

Chapter 2

NOISE PREFERENTIAL RUNWAYS AND ROUTES

2.1 NOISE PREFERENTIAL RUNWAYS

2.1.1 Preferred runway directions for take-off and landing, appropriate to the operation, are nominated for noise abatement purposes, the objective being to utilize whenever possible those runways that permit aeroplanes to avoid noise-sensitive areas during the initial departure and final approach phases of flight.

2.1.2 Runways should not normally be selected for preferential use for landing unless they are equipped with suitable glide path guidance, e.g. ILS, or visual approach slope indicator system for operations in visual meteorological conditions.

2.1.3 Noise abatement should not be the determining factor in runway nomination under the following circumstances:

- a) if the runway surface conditions are adversely affected (e.g. snow, slush, ice or water, or by mud, rubber, oil or other substances);
- b) for landing in conditions when the ceiling is lower than 150 m (500 ft) above aerodrome elevation, or for take-off and landing when the horizontal visibility is less than 1.9 km;
- c) when the crosswind component, including gusts, exceeds 28 km/h (15 kt);
- d) when the tailwind component, including gusts, exceeds 9 km/h (5 kt); and
- e) when wind shear has been reported or forecast or when thunderstorms are expected to affect the approach or departure.

2.2 NOISE PREFERENTIAL ROUTES

2.2.1 Noise preferential routes are established to ensure that departing and arriving aeroplanes avoid overflying noise-sensitive areas in the vicinity of the aerodrome as far as practicable.

2.2.2 In establishing noise preferential routes:

a) turns during take-off and climb should not be required unless:

- 1) the aeroplane has reached (and can maintain throughout the turn) a height of not less than 150 m (500 ft) above terrain and the highest obstacles under the flight path;

Note.— PANS-OPS, Volume II permits turns after take-off at 120 m (400 ft) and obstacle clearance of at least 90 m (300 ft) during the aeroplane's turn. These are minimum requirements for noise abatement purposes.

- 2) the bank angle for turns after take-off is limited to 15° except where adequate provision is made for an acceleration phase permitting attainment of safe speeds for bank angles greater than 15°;

b) no turns should be required coincident with a reduction of power associated with a noise abatement procedure; and

c) sufficient navigational guidance should be provided to permit aeroplanes to adhere to the designated route.

2.2.3 In establishing noise preferential routes, the safety criteria of standard departure and standard arrival routes regarding obstacle clearance climb gradients and other factors should be taken into full consideration (see PANS-OPS, Volume II).

2.2.4 Where noise preferential routes are established, these routes and standard departure and arrival routes should be compatible (see Annex 11, Appendix 3).

2.2.5 An aeroplane should not be diverted from its assigned route unless:

- a) in the case of a departing aeroplane it has attained the altitude or height which represents the upper limit for noise abatement procedures; or
- b) it is necessary for the safety of the aeroplane (e.g. for avoidance of severe weather or to resolve a traffic conflict).