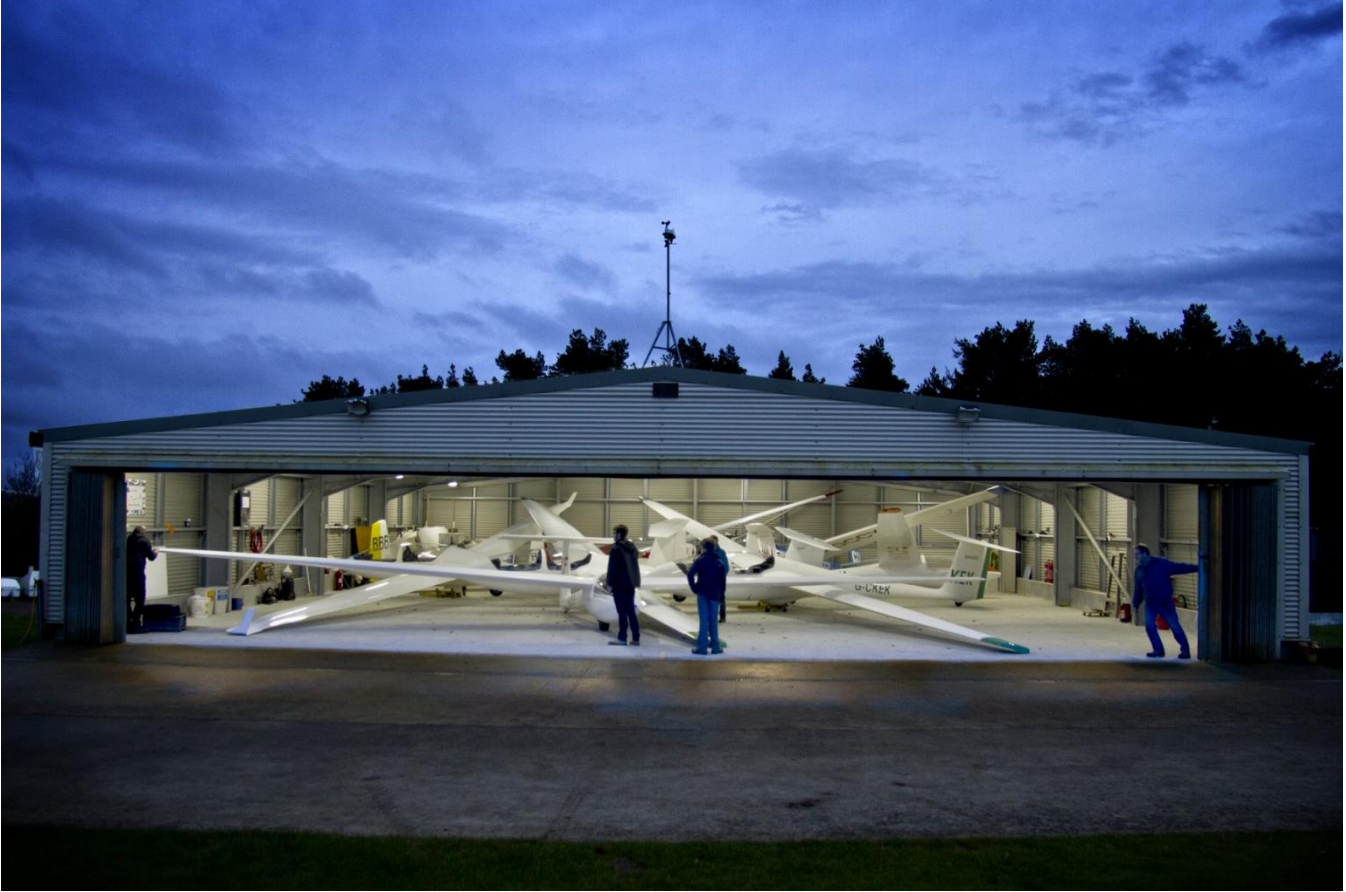




**A busy launch grid in summer**



**Exeter Scouts enjoy a flying evening**



**The club fleet**