

UK Air Traffic Control Staffing Issues

1 Introduction

- 1.1 Gatwick Airport experienced multiple short-term closures during the night periods of 8th and 9th of April 2018, which led to delays and two aircraft diverting to other airports, inconveniencing passengers and airlines.
- 1.2 This occurred due to short notice sickness of two Air Traffic Control Officers (ATCOs) on the first night in question. Gatwick normally has three ATCOs rostered to cover a night shift. The Air Safety Group accepts that short-notice sickness is difficult to cover but finds it notable that alternative ATCOs were either unavailable or unwilling to cover the second night shift when the original ATCOs remained unable to work.
- 1.3 Although the airport was not officially closed, the withdrawal of the Air Traffic Control Service and the imposition of a 'zero flow rate'¹ led to Gatwick being closed in all but name.
- 1.4 The situation of a major, 24-hour international airport closing due to a shortage of available ATCOs is of concern. Gatwick is busy throughout the night, especially during peak summer traffic levels. Any increase in actual or perceived workload of the remaining ATCO could exacerbate this situation, with an increase in declared fatigue and sickness. Whenever fatigue increases, there is always an increased risk of errors. Additionally, if working solo, there is no support to call on should it be required or desirable due to unexpected increased workload.
- 1.5 ATCO working hours are strictly regulated. The regulations are laid down in Civil Aviation Authority (CAA) publication CAP468. Rest breaks must be taken and, to be clear, The Air Safety Group believes that the suspension of air traffic movements was absolutely the correct thing to do under the circumstances to ensure that safety was not compromised. Nevertheless, this situation has highlighted some areas of concern held by The Air Safety Group and this paper will outline those concerns.

¹ A flow rate specifies how many aircraft an airport or ATC unit can handle over a certain time period.

2 Background

- 2.1 National Air Traffic Service² (NATS) provided the ATC service at Gatwick Tower for over 30 years. In 2014 it was announced that Gatwick Airport had decided to accept a bid for services for ten years from a new Air Navigation Service Provider (ANSP) – Air Navigation Solutions (ANS). ANS is a subsidiary of the German national ANSP, DFS.
- 2.2 This decision caused concern among ATCOs. Historically, NATS has provided a range of extra services such as research and development, simulation and a supply of trainees and new ATCOs from its own College of Air Traffic Control.
- 2.3 The reasons for Gatwick Airport choosing a new ANSP were confidential but it is not unreasonable to assume that cost reduction was a significant factor.
- 2.4 In order to provide an orderly transition between the two ANSPs it was agreed that NATS would second some ATCOs to ANS to work alongside ANS's own employees for a period of two years. The seconding of NATS employees ended in March 2018. Those controllers who had been seconded would then return to NATS at different sites making ANS the autonomous ATC service provider with ATCO positions to fill.
- 2.5 The Air Safety Group has been advised that ANS's plan for recruitment and training was overly optimistic. It can take 12 months to train an ab-initio ATCO. It is understood that ANS believed they could complete training in less time and therefore the training plan was unrealistic at its inception meaning service continuity was not guaranteed.
- 2.6 Furthermore, the Air Safety Group has been informed that there were difficulties with recruitment due to unattractive terms and conditions. Following extensive pay negotiations, the terms are now more favourable; however, this involved ATCOs agreeing to increasing the take-up of overtime and trainers agreeing to train for a higher percentage of their working hours. These conditions were a positive step in attempting to accelerate the training process however this may lead to increased ATCO fatigue and sickness in the longer term.

3 ATC Recruitment and Employment Market

- 3.1 The difficulties in recruitment and of ATCO retention are not confined to Gatwick Airport. Neither is the Gatwick Airport closure unique. Several other UK aerodromes could experience the same situation if controllers called in sick for a nightshift at short notice.
- 3.2 There have been several less well publicised closures of London airports due to staffing issues in the ATC approach radar units serving those airports.
- 3.3 The ATC approach radar service for the main London airports continues to be provided by NATS from their control centre in Swanwick, Hampshire. Although airports remain

² The previously nationalised ATC service provider for the majority of the UK; now jointed owned by airlines and the UK government.

officially open without a radar control service, it would generally be considered unsafe for public transport operators to fly through this temporarily uncontrolled airspace without the guaranteed separation from other aircraft, guidance, assistance and information that is normally provided as part of an ATC service.

