

## Executive Summary

1. Epping Forest District Council (EFDC) commissioned The Halcrow Group to examine the potential for an intensification of flying activity at North Weald Airfield (NWA). This report details the study work undertaken and the conclusions drawn from it.
2. Currently, aviation and related activity operates at a substantial annual loss, as revenues from the relatively low level of activity do not meet operating costs. The annual shortfall between aviation operating costs and revenues is currently close to £300,000. In EFDC accounting terms, revenues from non-aviation uses of land, mainly outside the operational airfield site, offset these losses. On this basis, revenues from the NWA site overall exceed costs, currently by just under £375,000 per year. Substantially the largest non-aviation revenue contributor is the Saturday market.
3. EFDC considers the NWA site to be an important local amenity, as an open space and barrier against inappropriate development, and as a venue for leisure activities, including flying. It is also considered to be of considerable heritage value, locally and nationally, because of its military history.
4. This study has examined how the airfield can be preserved as a centre of heritage and other flying activity, and how its financial position might be improved. It covers; the current operational situation, the site's planning context, the regional aviation market and potential demand, and airfield infrastructure. A concept for development of the site is proposed, and options for how development and future operations could be managed are examined. The financial implications of development options have been modelled. The study also includes a review of potential economic impact and a scoping of the environmental implications of development.
5. NWA is strategically placed close to the M11 and M25 motorways, giving the site advantages over many airports and airfields in the region in terms of access to key areas of London. This beneficial location, together with trends in General Aviation activity in the UK and the South East, suggests that there is potential to develop NWA as a business aviation airport. This is reflected in the views of a number of operators in the business aviation market interviewed for the study, and by enquiries received by EFDC.
6. In planning terms, the continued use of the site as an airfield is safeguarded by local policies and there is scope for aviation related development on and adjacent to the airfield site.
7. The infrastructure of NWA is generally adequate for its present uses but certain elements require attention in order to ensure continuing operational safety and to protect major assets. The security of the site, from a commercial and an aviation safety

standpoint, would be improved by establishing a clear and physically secure landside-airside boundary, allowing access to the active airfield to be better controlled at all times.

8. The runway and taxiway pavements are in a generally poor condition and their underlying structure and residual strength uncertain. Whether there is to be development of air traffic or not, action needs to be taken soon to preserve the integrity of essential pavement areas and so guard against serious deterioration and consequent restrictions on flying activity.
9. This study was commissioned to look specifically at the potential for increasing aviation activity at NWA, to increase revenues, reduce financial reliance on non-aviation uses and so safeguard the airfield's future. It has considered a range of options for doing this and narrowed these down essentially four scenarios. One is to do essentially nothing, continuing with operations much the same as today. The second is to promote 'organic' growth – that is, growth in the types of flying and related activities seen today – and to expend a limited amount of capital on key infrastructure improvements. The other two scenarios entail attracting commercial business aviation operations to NWA. These would entail substantial capital investment but would generate substantially higher revenues. The operational, infrastructure, financial and environmental implications of these options have been assessed.
10. A 'do nothing' scenario would see no significant capital expenditure on improvements, and aviation activity continuing much as it is at present. While there might be some growth in activity and revenues deriving from it, this is likely to be modest and operating losses are likely to continue. Site security arrangements would remain as today. There would also be a risk that the deterioration of airfield pavements could accelerate, requiring operating restrictions to preserve safety.
11. The organic growth option would require capital expenditure, in the order of £0.6M, to deal with the pavement and security issues noted above. EFDC would continue to operate the site much as today, but taking a more active approach to attracting aviation and aviation related tenants and maximising the revenues from them. This would include moves already in hand to improve the collection of landing fees from visiting aircraft.
12. The impact of this option on revenues is likely to be limited, by the constraints imposed on types of activity, by the infrastructure, and by the lack of an aerodrome licence. These effectively limit activity to private sport, leisure and heritage flying and pilot training. Other activities on the site, such as aircraft maintenance and fuel sales are in turn limited by the types of aircraft likely to base themselves there. Site leases, many of which have long terms, also impose constraints on the type of flying and other activity that can take place. Financial modelling indicates that aviation operating losses could

be mitigated under this scenario but are likely to remain substantial for the foreseeable future.

