

Part 150: Records of Approval

McGhee Tyson Airport, Knoxville, Tennessee

Approved on 1/17/97

The approvals listed herein include approvals of actions that the Metropolitan Knoxville Airport Authority (MKAA) recommends be taken by the Federal Aviation Administration (FAA). It should be noted that these approvals indicate only that the actions would, if implemented, be consistent with the purposes of Part 150. These approvals do not constitute decisions to implement the actions. Later decisions concerning possible implementation of the actions may be subject to applicable environmental or other procedures or requirements.

The recommendations below summarize as closely as possible the airport operator's recommendations in the noise compatibility program and are cross referenced to the program. The statements contained within the summarized recommendations and before the indicated FAA approval, disapproval, or other determination do not represent the opinions or decisions of the FAA.

The Noise Compatibility Plan (NCP) for McGhee Tyson Airport is divided into three interrelated programs: the Noise Abatement Element, the Land Use Management Element, and the Program Management Element. These recommendations are documented in Chapter 7, FAR Part 150 Noise Compatibility Program (NCP).

I. NOISE ABATEMENT ELEMENT

The numbering system for the measures is keyed to each element, therefore, the recommendations are not numbered sequentially for the entire program. The recommendations are numbered sequentially within each element.

Noise Abatement Element

1. Discontinue designation of Runways 23 L/R as preferential runways and initiate a rotational runway use program. (NCP, pp. 5-5, 5-23-27; Tables 5A, 5B. 5C; 7-2, 7-3)

Currently, Runways 23 L/R are designated the preferential calm wind runways and the airport operates in a south flow configuration approximately 75 to 80 percent of the time.(NCP, p. 5-4).

There are areas of scattered development both north and south of the airport. However, there are areas north of the airport that are zoned for commercial and industrial development. There is a net reduction in the population within the 65 DNL (112 fewer), although this measure would increase noise over a small number of homes north of the airport. This is depicted as Scenario A in the NCP and is combined with Noise Abatement Element 2, below.

FAA Action: Approved. Implementation of this measure requires compliance with applicable environmental requirements.

2. Direct jet departures from Runways 5L/R to fly runway heading to 3,000 feet MSL (about 2,000 feet AGL) before turning and jet departures from Runways 23L/R to fly runway heading to 3,000 feet MSL before turning left.(NCP, p. 5-6; 5-31 through 5-39; 7-3, 7-4)

This is primarily intended to prevent low overflights over dense residential areas north, northeast, and south of the airport. While this will reduce low overflights and annoying single events in some close-in neighborhoods, it will cause only a small change in the overall pattern of departure flight tracks. Based on data collected during the study, many jets now fly straight-out for a considerable distance before turning. (Noise Exposure Maps, p.2-19 Exhibit 2J)

The procedure would not direct aircraft over noise-sensitive areas that are not already experiencing overflights, however, this measure in conjunction with measure 1 would increase noise for 33 people to the north. (NCP, p. 5-32, Tables 5G 5H). The net reduction in numbers of people impacted by noise is greater when this measure is combined with Noise Abatement Element 1, above (page 5-33).

FAA Action: Approved. Implementation of this measure requires compliance with applicable environmental requirements.

Land Use Management Element

The airport operator has selected NCP Exhibit 1, 2000 Noise Exposure Map With Noise Compatibility Plan, to become the future map upon implementation of noise abatement measures 1 2 (NCP, page i).

The land use management elements, if implemented, would reduce the incompatible land uses around the airport, prevent new incompatible development, and encourage new compatible development. Most of the actions in this element are the responsibility of local counties and cities. The Metropolitan Knoxville Airport Authority is encouraged to work with local jurisdictions to achieve land use compatibility within the airport environs.

1: Establish Airport Influence Area. (Blount County, Alcoa, Louisville, Rockford.)

For application of the land use management elements, the airport operator has selected a land use compatibility scenario map that combines the 1994 baseline contours and the projected year 2000 contour and the long-term capacity scenario, with noise abatement procedures in effect (p. 7-4). The county and cities should establish the airport influence area based on the land use compatibility planning scenario and the FAR part 77 horizontal surfaces. Exhibit 7D shows the recommended boundaries, including four subdistricts. Between the horizontal surface and the 65 DNL contour (AC-1), the recording of fair disclosure agreements and covenants could be required. Within AC-2 (65-70 DNL), dedication of easements, fair disclosure agreements, and sound insulation to achieve a NLR of 25 dBA for new homes could be required. Within AC-3 (70-75 DNL), new homes could be prohibited except on existing lots of record. Where homes are permitted, sound insulation to achieve a NLR of 30 dBA could be required. Within the DNL 75 (AC-4), future residential development and noise sensitive institutions could be prohibited.

FAA Action: Approved. FAA believes that compatibility is best maintained by not permitting construction of new noise-sensitive uses within the DNL 65dB contour. Construction with sound attenuation that meets the Federal guidelines contained in Table 1 of 14 CFR part 150 would make the structures compatible with normal airport operations.

