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## Part VIII

### Department of Transportation

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Federal Aviation Administration

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**Development and Submission of Airport  
Operator's Noise Compatibility Planning  
Programs and FAA's Administrative  
Process for Evaluating and Determining  
the Effects of Those Programs and  
Proposed Amendment to Definition of  
"Acoustical Change" in Aircraft Noise  
Certification Rules Relating to Turbojet  
Engine Powered Transport Category,  
Large Airplanes**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 150**

[Docket Nos. 16279 and 16691; Adoption of Part 150]

**Establishment of New Part 150 To Govern the Development and Submission of Airport Operator's Noise Compatibility Planning Programs and the FAA's Administrative Process for Evaluating and Determining the Effects of Those Programs****AGENCY:** Federal Aviation Administration (FAA), DOT.**ACTION:** Interim rule, request for comments; Disposition of petition for rulemaking.

**SUMMARY:** This action establishes a new, interim regulation prescribing requirements for airport operators who choose to develop an airport noise compatibility planning program under the Federal program. This rulemaking implements portions of Title I of the Aviation Safety and Noise Abatement Act of 1970 (Pub. L. 91-193; 94 Stat. 50) adopting, in modified form, rules recommended by the Environmental Protection Agency and prescribes the administrative procedure followed by the FAA in fulfilling its responsibilities under that Act. It includes the establishment of a single system of measuring airport (and background) noise and a single system for determining the exposure of individuals to airport noise. It prescribes a standardized airport noise compatibility planning program, including (1) the development and submission to the FAA of noise exposure maps and noise compatibility programs by airport operators; (2) the standard noise methodologies and units for use in airport assessments; (3) the identification of land uses that are normally compatible (or noncompatible) with various levels of noise around airports; and (4) the procedure and criteria for FAA evaluation and approval or disapproval of noise compatibility programs by the Administrator. While these rules reflect the applicable provisions of the Aviation Safety and Noise Abatement Act of 1970, they are also the outgrowth of, and response to, the recommended regulations submitted by the Environmental Protection Agency on an "Airport Noise Regulatory Process" (Notice No. 70-24), and of a petition for rulemaking from the Air Transport Association (PR Notice No. 70-8), which

closely parallel many of the issues considered by the Congress in enacting the 1970 Act. This interim rule does not apply, at this time, to airports used exclusively by helicopters but covers those heliports located on other airports covered by the rule.

**DATES:** Effective date—February 20, 1981. Comments must be received on or before December 31, 1981.**ADDRESSES:** Send comments on the rule in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-204), Docket No. 16279, 800 Independence Avenue, SW., Washington, DC 20591; or deliver comments in duplicate to: FAA Rules Docket, Room 918, 800 Independence Avenue, SW., Washington, DC.

Comments may be examined in the Rules Docket, weekdays except Federal Holidays, between 8:30 a.m. and 5:00 p.m.

**FOR FURTHER INFORMATION CONTACT:** Mr. Richard Tedrick, Noise Policy and Regulatory Branch (AEE-110), Noise Abatement Division, Office of Environment and Energy, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 755-8027.**SUPPLEMENTARY INFORMATION:****Request for Comments on the Interim Rule**

This action is in the form of an interim rule, which involves implementation of statutory requirements that must be established by February 28, 1981, and adoption of internal agency procedures for the administration of the regulatory program. Although this rule is based largely on Notice No. 70-24 (41 FR 51522), full implementation of the statutory requirements dictates certain provisions in the rule that vary substantively from those proposed in that notice. Accordingly, comments are invited on the interim rule based on the rule text and experience under the rule. When the comment period ends, the FAA will use the comments submitted, together with other available information, to review the regulation. After the review, if the FAA finds that changes are appropriate, it will initiate rulemaking proceedings to amend the regulation. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in evaluating the effects of the rule and in determining whether additional rulemaking is needed. Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of

the rule that might suggest a need to modify the rule.

**Synopsis of the Regulation**

The purpose of this interim rule is to adopt regulations in response to EPA recommendations as modified, by establishing a new Part 150 of the Federal Aviation Regulations (the "FARs"). The EPA recommended rules have been modified in several respects to reflect FAA action concerning major portions of Title I of the Aviation Safety and Noise Abatement Act of 1970 (Pub. L. 91-193; 94 Stat. 50; the "ASNA Act") that do not involve Federal funding of airport noise compatibility planning. As provided under the ASNA Act, now Part 150 applies to air carrier airports (that is—those operated under a valid certificate issued under § 612 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1432; The "FA Act")) whose development projects are eligible for terminal development costs under § 20(b) of the Airport and Airway Development Act of 1970 (49 U.S.C. 1720(b)). The definition of an "airport" under Part 150 does not cover those airports used exclusively by helicopters but does apply to airports that are open to public use without prior authorization of the airport operator. The implications of applying Part 150 to heliports are not fully understood at this time. Additional evaluation of the matter is needed to determine whether the rules should be expanded to cover those airports used exclusively by helicopters and whether the noise compatibility planning regulation should use a different basis to evaluate the noise related to operation of those heliports on the community. Under the authority of § 611 of the Federal Aviation Act of 1958, as amended, the practical benefits of noise compatibility planning and FAA assistance, evaluation, and determination on those plans are extended to many additional public use airports by new Part 150. However, some of the legal consequences of that planning are limited by the ASNA Act to the eligible, air carrier airports. The FAA has no authority to extend those statutory matters beyond those provided by the ASNA Act.

New Part 150 contains the procedures, standards, and methodology governing the development and submission of "airport noise exposure maps" and "airport noise compatibility programs." It prescribes the two standardized noise systems required by § 102 of the ASNA Act. One is the system for measuring airport noise, which has a high degree of correlation between the projected noise exposure levels and the surveyed reactions of people to those noise levels.

