

## **Part 150: Records of Approval**

### **Pease International Tradeport Portsmouth, New Hampshire**

**Approved on 2/9/96**

#### **1.0 INTRODUCTION**

The Pease Development Authority sponsored an Airport Noise Compatibility Planning Study under a Federal Aviation Administration (FAA) grant, in compliance with Federal Aviation Regulations (FAR), Part 150. The Noise Compatibility Program (NCP) and its associated Noise Exposure Maps (NEM) were developed concurrently and submitted to FAA for review and approval on August 1, 1995. The NEM was determined to be in compliance on August 14, 1995. This determination was announced in the Federal Register on August 22, 1995.

The Part 150 Study was closely monitored by an advisory committee which represented area municipalities, airport users, and business, environmental, and community interests. A series of advisory committee meetings was held, with the airport's consultant presenting material and findings. Three public information meetings were held. The consultant addressed comments at all of these meetings, and subsequent written comments as well.

The study focused on defining an optimum set of noise and land use mitigation measures to improve compatibility between airport operations and community land use, presently and in the future.

The resultant program is described in detail in the "Noise Compatibility Program" volume of the study, Chapters 6, 7, and 8. Chapter 6 analyzes alternative operational measures. Chapter 7 analyzes potential land use control measures. Chapter 8 sets forth the Noise Compatibility Program. The program elements 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 determinations do not represent the opinions or decisions of the FAA.

The approvals which follow include actions which the Pease Development Authority recommends be taken by 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 these actions may be subject to applicable environmental or other procedures or requirements.

#### **2.0 PROGRAM ELEMENTS**

##### **2.1 Noise Abatement Elements**

**2.1.1 Formal Designation of Preferential Runway System (sections 6.2.1 and 8.2.1).** Runway 34 is currently the preferred runway for calm wind conditions (less than 5 knots) and is used approximately 75 per cent of the time. Except as described in the next noise abatement element,

this practice would be made formal through a Letter of Agreement between the Pease Development Authority (PDA) and the Air National Guard contracted air traffic control tower.

**Approved as Voluntary** . This is an administrative action that would help ensure continued use of Runway 34. This measure is being proposed in conjunction with 2.1.2 and 2.1.3.

**2.1.2 Nighttime Runway Use System** (sections 6.2.3 and 8.2.2). Between the hours of 10 pm and 7 am Runway 16 would be preferred for departures and Runway 34 preferred for landings, as traffic conditions permit (Pease Air Traffic Control Tower operates 24 hours per day).

**Approved as voluntary.** This measure would reduce noise exposure to close-in Newington residents to the north within the 65 DNL noise contour. Benefits to exposed residential populations are combined with the next measure, which addresses flight tracks. This measure is being proposed in conjunction with 2.1.1 and 2.1.3.

**2.1.3 Noise Abatement Flight Tracks** (sections 6.3.1, 6.7, and 8.2.3). Standard departure procedures would be established for both visual and instrument meteorological conditions as follows: (1) departures from Runway 16 to the south, west, and northwest via Lawrence (LWM), Concord (CON) or Montpelier (MPV) would maintain runway heading until passing 1.5 DME from the Pease VORTAC, then turn right to overfly Interstate Highway 95 on a magnetic heading of 220 degrees until reaching an altitude of 3000 feet MSL or until passing 5.0 DME from the Pease VORTAC; (2) departures from Runway 16 to the northeast via Kennebunk (ENE) would climb on runway heading until reaching an altitude of 3000 feet MSL; (3) west and southbound departures from Runway 34 would climb on runway heading until reaching an altitude of 2000 feet MSL.

