

procedures applicable to the instrument landing aids installed at aerodromes in the United Kingdom. In doing so, they have prescribed the dimensions of the approach and overshoot areas needed for the safe operation of each individual aid.

249. As an example, in the case of S.C.S. 51, the approach section covers an area extending up to 15 nautical miles from the aerodrome, and the overshoot section extends up to seven nautical miles in the opposite direction. Operational procedures require the maintenance of certain heights above the clearance surfaces prescribed, and the existence of obstructions above the clearance surfaces has the general effect of raising the height at which the operation is performed, by the height of the obstruction above the clearance surface. This does not mean that no obstructions in these extensive areas can be accepted, but severe obstructions would necessitate a great departure from the ideal procedure, and might even render the operation impracticable. In some places, this factor, in addition to I.C.A.O. Standards, must be given consideration when planning aerodromes at which instrument approaches have to be made.

250. The installation of approach lighting and instrument landing aids necessitates construction in an area extending up to 3,000 feet from both ends of the landing strip concerned. It is not essential to clear the whole of this land, and therefore not essential to incorporate it in the aerodrome. In planning new aerodromes, however, the necessary rights to cover construction and clearance around radio aids should be secured.

251. The foregoing references to approach areas emphasise the need for aerodrome zone planning and control of the development of land within the aerodrome zone. We note that Government have powers under the Public Works Act, 1928 (sections 2 to 6), for this purpose, which it appears have not been widely exercised. We recommend the preparation of a zoning plan for all important aerodromes as the basis for action under the Public Works Act. Such zoning plans are of value, not only to aviation, but to all other national and local planning authorities.

252. It will be appreciated that any obligation to comply with I.C.A.O. AGA Standards, when they are adopted, will apply only at aerodromes open to international air navigation. Moreover, New Zealand, by reason of its geographical situation, will be concerned for this purpose only with the Standards appropriate to the larger aircraft. The significance of the Standards of lower class in relation to aerodromes for internal flying is only that they provide a convenient standard of reference. Internal aerodromes may vary from the Standards which would strictly be applicable if they came within the ambit of