For that purpose, Part 150 uses the A-weighted sound pressure level ( $L_w$ ) in units of decibels (dBA) or an FAA approved equivalent. It also designates a standardized system for determining the level of airport noise exposure. That measurement includes the factors of intensity, duration, frequency, tone, and a penalty for night-time occurrences. Under Part 150 that noise exposure must be calculated in terms of "yearly day-night average sound levels ( $L_{dn}$ )," or an FAA approved equivalent for those situations where unusual and unique conditions at the airport dictate the use of another unit of measurement to properly evaluate noise exposure to individuals within the meaning and purpose of the ASNA Act. Two appendixes contain the technical matters relating to the development of the "noise exposure maps" (and related descriptions) and the "airport noise compatibility programs."

New Part 150, as required under the ASNA Act, identifies those land uses that are "normally compatible" or "noncompatible" with various levels of noise exposure by individuals. Those uses, contained in Appendix A, must be reflected on the noise exposure maps and in the airport operator's noise compatibility programs which are intended to reduce existing noncompatible land uses and prevent the introduction of new ones. Those land uses classifications were developed by the FAA based on its evaluation and assessment of similar determinations by other Federal agencies which are responsible for specific Federal programs in which noise exposure is a factor. To the extent practicable, FAA's "normally compatible" and "noncompatible" land uses are comparable to, and congruous with, although separate from, other Federal programs directed towards similar considerations of noise exposure. By identifying "normally compatible" land uses, Part 150 does not usurp or preempt the authority and responsibility of State and local authorities to exercise their police powers with respect to the development and implementation of local land use policy. It provides assistance to them and to airport operators in developing adequate airport noise compatibility planning. It does not direct the uses which any particular area may have now or in the future. The ASNA Act merely directs the Administrator to make judgments on whether an airport operator's noise compatibility program is consistent with obtaining the goal of noise level exposure reductions. It also reinforces the Administrator's authority

to make determinations on certain matters that are already federally preempted, such as flight safety, use of the navigable airspace of the United States, impacts on interstate and foreign commerce, and unjustly discriminating actions, as well as the currency of programs that have been approved under the ASNA Act. As such, neither the issuance of these interim regulations implementing Title I of the ASNA Act nor the approval of any airport operator's noise compatibility program authorizes or directs any change in conditions that might affect the environment. Accordingly, the FAA has concluded, in accordance with FAA's directive concerning environmental considerations (Order 1050.1C), that these interim regulations and any "approvals" made pursuant to them are not major Federal actions significantly affecting the quality of the human environment and are "excluded actions," respectively. Appropriate environmental assessments of any Federal actions involving the implementation of those approved programs will be made in conjunction with those actions. It is not possible at this time to evaluate the individual or overall environmental aspects of the programs that airport operators might develop and wish to implement.

A significant aspect of new Part 150 is its description of the administrative process to be followed by the FAA when it receives a noise exposure map or airport noise compatibility program (or their revisions) from an airport operator in accordance with the ASNA Act. The Secretary of Transportation has delegated to the Federal Aviation Administrator the authority and responsibility to implement and administer the Aviation Safety and Noise Abatement Act of 1979 (49 CFR 1.47(m); 45 FR 54054; August 4, 1980). The FAA's Director of the Office of Environment and Energy (the "Director") has the primary responsibility for administering the Part 150 airport noise compatibility planning program. Airport operators must submit their noise exposure maps, noise compatibility programs, and their revisions to the Director and to the Regional Director of the FAA Regional Office having jurisdiction over the area in which the airport is located. If the submission conforms to the applicable requirements, it is accepted by the FAA and a notice of receipt is published in the Federal Register. If it does not conform, the Director will return it to the airport operator for further consideration and development to achieve conformity.

Noise exposure maps and noise compatibility programs must be prepared in accordance with Appendixes A and B of Part 150, respectively, or an FAA approved equivalent. The FAA is concerned that planning work already completed under the Airport Noise and Land Use Compatibility (ANCLUC) program not be ignored and that airport operators be allowed to incorporate, where appropriate, that work in their submissions.

The Director conducts (and coordinates within the FAA) the necessary evaluations of noise compatibility programs and, within the proscribed time period, recommends to the Administrator whether to approve or disapprove the program. The Director is provided broad discretion to conduct the evaluation and to follow the necessary procedures to ensure that the decision will be made efficiently and on a well-informed and reasoned basis. Some of the evaluation criteria are prescribed under section 104 of the ASNA Act but in other situations, such as those relating to flight procedures or affecting the safe and efficient use of the navigable airspace, the FAA will apply applicable policy and program criteria to the matters presented by the program. The Director only considers one program at a time for any specific airport; thus, one program may be revised or withdrawn before an FAA determination is issued in order to present a new program. Except for specific situations, each revised program is considered under the rule as a new program. Under prescribed conditions, an approval may be revoked or modified for cause after notice to the airport operator. Determinations become effective upon issuance and continue until revoked or modified, or until the program is required to be revised under the rule.

#### Regulatory History

On October 26, 1970, the EPA submitted to the FAA a recommended regulation concerning an airport noise regulatory process, pursuant to section 611(c) of the Federal Aviation Act of 1958 as amended by the Noise Control Act of 1972 (Pub. L. 92-574). Section 611(c)(1) provides that the EPA may submit to the FAA its recommendation for proposed regulations or amendments to regulations to provide for the control and abatement of aircraft noise through the exercise of any of the FAA's regulatory authority over air commerce or transportation or over aircraft or airport operations.

The FAA published Notice No. 70-14 on November 22, 1970, containing the

EPA's recommended amendment of Subchapter G of the Federal Aviation Regulations (14 CFR Subchapter G) to establish a new Part 140 prescribing "procedures for the development, approval, and implementation of an Airport Noise Abatement Plan for airports required to be certificated under Part 139" (41 FR 51522). Pursuant to notice, a public hearing was held in Washington, DC, on January 17, 1977, before a panel of FAA and EPA personnel (41 FR 51533; November 22, 1976). This amendment is, in part, notice of the Administrator's decisions on those recommendations and his reasons for those decisions required under section 611(c).