**Approved as voluntary.** This measure would divert aircraft overflights away from residential areas in Portsmouth and more evenly distribute flight tracks over portions of Newington, Durham, and Dover. Combined with the nighttime runway use system proposed above (and assuming continuation of the existing preferential runway system) these measures would reduce existing noise exposure within the 60 DNL noise contour, the level of residential incompatibility adopted for use in the study, from an estimated 842 residents to an estimated 731 residents (Figure 6-19 and Table 6-9). Future (2011) noise exposure within the 60 DNL contour would be reduced from an estimated 1054 residents to an estimated 920 residents (Figure 6-5 and Table 6-10). This measure is being proposed in conjunction with 2.1.1 and 2.1.2. **2.1.4 Descent Profile for VFR Traffic Arriving from the North or East to Runway 34** (sections 6.3.2 and 8.2.4). VFR aircraft arriving from the north or east to Runway 34 would be directed to enter a 2-mile final approach at or above 700 feet MSL, traffic permitting. This measure is intended to minimize low-flying aircraft over a residential area immediately to the southeast of the runway.

**Approved.** This measure would apply to a relatively small number of mostly light aircraft operations. The DNL for the noise measurements conducted for the study indicate that the Sherburne neighborhood is currently exposed to DNL 60.4 dB (Table 4-10). It would experience a reduction of between .4 (scenario D) and 1.3 (scenario A) dB.

**2.1.5 NAVAID Improvements** (sections 6.4.3 and 8.2.5). The PDA would support existing FAA plans to install an Instrument Landing System (ILS) on Runway 16.

**Approved.** This approval is for the use of the ILS and does not extend to a commitment on the part of FAA to install an ILS on Runway 16; it merely acknowledges the slight improvement to the noise environment. While reduction in the size of the 60 DNL contour would be insignificant because of the small number of aircraft that would be diverted from the more easterly VOR approach course, FAA recognizes that individual turbojet Sound Exposure Levels over more populated areas of the city of Dover and town of Durham would be reduced slightly (comparison of Figures 6-19 and 6-11).

**2.1.6** Establishing the Location of Run-up Areas (sections 6.4.4 and 8.2.6). PDA will work with tenants to establish the location of preferred preflight and maintenance run-up areas. The location of these areas at ramp and runway end areas permits wide latitude in conducting preflight and maintenance runups. Upon completion of the noise barrier proposed as the next noise abatement element, maintenance run-ups would be conducted at this location.

**Approved.** This measure would mitigate noise exposure levels at or above those adverse levels specified in Table 8-2.

**2.1.7** Noise Barrier (sections 6.4.5 and 8.2.7). An optimum noise barrier for ground engine run-ups would be placed on the apron in the vicinity of the large maintenance hangar. Design of the barrier would be reviewed by a Noise Compatibility Committee prior to approval.

**Approved.** Table 8-2 indicates that reductions of approximately 10 dB in noise exposure to the Panaway Manor area south of the apron and Airport Road area north of the apron can be achieved through the construction of a noise barrier on the apron in the vicinity of the large maintenance hangar. Resultant noise exposure would be below levels that would normally interfere with human activity.

**2.1.7** Design and Placement of Structures in the Vicinity of the Airport Apron. PDA would ensure that future building projects occurring near the airport apron consider the potential use of the buildings as noise barriers for aircraft taxiing and run-up operations. This would be implemented through site plan review and airport master planning.

**Approved.** Where discretion in the placement of structures is available, this measure can provide added benefits in reducing aircraft ground noise exposure.

**2.1.8** Limitations on Types of Aircraft (sections 6.5.2, 6.7.4, and 8.2.9). PDA would negotiate voluntary nighttime restrictions on aircraft having a departure L<sub>max</sub> which exceeds 85 dBA as specified in FAA Advisory Circular AC-36-3F (or subsequent revisions). Analysis of projected future operations at Pease revealed that a few nighttime flights by relatively noisy Stage 3 aircraft would be responsible for an inordinate share of the airport's noise impacts. Voluntary restrictions of nighttime operations of aircraft above 85 dBA L<sub>max</sub> would provide DNL relief up to 3 dB for Newington residential areas and the Sherburne neighborhood of Portsmouth inside the 60 DNL noise contour.

