ADVISING ON AERODROME BIRD CONTROL, SOME REQUIREMENTS AND COMPLICATIONS

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SUMMARY

Aerodrome advisors have a responsibility to the aerodromes they are advising and must be qualified, experienced and conversant with current research and development. This paper illustrates these requirements and gives examples of misconceptions arising out of apparently sound advice.

NB. This paper reflects the author's views.
It should not be taken to represent
the official view of any UK Government Department or Agency.

1. INTRODUCTION

The monitoring of bird control effort on aerodromes is undertaken in many countries. Assessment of standards is complicated by the variety and complexity of operations on individual aerodromes. The author has been responsible for 20 years for assessing standards of bird control on behalf of the Ministry of Defence (MOD) and the Civil Aviation Authority (CAA). The qualities necessary for an advisor are identified and some common misconceptions found on UK aerodromes are discussed in this paper.

2. WHAT THE ADVISOR NEEDS TO KNOW

The fundamental prerequisite for an advisor is to have a comprehensive knowledge of bird biology and control so that a reliable and informed interpretation can be made of the general situation on the airfield during the short time generally available for an inspection. The use of a tick box check list gives only a superficial picture of the bird control situation and is thus inadequate. The specialist advisor should be able to identify not only existing problems but also potential problems for the future.

The advisor must have full and current knowledge of all aspects of aerodrome bird control

3. APPROACH

When visiting an aerodrome, the advisor's approach has to adapt to meet the level of staff being inspected. It is important to gain the confidence of all staff by dispelling the notion of an 'expert inspector' looking for trouble. The purpose of any visit is not so much to find faults, but to provide positive guidance and encouragement, wherever possible, to further flight safety. At the operator level, most aerodrome staff in the UK have attended 'Bird Control on Aerodromes' courses run by the Aviation Bird Unit (ABU). Therefore, they know the inspecting officer as a lecturer and recognise his knowledge and authority in the field.

It is imperative that the advisor has credibility and the confidence of the staff being inspected.

4. SURVEYS VERSUS STANDARDS CHECKING

In the UK, visits to aerodromes by Aviation Bird Unit personnel are classed as "surveys" for civil aviation and "standards checking" for military. As the same advisor is involved in each, the approach is the same. However, there is a difference between the two options. The former is specified as providing a positive way forward for an aerodrome to meet the minimum criteria whereas, the latter is often regarded by individual aerodrome operators as a fault finding exercise. Whatever the visits are called, they should all have the common aim of furthering safety.

All visits should be regarded by aerodromes as a positive move to further flight safety.

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5. MEDIATOR/CATALYST

During the intensive surveys of UK aerodromes in the early 1980's, it became evident that many apparent bird control problems arose because of a lack of communication between all the agencies involved on the aerodrome. During each visit, the problem was discussed in detail and the advisor then became a mediator between the different factions. Thus, it follows that the advisor must interview as many staff as possible, for as long as necessary during the visit to iron out any conflicting viewpoints which have resulted from the problem not having been adequately addressed previously.

The advisor must spend enough time on the aerodrome to discuss the problems with all the agencies involved.

6. RESPONSIBILITY

Obviously, the advisor has to be responsible for any actions he undertakes and recommendations given. Although safety is the prime concern, he must also recognise such things as the general financial state of the aerodrome before recommendations are made which could impose a severe financial load on the aerodrome. For example, it would be imprudent to recommend the employment of full-time staff solely for bird control on an aerodrome where other functions are undertaken by a multi role organisation and it is known that such a recommendation would effectively be ignored. Also if one impractical course of action is recommended in a series of attainable actions, it will tend to undermine all the recommendations and thereby nullify the objective of the visit.

It is unrealistic for an advisor to propose impractical courses of action. Any such proposals reduce the credibility of the advisory function.

7. TRAINING

As the advisor has regular contact with a variety of aerodromes, the 'local' knowledge so obtained is of value to participants on training courses, as the theoretical solutions can be illustrated from 'real' aerodrome situations. Also, as mentioned above, any demonstration of expertise serves to make the advisory role credible. However, by nature of his permanence compared to many aerodrome staff who, especially in military aviation, tend to be more mobile, his knowledge of past situations will prevent aerodrome staff wasting resources by trying to re-invent the wheel, which detracts from their primary task.