Subsequently, the Air Transport Association of America submitted to the FAA a petition for rulemaking, dated January 16, 1976, requesting the Administrator to initiate rulemaking proceedings to adopt regulations prescribing the process under which airport noise abatement plans, or similar restrictions upon the operation of aircraft at an FAA certificated airport, must be submitted to, and considered by, the FAA before the plan may be implemented. The petition was published verbatim as Petition Notice No. PR-79-6, "Petition for Rulemaking of the Air Transport Association of America, Airport Noise Abatement Plans: Regulatory Process," (44 FR 52078; September 9, 1979). For the benefit of commenters, the EPA recommended rule was republished as an appendix to Notice No. PR-79-6. This action is, in part, the Administrator's response to that petition as contemplated under FAR Part 11.

The Aviation Safety and Noise Abatement Act of 1979 (the "ASNA Act"; Pub. L. 96-183), signed by the President on February 18, 1980, was enacted "to provide and carry out noise compatibility programs, to provide assistance to assure continued safety in aviation, and for other purposes." Title I of the ASNA Act requires the Secretary of Transportation, after consultation with the EPA and such other Federal, state, and local interstate agencies as he deems appropriate, to establish single systems for measuring noise at airports and determining noise exposure, and to identify compatible land use within twelve months of enactment of the ASNA Act. It also establishes that airport operators, as defined by the Act, may submit to the Secretary noise exposure maps setting forth the noncompatible land uses within the vicinity of the airport. Those airport operators are also authorized to submit noise compatibility programs for

approval by the Secretary. The ASNA Act provides that funding through grants-in-aid may be made available for airport noise compatibility planning. The authority and responsibilities of the Secretary under the ASNA Act were delegated to the Federal Aviation Administrator on August 9, 1980 (45 FR 54054; August 14, 1980).

Thus, in many respects, the ASNA Act dictates, or significantly influences, the substantive response to both the EPA's recommended rule and the ATA's petition for rulemaking.

On December 17, 1980, based on their request for an immediate meeting, representatives of the major helicopter and helicopter engine manufacturers met with the FAA to express their concern regarding a possible FAA application of an ASNA type noise compatibility planning regulation to small airports used exclusively by helicopters. On January 7, 1981, the representatives jointly presented to the FAA their detailed analysis of the potential impact of including heliports not located on other airports under the new Federal Aviation Regulation that might follow the EPA and ATA recommendations in light of the requirements of the ASNA Act. That submission has been placed in the Rules Docket and is available for public examination.

The FAA's review of the submission and its own review of the matter of small heliports lead to several conclusions—(1) that the ASNA Act does not expressly require the application of implementing regulations to airports used exclusively by helicopters; (2) that no airports used exclusively by helicopters currently satisfy the definitional qualities of an "airport" under the ASNA Act; (3) that there is an almost total absence of information concerning the noise implications of the operations of those small heliports on the surrounding community; and (4) that if the industry contention is correct, the direct application of the Part 150 methodologies to those heliports may not achieve the objectives of airport noise compatibility planning, to the detriment of the surrounding community, the heliport operator, helicopter operators, the helicopter industry, and the national transportation system.

The alternatives were presented to the FAA as it faced the fast approaching statutory deadline to prescribe regulations and the surprising absence of helpful, relevant data on which to evaluate the industry contentions. Either the FAA had to proceed to cover those heliports in the regulations without substantive, technical basis or exclude

them, at least temporarily, from the coverage of the interim rule until adequate information is found or developed on which to base a supportable decision. The FAA concluded that, since there is no airport used exclusively by helicopters under the ASNA Act definition, the only responsible action would be to defer the discretionary regulatory decisions affecting those heliports. Thus, the term "airport" as used in new Part 150 does not include those airports used exclusively by helicopters.

During the period of the interim rule, the FAA will conduct a thorough review of the available information and, if necessary, institute appropriate studies to develop data which is currently not available. Based on those efforts, if it is found appropriate, additional rulemaking will be initiated by the FAA to propose and adopt any necessary regulations for those airports used exclusively by helicopters.

#### Relation to Notice No. 70-24

This interim rule is based, in major part, on the regulatory proposals submitted to the FAA by EPA and published in Notice No. 70-24. However, some substantive changes have been made to accommodate full implementation of the ASNA Act. The major provisions contained in the notice are summarized below, along with their disposition in the interim rule. This preamble covers those matters in more detail under appropriate discussions not repeated here to avoid unnecessary repetition.

The EPA recommended that the FAA add a separate part to the Federal Aviation Regulations prescribing procedure for the development, approval, and implementation of airport "noise abatement plans" for airports certificated under Part 139. The interim rule does that, except that the term "airport noise compatibility program" is used instead, to reflect the ASNA Act terminology.

The EPA recommended that submission of those plans be mandatory by means of requiring them for new or continued certification of the airport. This interim rule, in consonance with the ASNA Act, makes voluntary the development and submission of noise compatibility programs but prescribes the standardized methodology for those programs that are developed for submission to the FAA under the program prescribed in the regulation. Further, the FAA has broadened the applicability of the rule to permit participation by other public use airports on the same voluntary basis.

A key element of the EPA recommended plan is a map of the airport and its environs including the map noise contours around the airport. This interim rule contains similar requirements.

The EPA recommended requiring that the noise contours be expressed in terms of Day-Night Average Sound Level ( $L_{dn}$ ). Part 150 specifies the use of  $L_{dn}$ . Further, the interim rule specifies the complimentary, single event measurement unit ( $L_{eq}$ ), as required by the ASNA Act.