- 3.4 In recent times, the ATCO job market has undergone significant change. The introduction of new technology, combined with pressure from the UK CAA and airlines to achieve cost reductions and the ANSPs own desire to lower their staff costs to increase profits, led to a significant level of voluntary redundancy being approved to encourage the more expensive, and hence more experienced, staff to leave the business. This has also coincided with a retirement bulge with many staff being eligible for flexible retirement and deciding to retire with minimal notice.
- 3.5 Additionally, there has been active recruitment of UK ATCOs from around the world as other countries also face their own shortages and recognise the high standards of the training of ATCOs in the UK. Overseas ATC agencies are positively engaged in the recruitment of experienced, young/middle aged ATCOs who may be happy to relocate.
- 3.6 This significantly reduces the pool of experienced ATCOs who would otherwise become the next instructors, supervisors and managers of the UK ATC system. Middle East airports, Australia and Canada have all taken UK trained and based staff in recent years.
- 3.7 None of this would be an issue if new ATCOs were being trained at a rate matching or exceeding the rate of loss; however, this is not the case. The UK's biggest ATC college, operated and owned by NATS, based at Bournemouth Airport, was closed and relocated to a smaller facility integrated into NATS HQ. However, this new facility cannot achieve the level of recruitment and training that is required to offset the exodus.
- 3.8 Other privately-operated colleges in the UK are attempting to fill the space and provide ATC training services to NATS, smaller airports, other ANSPs worldwide and private, self-funded individuals. The previous NATS college provided a 'one-stop shop' solution for ab-initio student ATCOs to learn in a professional, world class training establishment; the current approach is more fragmented and market driven.
- 3.9 Many ATC units are attempting to recruit ATCOs such as NATS (including ab-initio students), Battersea Heliport, Carlisle Airport, Edinburgh Airport, Gatwick Airport, Highlands and Islands Airports, Liverpool Airport, Southend Airport and Wycombe Air Park. However, they are finding it challenging to recruit from the pool of available ATCOs and to compete with the generous employment packages offered in the Middle East and other overseas ANSPs such as Australia, Canada and New Zealand.
- 3.10 Other airports such as Coventry have been forced to stop providing a full ATC service and have downgraded to Flight Information Service Officers (FISO). Clearly, this can impact safety, operational robustness in marginal weather and affect the ability of the airfield to attract business.

4 The Air Safety Group Position

- 4.1 ATC is a safety critical activity which depends on highly trained, motivated and alert ATCOs, engineers and support staff. This is critical if the UK is to cope with the growth of air traffic movements caused by year-on-year demand for cheap air travel.
- 4.2 The ATC system is a critical element of national infrastructure and aviation itself contributes over £22bn to the UK economy.
- 4.3 In isolation, the situation at Gatwick Airport would not be a cause for concern and, at the time, it was managed appropriately. However, should airspace or airport closures become more frequent, it would suggest an underlying issue with staffing levels. In the context of the issues described above, we are concerned that there is an underlying staffing issue which is only now becoming apparent.
- 4.4 The cause of this shortage is multifaceted, and includes:
- a high retirement rate;
 - growing global employment opportunities;
 - a lack of planning by an increasingly fragmented industry where contract lengths for ANSPs may be a disincentive to invest in training, recruitment and retention;
 - pressure from airlines, airport, regulators and other organisations to reduce costs.
- 4.5 The UK ATC Tower market has been open to competition since 1985 but recent years have seen a period of major upheaval with ANSPs changing at Gatwick, Edinburgh and Birmingham Airport. The UK market is far more open to competition than the rest of Europe. Only a small number of European countries, such as Spain and Germany, have any competition for the provision of ATC services. The Air Safety Group is concerned that commercial interests in the UK are being placed above the need for operational robustness and safety.
- 4.6 The Air Safety Group understands that ATC units do not routinely operate a standby system for ATCOs in the way that airlines do for their crew and that any ATC staff shortages must be covered by ATCOs working additional shifts or overtime. However, if a general shortage of staff does exist, the availability of ATCOs to take up those extra shifts will be diminished either by the need for legally mandated rest or an unwillingness to work due to sustained high workloads.

5 Conclusion

- 5.1 The Air Safety Group is concerned that the increasing fragmentation of the ATC system, pressure on costs and fixed term contracts for the provision of ATC services will discourage ANSPs from investing in training, recruiting sufficient staff or retaining experienced, and hence more expensive, personnel.
- 5.2 The Air Safety Group is additionally concerned that an underlying shortage of qualified and experienced ATCOs in the UK could lead to a reduction in safety standards due to increased workload and pressure to work when unfit or fatigued.
- 5.3 We believe the model for the provision of ATC service should be reviewed.