An advisor must have comprehensive knowledge of individual aerodromes and their problems.

8. THE IDEAL

There is an inherent danger that an individual advisor might gradually develop exaggerated ideas of how bird control should be carried out. This can partly be avoided by being a member of a group. Advisors must be adaptable and able to incorporate new ideas into their advice. This can be achieved only by keeping informed about current developments. Ideally, the advisor will benefit from having personal research experience and maintaining close contact with research bodies.

The current service provided in the UK is borne of many man years work in the field and allows for routine updating as research findings are produced.

Advice must be based on a sound R&D base.

9. COMMON MISCONCEPTIONS

Following the production of a comprehensive and largely confidential ABU report to the MOD and CAA on standards in bird control on aerodromes (Rochard and Horton 1984), several of its major recommendations have been incorporated into advice given during training courses and aerodrome visits. Some of the recommendations for bird control, and some misconceptions surrounding them, are considered briefly below.

a. The aim must be a bird free aerodrome.

This philosophy is based on the fact that serious damage can be caused by a single bird. However, making this recommendation caused problems as some aerodrome managements were under the false impression that it should be taken literally and that no birds should be present at any time on the aerodrome. As this is, of course, totally unattainable some tended to despair of the whole concept of bird control as this primary objective was impossible. Thus, some definition is necessary. In essence, it means that the aerodrome should be maintained as a hostile area for the known problem species; gulls (Laridae), lapwings *Vanellus vanellus* etc, where they will not be allowed to congregate routinely.

Although periods of high risk may be identified in general terms and for individual aerodromes, there are no times of the day or night when birds will definitely not be present. This implies a basic standard:

b. Bird control must be effective throughout the aerodrome operating hours.

This has been taken by some to mean that bird control is related to air traffic and can be relaxed when aircraft movements are low. In reality what is being recommended is that birds should have been dispersed where possible before aircraft movements begin, and prevented from returning during operating hours. From this it follows that:

c. The period when bird control is available must be related to bird activity, not aircraft activity, if significant and permanent reductions in aerodrome bird populations are to be achieved.

This is an important concept for the smaller aerodrome where full-time bird control is not possible. Peak periods of bird activity are generally known and it is necessary for limited resources to be used during these periods as a minimum and, thereafter, when other duties allow.

The main purpose of this section is to illustrate that the advisor must take care when wording what, to him, is a simple concept. It is only simple to him because of his experience and he must recognise that others do not possess the same level of specialism. However, the major misconception in aerodrome bird control is that it involves two functions; *detection and dispersal*. Detection has been the poor relation of dispersal since bird control was introduced on aerodromes.

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Yet it is clear that, no matter how well trained and equipped the dispersal team, the problem cannot be effectively reduced unless infestations can be quickly detected over the whole aerodrome. Where bird control is instigated by ATC for example, viewing distances of c. 1km would be common. At this range, birds the size of starlings *Sturnus vulgaris* and lapwings cannot always be seen in good visibility and are effectively invisible when it is raining. Therefore, reliance on fixed point observations is not effective for detection and it follows that:

d. Efficient detection can only be maintained by constant surveillance by a mobile observer.

Thus, as the bird controller must be constantly available to disperse birds, the only logical arrangement is for the functions to be combined. This also results in minimal delay between detection and dispersal.

10. CONCLUSION

Practical bird control advice requires:

a. Comprehensive knowledge of the subject derived from sound R&D.

b. First-hand experience of problems on individual aerodromes.

c. The co-operation of aerodrome staff, which is more easily obtained if the advisor is widely experienced.

d. Finally, an appreciation by all involved, that the aim is to further flight safety.

11. ACKNOWLEDGEMENTS

Most of these personal views are the result of the author's advisory role on the UK aerodromes which was undertaken on contract to the Ministry of Defence and Civil Aviation Authority.

12. REFERENCES

Rochard, J. B. A. & Horton, N. 1984. *Standards in bird control on British Aerodromes 1980-84.* Unpublished ABC Report.