The EPA recommended the development of a table of land use compatibility with day-night average sound level for buildings as commonly constructed. Part 150 contains such a table. The table in Notice No. 70-24 contained seven major land use categories; the table in Part 150 contains five major land use categories and 23 subcategories.

The EPA recommended that the FAA prescribe a complex method for indigenous and ambient (nonaircraft) noise levels. This method was identified as the "Airport Noise Evaluation Process" (ANEP). In response to comments to the docket, Part 150 does not contain the ANEP. Instead, the FAA has elected to leave the choice of a method for accounting for nonaircraft noise around the airport to the airport operator. However, like Notice No. 70-24, Part 150 excepts from identification as noncompatible those areas where the indigenous or ambient noise levels equal or exceed the noise from aviation sources.

Notice No. 70-24 recommended requiring identification of each "governmental entity" which has "comprehensive land use planning and control authority" within the  $L_{dn}$  55 contour, even though the EPA did not identify any noncompatible land uses below  $L_{dn}$  55. Part 150 requires the identification of all "public agencies and planning agencies" having jurisdiction within the  $L_{dn}$  55 contour.

The EPA recommended that the rules require each airport operator to conduct "a public hearing" prior to submission of a plan to afford all interested persons an opportunity to submit data, views, and comments with regard to the merits of the draft plan. Part 150 requires airport operators submitting programs to afford all interested persons similar opportunities, but does not restrict the method solely to public hearings. Both the EPA recommendation and the interim rule require an accounting of public participation in the final plan or program.

Notice No. 70-24 would require analysis of the effect of the proposed

plan on reducing noise impact in the surrounding community for the years two, five, and ten years after the date of submission. The ASNA Act only requires analysis at the time of submission and for 1985. Part 150 combines the two approaches by requiring analysis for the date of submission, for 1985, as required by the ASNA Act, and, if the submission is made after December 31, 1982, for the five years after the submission.

The EPA recommended the rule to require submission of a revised plan not later than four years after approval of the original plan. Part 150, in compliance with the ASNA Act, requires submission of revised maps and program plans whenever any actual or proposed change in the operation of the airport might create any substantial, new, noncompatible use in any area depicted on the map.

The EPA recommended that the FAA process of review of noise plans be conducted administratively in conjunction with airport certification. While the interim rule does not rely on airport certification, the process under which the FAA will review submissions to it under Part 150 is an administrative process, with public notification by publishing appropriate notices in the Federal Register.

#### The Need For This Amendment

As previously indicated, the EPA has submitted to the FAA under § 611(c) of FA Act a recommended regulation concerning airport noise certification which was published in Notice No. 70-24. The same statutory provision requires the FAA to respond to the proposed regulation by adopting it as presented by the EPA (or some modification of it) or by publishing a notice of the decision not to prescribe any regulation in response to EPA's submission. Accordingly, pursuant to § 611(c), this action, in part, constitutes FAA's response to the EPA recommendations in light of the subsequent provisions of the ASNA Act.

Similarly, Subpart C of Part 11 of the Federal Aviation Regulations requires the FAA to respond to petitions for rulemaking submitted in accordance with that part. Since the Air Transport Association of America submitted a petition concerning airport noise abatement plans (Notice No. PR 79-0) which is affected by implementation of the ASNA Act, this action is also the FAA's response to that petition in light of the subsequent enactment of the ASNA Act.

As discussed throughout this preamble, Title I of the ASNA Act requires implementation before

February 26, 1981 by adopting regulations prescribing specific, standardized systems for noise measurement and noise exposure and identifying "normally compatible" land uses around airports. Once those regulations become effective, airport operators may begin submitting "noise exposure maps" and then "noise compatibility programs" for evaluation and approval or disapproval. The practical effect of those provisions is to prescribe the FAR's procedural rules for handling those submissions. To provide for orderly and fair administration of that program, those rules should be adopted on or before the effective date of the expressly required regulations. Accordingly, this interim rule encompasses both the substantive and procedural aspects of the implementation of the ASNA Act to provide the basis for both the regulatory and administrative programs contemplated by Title I of that Act. Before the interim rule is made final, the FAA will review any comments and suggestions submitted to the Rules Docket and, based on those communications, FAA's experience under the interim rule, and other available information, may modify the rules to better achieve their objectives.

Further, this amendment to the Federal Aviation Regulations on the subject of aviation noise serves to fill a need which has been articulated by the actions of the Congress, the Environmental Protection Agency, and the Air Transport Association of America, even though each has taken a different approach to the problems each feels should be addressed.

The adoption of FAR Part 36 in 1969 prohibited the further escalation of aircraft noise levels of subsonic civil turbojet and transport category airplanes and required new airplane types to be markedly quieter than those previously developed. Subsequent amendments extended the noise standards to include propeller-driven, small airplanes and supersonic transport category airplanes. The FAA has proposed noise standards for helicopters but has not adopted a final rule based on its proposal. Part 36 provides for aircraft noise certification and specifies noise limitations, based on gross weight, measured at specified points on the ground, in accordance with prescribed noise testing methodology.

The FAA has required reduction of aircraft noise at the source through certification, modification of engines, or replacement of aircraft; it regulates flight procedures for noise abatement purposes, and provides assistance to

airport operators and community representatives in development of airport noise control and land use compatibility programs. Airport proprietors are responsible for taking the lead in local aviation noise control. However, reduction of aircraft noise impacts is a complex issue with several parties sharing the responsibility: the Federal Government, airport proprietors/operators, State and local governments and planning agencies, aircraft operators, air travelers and shippers, and local residents.

Although many elements are involved, the prime responsibility under the ASNA Act for developing a program designated to reduce the exposure of individuals to noise in the vicinity of a particular airport lies with the airport operators. However, it should be noted that State and local governments and planning agencies also have important responsibilities. Significant benefits can be obtained through the airport proprietor, local jurisdictions, and the FAA working together to develop airport noise control and land use compatibility plans.