**Approved in concept.** Where an airport operator determines that there is a need to control noise levels, FAA encourages voluntary arrangements with users rather than mandatory measures. However, the FAA is unable to confirm the NCP's quantified benefits of this recommendation since the aircraft projected to be impacted by the estimated timeframe for Scenario A (Table 6-3) do not currently serve PSM, are no longer in production, and may reach the end of their useful life and be replaced by quieter Stage 3 aircraft before their nighttime use at PSM occurs. This analysis would not be sufficient to support a mandatory restriction.

**2.1.9** Continue Restrictions on Aircraft Run-ups. This measure, which is currently in effect, differs from that proposed above as "Establishing the Location of Run-up Areas" in that it restricts the location of ground run-ups by operating rule of the airport (Zoning was considered as an alternative but not adopted.). The locations are the same as those in the run-up measure 2.1.6. Appropriate restrictions will be included in any future leases with a tenant that intends to conduct maintenance operations at PSM.

**Approved in part:** disapproved in part pending submission of sufficient information to make an informed analysis. Approved with respect to establishing in airport rules the location of runups. This portion of the measure relates directly to measure 2.1.6, above.

The NCP does not contain the proposed regulations, including any sanctions. It is not possible for the FAA to determine whether portions of the regulations, such as time of day or partial power settings, may reduce the level of aviation safety provided (14 CFR 150.35).

For purposes of determining applicability of 14 CFR Part 161 to the airport rules and leases, there is insufficient information to determine whether time of day and partial power setting restrictions could have the effect of limiting total numbers or hours of aircraft operations (14 CFR 161.7). There is also insufficient information to determine whether restrictions other than those described in the NCP are contemplated.

**2.1.10 Conduct Part 161 Study of Mandatory Access Restrictions.** The PDA would study and consider implementing, under the provisions of Federal Aviation Regulation, Part 161, mandatory access restrictions. This recommendation was suggested by a preliminary noise impact study which showed that a mandatory access restriction on nighttime operations by aircraft exceeding a departure Lmax of 85 dBA would reduce the number of dwellings and therefore the people in the DNL 60 dB or greater contour. Other restrictions could be expected to produce similar or greater reductions in noise exposure, but with as yet unknown economic impacts to the airport and the region. An update to the Part 150 study should be undertaken to examine the benefits and costs of selected mandatory use restrictions in accordance with Part 161 of the Federal Aviation Regulations.

**Approved for study.** The airport operator proposes to evaluate mandatory airport noise or access restrictions to mitigate below levels proposed to be accomplished by non-restriction measures contained in this NCP, and to update the Part 150 study. The airport operator will update the Part 150 study to examine the benefits and costs of selected mandatory use restrictions in accordance with Part 161 of the Federal Aviation Regulations. Approval to conduct an analysis of proposed mandatory restrictions in accordance with 14 CFR Part 161 requirements may not be construed as approval of any action to implement a recommendation contained in that analysis. Neither is approval to conduct the analysis required by 14 CFR Part 161 a commitment by FAA to grant approval of any recommendation nor to otherwise concur in any recommendation.

## 2.2 Land Use Elements

**2.2.1 Remedial Sound Insulation (sections 7.3.1 and 8.3.1).** PDA would offer a sound insulation option to existing dwellings (and one church) in Newington and Portsmouth, where such structures are exposed to 65 DNL or greater under the abated 1993-1994 Base Case. This could affect approximately five homes in Newington and three in Portsmouth, as well as one church in Portsmouth.

**Approved.** This measure would establish and help ensure future land use compatibility beyond what can be achieved with the above operational noise abatement elements.

**2.2.2 Fee-Simple Purchase for Compatible Use (sections 7.3.3 and 8.32).** PDA would offer to purchase, on a voluntary basis, existing dwellings in Newington and Portsmouth which are exposed to 65 DNL or greater under the abated 1993-94 Base Case, as well as undeveloped, residentially-zoned land in Newington which would be exposed to 65 DNL or greater as depicted in "Scenario A (approximately 2011) with aircraft access restrictions." Approximately five homes in Newington and three in Portsmouth would be considered. Additionally, approximately 160 acres of residentially-zoned land in Newington would be considered.

