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THE NON-USE OF REVERSE THRUST AT LANDING FOR PURPOSES OF NOISE ABATEMENT

1 Flight crews will already have encountered, or are likely to encounter in the future, requests to avoid the use of reverse thrust at landing in the interests of reduced noise nuisance. Although such requests are never, of course, intended to prejudice safe operation, it is felt that some guidance is needed on the advisability of not using reverse thrust in particular circumstances. The Civil Aviation Authority considers the following advice to be of general applicability.

2 Whereas the non-use of reverse thrust at landing can offer some reduction in noise levels, such non-use can, in certain circumstances, significantly reduce safety levels. Before electing not to use reverse thrust at landing, the following considerations should be borne in mind:

- (a) The onset of adverse conditions such as aquaplaning is difficult to forecast before landing, thus making it difficult to judge when the use of reverse thrust is vital for safety;
- (b) the onset of an adverse wheel braking condition is often difficult to detect and to respond to rapidly, thus limiting the pilot's ability to retrieve a bad situation, by the late selection of reverse thrust;
- (c) the sensitivity of landing performance to degradation in performance of the wheel brakes increases significantly if other available means of retardation are not used.

3 In the light of the above considerations:

- (a) Safety levels at landing are likely to be adversely affected to an unacceptable extent if reverse thrust is not selected when:
 - (i) The runway is normally wet and for which the landing distance available is less than 140% of the landing distance required*;
 - (ii) the runway surface is covered by precipitants such as snow, slush, ice or standing water;
 - (iii) the landing is being made with a tailwind component;
 - (iv) the target threshold speed has been increased due to a strong cross-wind component;
 - (v) there is any known unserviceability of a retardation device such as lift dumpers, brake or anti-skid unit;
 - (vi) the landing is made in an abnormal configuration.
- (b) Good airmanship would demand that reverse idle is always selected, even when it is not the intention to use reverse thrust.

***Note:** Although certain aeroplanes have scheduled landing distances with reverse thrust unserviceable, such operations are considered to be acceptable only because of their relative infrequency. It is anticipated that the non-use of reverse thrust for purposes of noise abatement could well become a relatively frequent occurrence and therefore the margin inherent in the data appropriate to reverse thrust unserviceable could be inadequate in the context of day-to-day operations.

This Circular is issued for information, guidance and necessary action.