Title I of the ASNA Act enforces the authority of the FAA in providing assistance for airport noise compatibility planning and establishes that any operator of a certificated airport may submit a "noise exposure map" setting forth the noncompatible land uses around the airport. Subsequently, an airport operator who has submitted a "noise exposure map" may then submit a "noise compatibility program" setting forth measures reducing noncompatible land uses in the vicinity of the airport and precluding the introduction of additional noncompatible land uses. The noise program submitted to the FAA may be approved or disapproved on the basis of any undue burden on interstate or foreign commerce and whether it is reasonably consistent with obtaining the goal of minimizing noncompatible land uses. The program must also contain provisions of its updating and periodic revision. The ASNA Act requires the Secretary to prescribe standardized methods of measuring noise and noise exposure at airports, and to identify the land uses which are normally compatible with various noise exposures. It does not preempt, but reinforces the appropriate exercise of local authority and responsibility for airport noise abatement and land use planning, zoning, or the exercise of related police powers. The approval or disapproval of an operator's airport noise compatibility program under new Part 150 is not a Federal finding that the

noise levels or land uses associated with the program are, or should be, acceptable for that area under Federal, State, or local law.

The implementation of the provisions of Title I of the ASNA Act assures that an airport operator's measures in noise compatibility programs do not place an undue burden on interstate or foreign commerce or would not be incompatible with the management of the air navigation system. Thus, it is also necessary to issue, as part of the interim rule, the procedural requirements for submitting airport noise programs to the FAA for evaluation and consideration for "approval." Accordingly, this rule specifies noise systems and descriptors and identifies normally compatible land uses for use in developing noise compatibility programs and specifies the procedures for submitting noise exposure maps and noise compatibility programs.

#### Regulatory Issues

The Federal Government has preempted certain areas of controlling aviation in the United States. The principal aviation responsibilities assigned to the Federal Aviation Administrator under the Federal Aviation Act of 1958, as amended, include safety, operating and air traffic rules, and airspace assignment and use. The basic national policies intended to guide actions under the FAA Act are set forth under section 103 (49 U.S.C. 1303), which include:

- (a) The regulation of air commerce in such manner as to promote its development and safety and fulfill the requirements of national defense;
- (b) The promotion, encouragement, and development of civil aeronautics;
- (c) The control of the use of the navigable airspace of the United States and the regulation of both civil and military operations in such airspace in the interest of the safety and efficiency of both; and
- (d) The development and operation of a common system of air traffic control and navigation for both military and civil aircraft.

To achieve these statutory purposes, §§ 307 (a) and (c) of the Federal Aviation Act, 49 U.S.C. 1340 (a) and (c), provide extensive and plenary authority to the FAA concerning use and management of the navigable airspace and air traffic control. The FAA has exercised that authority, in part, by promulgating comprehensive Federal regulations on the use of navigable airspace and air traffic control (14 CFR Parts 71; 73; 75; 77; 81, Subpart B; 83; 85; 87; 89; 101; 103; and 157). Similarly, the FAA has exercised its aviation safety

authority, including the certification of airmen, aircraft, air carriers, air agencies, and airports under Title VI of the Federal Aviation Act, § 601 *et seq.* (49 U.S.C. 1402 *et seq.*) by extensive Federal regulatory action, including 14 CFR Parts 21 through 43, 61 through 67, 81, 121 through 148.

In legal terms, the Federal Government, through this exercise of its constitutional and statutory powers, has preempted the areas of airspace use and management, air traffic control and flight safety. The doctrine of preemption, which flows from the Supremacy Clause of the Constitution, is essentially that state and local authorities do not have legal power to act inconsistently with matters already subject to comprehensive Federal law, including regulations of general applicability and legal effect.

In the area of noise regulations, the FAA has set clear Federal standards for the certification and manufacture of aircraft (14 CFR Parts 21 and 38) and set time limits on the use of older, nonconforming airplanes and speed limits on supersonic aircraft in U.S. airspace (14 CFR Part 81, Subpart E).

In addition to its regulatory authority over aircraft safety and noise, the FAA has administered a program of Federal grants-in-aid for airport construction and development (14 CFR Parts 152 and 154). Through its decisions on whether to fund particular projects, the FAA has been able, to a degree, to ensure that new airports or runways will be planned and developed with noise considerations in mind. That indirect authority was measurably strengthened when in 1970 the Airport and Airway Development Act expanded and revised the FAA's grant-in-aid program for airport development and added environmental considerations to project approval criteria. Amendments to the 1970 Act have increased funding levels and provided new authority to share in the costs of certain noise abatement activities, but the ability of the FAA to provide financial assistance remains limited in terms of both percentage of project costs and the types of projects eligible for Federal aid.

Thus, the Federal Government has preempted the areas of airspace use and management, air traffic control, safety and the regulation of aircraft noise at its source. The Federal Government also has had substantial influence on airport development through its administration of the Airport and Airway Development Program.