**Approved.** Acquisition of vacant, noncompatibly zoned land is subject to a showing that the land cannot be rezoned and is likely to be developed incompatibly absent acquisition.. This measure would also establish and help ensure future land use compatibility.

**2.2.3 Sales Assurance** (sections 7.3.4 and 8.3.3). For owners of existing, remaining dwellings exposed to 60-65 DNL the PDA would offer to guarantee the sale of a home at fair market value, as funding permits.

**Approved.**

**2.2.3 Construction Standards** (sections 7.4.1 and 8.3.4). PDA would request that the Town of Newington enact mandatory sound-insulation performance standards for construction of future noise-sensitive structures within the 60 DNL noise exposure contour.

**Approved.** The FAA strongly discourages new noncompatible development in areas designated as airport noise-sensitive. Where the community determines that noise-sensitive uses must be allowed, 14 CFR Part 150 encourages measures to achieve appropriate outdoor to indoor noise level reduction. Soundproofing of new homes developed after approval of the NCP may not be eligible for Federal funding.

**2.2.4 Construction Guidance** (sections 7.4.2 and 8.3.5). PDA would request Greenland, Newington, Portsmouth, and Rye provide advisory sound-insulation performance guidelines for construction of future noise-sensitive structures exposed to noise levels of 55-60 DNL (55 DNL and above in Portsmouth). Newington and Portsmouth would be requested to provide such guidance for construction of future public-oriented, commercial, and industrial structures to be exposed to 60 DNL and greater. PDA would adopt similar guidelines for future development within PDA jurisdiction.

**Approved.** The FAA strongly discourages new noncompatible development in areas designated as airport noise-sensitive. Where the community determines that noise-sensitive uses must be allowed, 14 CFR Part 150 encourages measures to achieve appropriate outdoor to indoor noise level reduction. Mitigation of new noise-sensitive structures developed after approval of the NCP may not be eligible for Federal funding.

**2.2.5 Subdivision and Site Review Regulations** (sections 7.4.5, 7.4.6, and 8.3.6). PDA would request that Newington and Portsmouth amend their development review regulations to address compatibility of future land uses with Pease operations. The PDA would adopt similar provisions in its land use development regulations.

**Approved.** The FAA strongly discourages new noncompatible development in areas designated as airport noise-sensitive. Soundproofing of new homes developed after approval of the NCP may not be eligible for Federal funding.

**2.2.6 Master Planning** (7.4.9 and 8.3.7). PDA would request that Greenland, Newington, Portsmouth, and Rye review community master plans and capital improvement programs in order to advance policies encouraging compatibility between their land uses and Pease operations. PDA would, as necessary, adopt similar policies in its own master plan and capital improvement programs.

**Approved**

## . 2.3 Administrative Elements

**2.3.1 Noise Monitoring Equipment** (sections 6.6.1 and 8.4.1). PDA would establish a noise monitoring program utilizing two portable sound monitoring units.

**Approved.**

**2.3.2** User Education (sections 6.6.3 and 8.4.2). PDA would undertake an on-going user education program to establish and maintain an awareness of the noise abatement programs at the airport.

**Approved.**

**2.3.3** Citizen Complaint Mechanism (sections 6.6.4 and 8.3.4). PDA would continue to operate the noise complaint system for recording, researching, and reporting on citizen complaints about aircraft noise.

**Approved.**

**2.3.4** Community Participation Program (sections 6.6.5 and 8.4.4). PDA would establish a permanent Noise Compatibility Committee (NCC) to monitor implementation of the Part 150 study and ensure ongoing community participation in implementing the noise compatibility program.

**Approved.**

**2.3.5** Public Outreach Program (sections 7.5.1 and 8.4.5). PDA would periodically issue a newsletter on implementation of the noise compatibility program.

**Approved.**