2. Establish airport noise overlay zoning. (Alcoa, Louisville.)

In the four overlay zones, zoning standards in accordance with Table 7A would ensure that new development would be designed to promote compatibility with the airport. (NCP, pp. 7-5 through 7-10; Table 7A). A fifth zone should be established for the area proposed to be within the ultimate airport property line. Within this area, any proposed application for new development would be placed on hold for 45 days so that the Airport Authority would have the opportunity to negotiate the sale with the property owner. Approval of the development application should be conditioned upon compliance with the requirements of the zoning district in which the site lies.

FAA Action: Approved. Sound attenuation consistent with Part 150 Table 1 will make structures compatible.

3. Amend airport hazard area zoning to establish airport noise compatibility standards. (Blount County.)

The recommendation is to incorporate airport noise compatibility standards as described in land use measure 2, above. In order to implement sound insulation building standards, the amending ordinance should incorporate standards that can be used by builders to assure that they are providing the required level of sound insulation. (NCP, pp. 7-10, 7-11.)

FAA Action: Approved.

4. Maintain existing commercial and industrial zoning within Airport Influence Area. Changes from one kind of compatible zoning to another are acceptable. (Alcoa, Rockford.) (NCP, p. 7-11, Exhibit 7E)

FAA Action: Approved.

5. Reserve areas southwest and east of the airport for future commercial or industrial use.

There is one tract of land east of the airport that is potentially suitable for future commercial or industrial use. Another much larger area southwest is also a potentially good site for long-term commercial or industrial use. The current zoning limited restriction serves as a holding zone, permitting only relatively limited development until the market is ready. The Airport Authority should request Alcoa and/or Louisville to reserve these areas. (Alcoa and Louisville.) (NCP, p.7-12, Exhibit 7E)

FAA Action: Approved.

6. Adopt project review guidelines for rezoning, special use, planned development and variance applications.

The adoption of special project review criteria specifically addressing airport land use compatibility needs would help ensure that airport compatibility continues to be addressed in future land use deliberations. (Alcoa, Louisville, Maryville, Rockford.) (NCP, pp. 7-12 and 13)

FAA Action: Approved.

7. Amend subdivision regulations to require dedication of avigation easements and recording of fair disclosure agreements for new subdivisions in Airport Influence Area. The proposed noise overlay zoning ordinance would require the recording of fair disclosure agreements and covenants for new land uses permitted in the airport influence area. It also would require the dedication of easements for any use permitted within AC2, 3, and 4 overlay zones. The noise disclosure agreement would run with the land. The avigation easement would grant to the Airport

Authority the unabridged right to use the airspace above the property and the right to make noise inherent in the operation of aircraft. (Blount County, Alcoa, Louisville, Maryville, Rockford.)(NCP, p.7-14)

FAA Action: Approved.

8. Adopt local building code amendments setting sound insulation standards for noise sensitive buildings within noise overlay zones. In order to facilitate implementation of the sound attention requirement, it would be appropriate for the cities to adopt sound insulation standards supplementing their building codes. (Alcoa, Louisville.)(NCP, pp. 7-14 through 7-16)

FAA Action: Approved.

9. Promote informal means of providing fair disclosure of potential noise impacts in airport area. Parts of land use measures 2, 3, and 6 address the need for fair disclosure of potential noise impacts to buyers of property in the airport area. These recommendations, however, only require fair disclosure for new development. Voluntary and informal means of ensuring fair disclosure should be pursued by the authority to ensure that buyers of property that has been previously developed are made aware of potential noise issues. (Airport Authority.)(NCP, p.7-16 7-17)

FAA Action: Approved.

10. Acquire homes northeast of the airport within 65 DNL contour based on the 2000 noise compatibility plan scenario. Nine single family homes and 19 mobile homes are directly northeast and in the extended centerline of 5L/23R and are impacted by noise above 65 DNL based on the five-year projection. Nine other homes in the 65 DNL immediate north have no long-term viability as residential neighborhoods and are scattered in areas zoned for commercial or industrial use. (Airport Authority.)(NCP, p.7-17 7-18; Exhibit 7F)

FAA Action: Approved. In order to be eligible for Federal funding, requirements of the Uniform Relocation Assistance and Real Property Acquisition Act (49 CFR Part 24) must be satisfied.

11. Acquire undeveloped, residential-zoned land within 65 DNL contour based on the 2000 noise compatibility plan scenario. Twelve vacant tracts, 503 acres, zoned residential use within the 65 DNL contour are proposed for acquisition and shown on Exhibit 7F. Land use measure 5, above, proposes to reserve the area for future commercial or industrial use. This does not guarantee it will be kept free of new housing and cannot be used legally to withhold permission to build homes permitted by the limited restriction zoning. A certain amount of pressure is being felt now for residential development. Further, the long-term legal status of the unincorporated areas is in doubt. Given the development pressure and jurisdictional uncertainty, acquisition is recommended. If, in the long-term, some of the land has industrial development potential, the airport could sell the land and retain appropriate easements.