Nevertheless, there remains a critical role for state and local authorities in protecting their citizens from unwanted aircraft noise, principally through their

powers of land use control. Control of land use around airports to ensure that only compatible development may occur in noise-impacted areas is a key tool in limiting the number of citizens exposed to airport noise, and it remains exclusively a governmental function in the control of state and local governments. Occasionally, it is a power exercised by individual airport operators who are also the state or municipal governments and can exercise police powers to achieve appropriate land use controls through zoning and other authority. But even where governmental bodies are themselves airport operators, the noise impacts of their airports often occur in areas outside their jurisdiction. Other police power measures, such as requirements that noise impacts be revealed in real estate transactions, may also be available to them. Finally, local governments have legal authority to take noise impacts into account in their own activities, such as their choice of location and design for new schools, hospitals, or other public facilities, as well as sewers, highways and other basic infrastructure services that influence land development. The responsibilities of airport proprietors/operators, including State and local governments active in the proprietary capacity, are, in certain respects, more restricted than those of State and local government exercising police powers. Under the Supreme Court decision in *Griggs v. Allegheny County*, 309 U.S. 40 (1962), proprietors are liable for "taking of property" resulting from operations from their airport. The proprietor, the Court reasoned, planned the location of the airport, the direction and length of the runways, and often has the ability to acquire more land around the airport and otherwise mitigate noise impacts. From that control flows the liability, based on the constitutional requirement of just compensation for property taken for a public purpose. The Court concluded: "Respondent in designing the Greater Pittsburgh Airport had to acquire some private property. Our conclusion is that by constitutional standards it did not acquire enough." The role of the proprietor described by the Court remains essentially the same today.

But the proprietor's responsibilities do not end there. A three-judge district court observed in *Air Transport Association v. Crotti*, 309 F. Supp. 58 (N.D. Cal., 1975):

"It is now firmly established that the airport proprietor is responsible for the consequences which attend his operation of a public airport; his right to control the use of the airport, is a necessary concomitant,

whether it be directed by state police power or by his own initiative . . . . Manifestly, such proprietary control necessarily includes the basic right to determine the type of air services a given airport proprietor wants his facilities to provide, as well as the type of aircraft to utilize those facilities . . . ."

The *Crotti* case held that part of the State of California airport noise statute imposing noise abatement duties on airport proprietors was not *per se* unconstitutional and reserved judgment as to its constitutionality in its implementation. The Court in *Crotti* struck down as unconstitutional that portion of the California statute which provided for sanctions against the operator of an aircraft that exceed a single-event noise standard on takeoff or landing, because it represented a clear interference with the FAA's exclusive control over flight operations in the navigable airspace.

In the subsequent *National Aviation v. City of Hayward* case, 416 F. Supp. 417 (N.D. Cal. 1976), an air freight company sought to enjoin a curfew on noisier aircraft imposed at the municipally owned Hayward Air Terminal. The court addressed the legal issue of the rights of a proprietor and found that the curfew had not been preempted by the Federal Government:

"[I]t is clear from the Congressional statement that the amendments to the Federal Aviation Act were not designed to and would not prevent airport proprietors from excluding any aircraft on the basis of noise considerations, make the same findings with respect to regulations adopted by municipal airport proprietor . . . ."

Id. at 424, citing S. Rep. No. 1353, 90th Cong., 2d Sess., 6-7; see also, *British Airways Board et al v. Port Authority of New York*, 558 F. 2d 76 (2d Cir. 1977).

The court went on to indicate that the FAA had the authority to preempt such proprietor regulation although it had not yet exercised it. The court also found that the ordinance, which required some of the plaintiff's aircraft to use another airport between 11:00 p.m. and 7:00 a.m., had an effect on interstate commerce, but that the effect was:

". . . incidental at best and clearly not excessive when weighed against the legitimate and concededly laudable goal of controlling the noise levels at the Hayward Air Terminal during late evening and morning hours.

*Hayward*, supra at p. 427.

Thus, an airport proprietor's ability to control what types of aircraft use its airport, to impose curfews or other use restrictions is not unlimited. Though not preempted, the proprietor is subject to two important Constitutional restrictions. The proprietor first may not

take any action that imposes an undue burden on interstate or foreign commerce and, second, may not unjustly discriminate between different categories of airport users. (See, *British Airways Board v. Port Authority of New York*, 558 F. 2d 1002 (2d Cir. 1977); *Santa Monica Airport Association et al v. City of Santa Monica*, 461 F. Supp. 927 (C.D. Cal. 1979).)

The EPA recommendation in Notice No. 76-24 proposed to require airport proprietors to develop and implement noise control plans with the approval of the FAA. That process would apply to all airports certificated by the FAA under FAR Part 139, which governs the certification and operation of land airports serving air carriers that hold certificates of public convenience and necessity issued by the Civil Aeronautics Board.

ATA, representing most of the certificated scheduled air carriers in the United States, subsequently submitted a somewhat similar proposal in their petition. However, the emphasis in the ATA petition was on setting up a formal, adjudicatory, and public hearing process for noise control plans. In his letter to the FAA submitting the ATA's petition, Mr. Paul R. Ignatius stated:

The thrust of the attached rulemaking proposal is to establish a regulatory procedure under which any airport proprietor desiring to implement a noise abatement plan, that would restrict aircraft operations in interstate or foreign air transportation, would not be able to implement that plan without submitting it to the FAA at least 90 days in advance of proposed effectiveness. Upon publication in the Federal Register, any interested party could file a statement in support of or a complaint against implementation of the plan. Based upon such a complaint, or upon his own motion, the Administrator could suspend the implementation of the plan for a maximum period of 180 days beyond its proposed effectiveness. Interested parties could then submit written position statements to the FAA supporting or opposing the plan, and a formal hearing could be convened. There are several levels of administrative appeal provided for before the Administrator issues a final decision whether to disapprove a proposed plan or terminate an existing plan.

"As stated in the ATA petition:

The FAA would not be required to approve each airport proprietor plan, but would be required to take action only upon a finding that a proposed plan, if implemented, or an existing plan, if continued, would adversely affect a valid Federal interest. Also, the proposed regulation would authorize (1) disapproval of a proposed plan or (2) termination of an existing plan on the basis of individual or cumulative impact. This would permit review and termination of a state or local plan, even after it had been subjected to the hearing process without disapproval, based upon a finding that the

cumulative effect of that plan, in combination with other plans implemented or proposed subsequent to its effectiveness, would jeopardize the safety of aircraft, interfere with the efficient utilization of the navigable airspace, unduly burden interstate or foreign commerce, be unjustly discriminatory, or conflict with the Federal Aviation Administration's regulatory authority.