13. Active development envisages NWA attracting significant numbers of business aviation aircraft operations, that is corporate and air taxi/private charter operations by business jets and turbopropeller aircraft. The aim of this option would be to increase both movement numbers and revenue levels. Actual flying activity at NWA today generates minimal revenue directly to EFDC; business aviation could deliver significant revenue per movement.
14. In order to attract this market, however, NWA would have to upgrade its infrastructure. Air taxi and private charter flights have to operate at a licensed aerodrome, and major corporate aircraft operators have a strong preference to do so. Business flyers require reliability of air access to an airfield, at all reasonable hours and in poor weather. This means NWA would need runway lighting and at least a non-precision instrument approach capability.
15. In use by business aircraft in significant numbers, continued patching and repair of the airfield pavements would be unlikely to preserve them in a safe condition. The main runway and parts of the taxiway system would need to be strengthened by overlaying. The cost of this would constitute the single largest item of capital expenditure required.
16. The length of the runway to be licensed would be the main determinant of the capital cost and local impact associated with the active development option. Available data and discussions with aircraft operators indicate that a runway length of some 1400m would be needed to make NWA a viable location for business aviation. Licensing regulations dictate a cleared strip of ground around such a runway, which would require the purchase of a small area of land on the western airfield boundary and realignment of a section of Merlin Way. The cost of all the works required to license, equip and strengthen the runway etc. is estimated at just over £5.6M.
17. Some risk would attach to choosing the active development option and committing to this capital expenditure. Further studies are required to confirm the state of the airfield pavements and costs could increase. The time and costs required to complete the aerodrome licensing process and establish an instrument approach capability are uncertain. Because of the congested nature of airspace around NWA and its proximity to Stansted, there is a possibility that airspace capacity could impose constraints on commercial aviation operations. This risk must be addressed through careful planning, the application of expert resources and close liaison with the Airspace Policy Division of the Civil Aviation Authority at all stages. There are also the usual risks of any enterprise, including failure to attract sufficient business and the effect of economic conditions.

18. The active development route could be pursued in two ways; EFDC could continue to manage and operate the airfield, or it could lease the site to an operating company. Under the first of these, EFDC would continue with its existing functions but, in order to attract significant commercial traffic, would need to find a Fixed Base Operator (FBO) tenant. The aim of this would be to take advantage of the FBOs specialist marketing and operating expertise and, ideally, an existing customer base. An FBO's lease could be on a straight rent basis or include some share of turnover. In this scenario EFDC would continue to collect all other lease revenues and landing fees from new traffic.
19. The second option is an operating lease, which would require EFDC to negotiate a contract with a company experienced in aviation operations. This could be an existing FBO, an existing aerodrome operator or other suitably experienced entity. The operator would become responsible for the operational airfield site and for all aviation and related operations on it. This would exclude the non-aviation, off-airfield activities, such as the Saturday market.
20. The main advantages to EFDC of taking this course would be the elimination of its aviation and related operating costs and an element of risk sharing. All operating revenues, including landing fees and rents, would go to the operator, but the company would pay an annual fee to EFDC. That fee should include an element linked to turnover, to ensure that EFDC shares the benefits of traffic development.
21. For the purposes of business planning a conservative approach has been taken to forecasting the business aviation traffic that might be attracted to NWA, given the infrastructure and management arrangements required for active development. This approach predicts growth in business traffic from about 2017 onwards, primarily from an overspill of demand from airports with limited and decreasing capacity to accommodate business aviation. On this basis, a few thousand business movements would be attracted initially, growing towards perhaps 18,000 over ten years.
22. Such traffic would represent a substantial increase in NWA revenues, rendering its cash flow positive almost immediately. The burden of the capital cost of the necessary infrastructure improvements would, of course, remain. It is possible that a major FBO or an operating company might be willing to make a capital contribution to the necessary infrastructure improvements. The level of any such investment would depend on the lease terms and the company's own view of the market.
23. Should EFDC elect to lease the airfield to an operator, the income the Council might expect would depend on the terms of that lease. A minimum position would be to collect only a rental fee and let the operator take all revenues and carry all risks. Alternatively, the terms would ensure that EFDC shared in revenues above a certain level.