Three tracts have homes on them. For planning purposes, it is assumed that these homes will remain and be sound insulated. The parcel can be split, with the authority buying only the larger undeveloped area. Alternatively, the airport could buy the entire tract, sound insulate the home and sell the home with a larger lot, subject to an aviation easement. If the property owner chooses not to sell the undeveloped portion, land use and aviation easements could be purchased to prevent noise-sensitive uses from being constructed.

Acquisition is necessary to prevent the development of housing in the highest noise areas. Near the fringes where homes may be acceptable if they were sound insulated, land is needed to prevent the construction of homes without adequate sound insulation. Given the current lack of county airport compatibility zoning and sound insulation construction standards, it is not possible

to ensure that these standards can be enforced over the long term. Should Blount County decide to adopt airport compatibility and sound insulation standards as recommended in measure 3, above, the Airport Authority should reconsider the need to buy this land. (Airport Authority.)(NCP, p. 7-18, 7-19, 7-20; Exhibit 7F)

FAA Action: Approved. Action to carry out this measure is subject to a determination at the time of implementation that the purchase is necessary to prevent new noncompatible development because noncompatible development on the vacant land is highly likely and local land use controls will not prevent such development. If zoning is changed in Blount County to provide for compatible development, acquisition of that land will not be required.

12. Install sound insulation in homes within 65 DNL contour based on the 2000 noise compatibility plan scenario (84 dwellings). Sixty homes and 24 multi-family units are not planned for acquisition and are recommended for sound insulation. Homeowners receiving sound insulation should be required to dedicate avigation easements to the Airport Authority. Five homes southwest of the airport designated for sound insulation are on large tracts of land recommended for acquisition in Measure 10, above. These homes may be purchased by the Authority at the time the rest of the parcel is acquired and either destroyed or sound attenuated with easements and resold. (Airport Authority.) (NCP, pp. 7-20, 7-21)

FAA Action: Approved. Sound insulation must meet the criteria set forth in 14 CFR part 150. Federal funding is subject to compliance with Airport Improvement Handbook, FAA Order 5100.38A, paragraph 712.

13. Purchase avigation easements from homes within 65 DNL contour that cannot be sound insulated. It is possible that some homes will not be able to be sound insulated or that some have already been insulated by the homeowners. Mobile homes are examples of a type that cannot be insulated. The Airport Authority should purchase noise and avigation easements over the homes, but only from homeowners that also own the lot on which the home is situated. The purchase of easements is recommended as a back-up option that would be used at the discretion of the Airport Authority. Sound insulation should be the program of preference in the eligibility area. The Airport Authority should offer to purchase easements only when sound insulation is technically infeasible or not cost-effective. (Airport Authority.) (NCP, pp. 7-21 7-22)

FAA Action: Approved.

14. Following submission of the Noise Compatibility Study, the Metropolitan Knoxville Airport Authority requested an amendment to a mitigation measure approved in 1993 under the first NCP which offered purchase assurance and soundproofing options for homes located within the 65 DNL in the Armenia and Benford Heights subdivisions. MKAA has requested in this amendment to extend the area of mitigation to twenty-six additional properties (most on Hunt Road) which are outside the composite 65 DNL, within proposed AC-1, and contiguous to homes which were approved in 1993 for mitigation. Except for one church, these West Hunt Road properties are owner/occupied, single-family homes. Many of the requested homes share a common backyard boundary line with homes included in the program. The remaining homes each share a common backyard boundary line with airport property. Inclusion of these homes is requested to achieve equity and to maintain the integrity of both impacted neighborhoods.

FAA Action: Approved. There are limited federal funds available for noise compatibility mitigation, and these residences would compete with more severely impacted areas for funds. Sound attenuation projects are subject to the requirements specified in FAA Order 5100.38A, paragraph 712 in order to be eligible for Federal funding.

Program Management Action

1. Maintain system for receiving and responding to noise complaints. A summary report should be compiled at least quarterly and provided to the Airport Authority Board at least annually. Interpretation of the complaints would be enhanced by mapping. If the geographic pattern indicates that consistent problems exist, the airport management should investigate and if possible seek corrective action. (Airport Authority.) This is an existing activity that should be continued. (NCP, p. 7-24, 7-25)

FAA Action: Approved.

2. Review of Noise Compatibility Plan Implementation. The airport management should maintain communication with local planning officials to follow their progress. The airport management must also monitor compliance with the noise abatement elements, including checking periodically with the air traffic control manager. Where appropriate, the airport management could check with users to serve as a friendly reminder that the management places a high regard on the program while helping to identify difficulties associated with noise abatement measures. It may be necessary to arrange for periodic monitoring, modeling, or flight track analysis to study future issue. To estimate runway use based on the rotational runway program, studies should be undertaken periodically. (Airport Authority.) (pp. 7-24, 25)

FAA Action: Approved.

3. Update Noise Exposure Maps and Noise Compatibility Program. The airport management should review the NCP and consider revisions and refinements as necessary. A complete update will be needed periodically, approximately every five to eight years. Even if the NCP does not need to be updated, the NEM may needed to be updated in accordance with Part 150. (Airport Authority.) (pp. 7-25, 26)

FAA Action: Approved.