Thus, under both the EPA and ATA proposals, the FAA would make the final decision on each noise control plan on an airport-by-airport basis. Each would require the FAA to review the proposed plan's impact on safety, efficiency, and interstate or foreign commerce. While the EPA and ATA clearly disagreed in their approaches to noise control plans and their usefulness, both organizations cited a need for the FAA to set standards for the plan's development, review, approval or disapproval, and implementation.

The Congress, in enacting Title I of the ASNA Act, agreed with that need. As a result, the Secretary of Transportation was directed to set certain uniform standards by regulation. That statute also set specific requirements for both the content and application of those standards. In so doing, that legislation expressed the congressional will on those issues and provided compelling guidance for the course of regulatory decisions left to the discretion of the Administrator in responding to the outstanding issues. Those matters include the following:

**Noise Standards**—The Federal Government (FAA) must set uniform standards for the measurement and evaluation of noise at and around airports. [Section 102]

**Land Use Standards**—The Federal Government (FAA) must identify land uses which are normally compatible with various levels of exposure by individuals to airport noise. [Section 102]

**Land Use Planning**—There is no Federal preemption of the responsibilities of the airport operator or of state and local public agencies and planning agencies. In that regard, the Federal action involves an evaluation of proposed plans to decide whether the land use and other measures of an airport operator's program are reasonably consistent with achieving the goals of reducing existing, and preventing introduction of additional, noncompatible land uses around the airport. The Act also does not speak to any changes in the division of Federal responsibility between the DOT and other Federal agencies or departments, such as the authority of the Department of Housing and Urban Development to

determine whether or not to guarantee mortgages. [Sections 103 and 104]

**Voluntary Planning**—The development of noise maps and noise compatibility programs is voluntary with airport operators and does not become mandatory (such as making them a condition of the certification of an airport or requiring submission of measures for evaluation before implementing them). [Sections 103 and 104]

**Review and Approval**—The FAA reviews and approves each noise compatibility program submitted to determine whether the measures to be undertaken in carrying out the program (not involving flight procedures for noise control purposes) (1) create an undue burden on interstate or foreign commerce (including unjust discrimination), and (2) are reasonably consistent with obtaining the goal of reducing existing noncompatible uses. The program must also provide for its timely and adequate revision. [Section 104]

**Flight Procedures for Noise Control Purposes**—The FAA reviews the measures in each noise compatibility program relating to flight procedures for noise control purposes. In determining whether to approve or disapprove those measures, the Administrator considers the full range of FAA responsibilities and programs. Accordingly, consideration is given to safety of flight operations, safe and efficient use of the navigable airspace, management and control of the national airspace and air traffic control systems, the effects on air commerce and air transportation, the potential of unjust discrimination, national defense and security factors, and other, similar statutory and regulatory matters. [Section 104]

**U.S. Liability**—The United States is not liable for damages resulting from aviation noise by reason of any action taken by the Secretary or the FAA Administrator pertaining to noise compatibility programs. [Section 105]

**Systems of Noise Measurement and Evaluation**—In part, § 102 of the ASNA Act requires the Secretary, after consultation with the Administrator of the Environmental Protection Agency and such other Federal, state and interstate agencies as he deems appropriate, to establish by regulation—

(a) A single system of measuring noise, for which there is a highly reliable relationship between projected noise exposure and surveyed reactions of people to noise, to be uniformly applied in measuring the noise at airports and the areas surrounding such airports; and event and cumulative noise measure systems. Unanimous support was

expressed for the designation and use of decibels (A-weighted) for single event measurements and of day-night average sound levels ( $L_{dn}$ ) for the cumulative noise measure system. As can be seen from statutory requirements, the purpose of standardized measurement and analysis of aviation noise is to evaluate its effect on individuals. To do this, numerous specialized measurement techniques and noise units have been developed over the years. After the required consultations and careful consideration of the alternatives, the FAA has determined that two related noise measuring systems are needed for the evaluation of noise exposure from airports—

(a) Single event measure: A-weighted sound level ( $L_A$ ) in decibels; and

(b) Cumulative noise measure: Day-night average sound level ( $L_{dn}$ ) in decibels.

For single event measurements (such as the measurement of noise from the flyover of a single aircraft) for comparison with other single events (typically other aircraft or other transportation modes), the maximum A-weighted sound pressure level is sufficient. In order to compute daily or hourly exposure levels, measurements must be made of multiple events. Computing cumulative noise exposure in terms of  $L_{dn}$  requires amplitude-versus-time data. For steady state levels from stationary sources (such as electrical generators or ground runup areas), it is necessary to provide average sound levels in  $L_A$  and frequency of occurrence in noise sensitive areas.

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The A-weighted Sound Level ( $L_A$ ) is already widely used. It has been found to correlate well with individuals' subjective judgments and much of the public is familiar with it. It is apparent that  $L_A$  (often described as dBA) is the best choice in the interest of optimizing compatibility with existing noise standards currently in use by Federal, State and local government bodies. In

the December 1977 edition of Sound and Vibration, it is reported that "there are now in excess of 900 local, county and State noise control laws in the United States," (p. 12) and that "dBA is a common unit of measurement for enforcement purposes even among those States using time integration (of sound levels)" (p. 13). Clearly, the A-weighted sound level provides the most compatible unit system for assessment of aircraft noise within the context of other community noise sources. The standard of time A-weighted sound levels over predetermined thresholds is used by the Department of Housing and Urban Development policy Circular 1390.2 as the unit for determining mortgage guarantee eligibility in nonairport environments. The A-weighted sound level is also the basic measure in the Department of Labor, Occupational Safety and Health Standards which establish specified periods of time during which a worker can be exposed to various noise levels. This unit system also serves as the basis for the DOT, Federal Highway Administration criteria for planning and design of highways constructed with Federal aid.