24. The four development options have been modelled in financial terms, both cash flow and capital expenditures. The do nothing option shows continuing operating losses, but does not entail any capital expenditure. The organic growth option shows operating losses continuing, but on a reduced scale. Capital costs for this option are limited to essential works.
25. Active development options would yield positive operating cash flows, the size of which depends primarily on the volume of traffic attracted. The initial capital cost burden is high for these options. In the case of an operating lease arrangement, the overall financial outcome for EFDC would depend on what lease terms can be arrived at.
26. The demand forecasts used as a basis for financial modelling are conservative. Our examination of the business aviation market, and discussions with companies involved in it, show that the sector is still growing, that there is pressure on capacity at other airfields, and that there is significant genuine interest in NWA as an operating location. It is important to note that, if EFDC was successful in attracting an FBO or operating company with an established market presence, business aviation activity and revenues could increase more quickly and to a level considerably higher than the basic forecast.
27. It should also be noted that, under any scenario, EFDC could continue to collect the substantial other, non-aviation revenues that it enjoys today, such as those from the Saturday market.
28. All discussions with potential business aviation tenants or operators to date have been by the Consultant only and on a without prejudice basis. Should EFDC resolve to pursue the active development route, it would be prudent to test the market directly and with a more formal proposition. It is appreciated that procurement rules may constrain the extent to which the Council can negotiate with such companies, but a reliable view of the market's interest in NWA can only be gained by approaching it with a degree of commitment.
29. EFDC may wish to take specialist advice on what sort of financial and legal structure might be most suitable, particularly in the case of an operating lease approach. As a minimum, however, the Council should consider some basic parameters for any market approach. These might include; EFDC's willingness to invest capital, the position of existing tenants, acceptable operating hours, the extent of land to be included, and so on.
30. Companies that might be interested in operating at NWA are likely to exhibit a wide variety of business models, in terms of ownership, core activities, availability of capital, and other aspects. It would be important that EFDC maintain a degree of flexibility in initial discussions, as to the terms of any deal it might ultimately make. Once the Council has been able to gauge the real level and quality of interest and assess what

financial and other terms might be achievable, a business proposition can be defined and a formal procurement process initiated.

31. Initial discussions with the Civil Aviation Authority have established in outline the requirements for licensing and the issues and constraints that would need to be addressed regarding airspace. If active development is contemplated, further discussions with the Authority should be initiated at an early stage, with a view to fully defining aerodrome licensing parameters and airspace and instrument approach planning requirements.
32. It is outside the scope of this study to explore in any detail the potential for non-aviation, off-airfield development. However, the sale of land on the greater NWA site – that is, areas that are EFDC-owned but not on the operational airfield – for other development uses is an option that EFDC may wish to consider, if only as a means to raise capital for airfield upgrading works. This could include any or all land east of the main runway.
33. Allowing for restrictions imposed by aerodrome obstacle control, such land could amount to some 75 acres. There is the potential, therefore, to derive substantial capital or rental value in this way, although the presence of the Saturday market and the current planning constraints on these areas would have to be taken into account.
34. Development of such land could be of any class appropriate to local needs. This includes facilities for aviation related services or technologies, should the growth of commercial aviation at NWA prove a sufficient attraction to companies in these fields. Given that much of this land has an airside frontage, and if planning constraints would allow, consideration might be given to designating some of the land for uses requiring airside access. In this way, scope for growth of aviation facilities, beyond the capacity of the current operational airfield area, could be safeguarded.