However, it should be noted that while A-weighted sound level is the basic measure for most Federal, State and local noise standards, variations do exist in its method of application. Specifically, those variations involve "integration" (summation of the total energy of an event) versus averaging, that same total energy over the event's duration. That measure does not reflect blasts and other clearly impulsive sounds where duration is not an issue. On the other end of the scale, ambient noise standards for traffic and workplace levels are often averaged for several hours or even days. Since aircraft events are typically only several seconds long and since both the peak noise and the associated duration have been shown to affect human response, the FAA has used the maximum A-weighted sound level averaged over about 1.5 seconds for noise certification of propeller-driven light airplanes. This unit ( $L_{max}$ ) corresponds to the "slow" response setting on a standard sound level meter. For certifying turbojet powered airplanes, the FAA has integrated the sound over the entire period when the sound level was within ten decibels of its maximum. When this type of integration is applied to A-weighted sound levels, it is known as the Sound Exposure Level ( $L_{AE}$ ) which is used in the computation of cumulative noise levels. Thus, in specifying the use of A-weighted sound levels as the

fundamental noise unit, the FAA has specified a "system of measurement" as required by § 102 of the ASNA Act. When the purpose of the measurement of aircraft noise is intended for comparison to a State or local standard or for comparison with another transportation noise source,  $L_{AE}$  generally will be appropriate; when the measurement is intended to be used in the computation of cumulative exposure levels from multiple aircraft events, as in calculating  $L_{dn}$  for use under Part 150, either with or without other community noise sources, the data should be analyzed and presented in terms of  $L_{AE}$ .

For evaluating the exposure of individuals to noise from airports, the appropriate unit is a cumulative noise measure. While people certainly do respond to the noise of single events (particularly to the loudest single event in a series), the long-range effects of prolonged exposure to noise appear to best correlate with various cumulative measures. Each of these noise units provides a single number which is equivalent to the total noise exposure over a specified time period. In other words, cumulative noise measurements provide information on the total acoustical energy associated with the fluctuating sound during the prescribed time period or the total time over which the sound level exceeded a predetermined threshold. Cumulative noise units are based on both time and energy. A further sophistication is achieved by basing the cumulative noise measure on single event measurements where the frequency spectrum of each event is weighted (shaped) to approximate the response of the human auditory system. The day-night sound level ( $L_{dn}$ ) recommended by the EPA and accepted as the noise system for Part 150 is such a unit.

$L_{dn}$  is an energy-averaged A-weighted sound level ( $L_{AE}$ ) measured (integrated) over a 24-hour period. Further, it incorporates a 10-decibel penalty (step function weighting) for those events that occur between 10:00 p.m. and 7:00 a.m. The purpose of this 10-decibel penalty is to account for increased annoyance to noise during late night and early morning hours.

The FAA has spent several years examining the appropriateness of nighttime penalties in general and the 10-decibel value employed by  $L_{dn}$  in particular. In that examination, we have relied heavily on the research and recommendations of the National Aeronautics and Space Administration, the EPA, and other governmental agencies. What has been shown during that examination is that while the

specific weight or value of the penalty is subject to debate in terms of both amplitude and time period of application, there is general agreement that some penalty is appropriate. The available research indicates that the 10-decibel penalty used in  $L_{dn}$  does represent a reasonable approximation of the differences in response of people to day and night aircraft operations. The FAA recognizes that individual differences in persons and communities may result in variations of the benefits to be derived from the application of this (or any other) night-time penalty. However, as a single national system for the uniform application of the entire day-night noise level system (including the nighttime penalty), it is the best system available for airport planning and for land-use compatibility programs around airports.

The FAA will continue to evaluate the use of  $L_{dn}$  and in particular the nighttime weighting factor used in its calculation. If further investigations indicate that improved systems of units are available, or are shown to be more appropriate, any necessary rulemaking action will be initiated.

#### Land-Use Compatibility Planning

There are existing compatibility problems around many airports; conflicts between airports and their urban environments are evident across the United States. They represent a serious confrontation between two important characteristics of urban life and economics—the need for airports that meet transportation needs and the continuing demand for urban expansion in a manner that protects airport neighbors from excessive noise. Airport owners are finding essential expansion to be difficult and expensive or even impossible at any cost. New residential and noise sensitive area development tends to move closer to the airport from all sides and is the source of continual threat of conflict, sometimes leading to law suits. On the other hand, people living in the vicinity of airports with investments in their homes may view the airport and its associated noise as a threat to their quality of life. To them the airport seems to be ever expanding, with more and larger jets every year. There are often other important sources of conflicts between airports and airport neighbors, such as protection of approaches to runways and the location of persons and property on the ground. These conflicts may be reduced, however, and new ones substantially avoided, through the development and implementation of appropriate airport noise compatibility plans. Such overall plans rely to a large extent on successful

and realistic land use planning for the communities around airports.

The Secretary of Transportation and the FA Administrator jointly issued an Aviation Noise Abatement Policy ("ANAP") on November 18, 1976. The intent of the policy was to significantly reduce the adverse impacts of aviation noise upon the estimated six to seven million most heavily impacted Americans and to achieve a substantial degree of noise compatibility between airports and their environs. The policy recognized that effective noise abatement requires coordinated actions by aircraft owners and operators, the FAA, airport proprietors/operators, airport neighbors and state and local governments. The actions identified in the policy statement include actual source noise reductions through aircraft retrofit/replacement; modifications in takeoff and landing procedures; and development of airport noise control and land use compatibility plans. These plans have the objective of containing severe noise impacts within airport controlled areas through purchase of land, through purchase of easements for development rights, through changes in land use from noise sensitive to noise tolerant, through acoustical treatment of critical noise sensitive uses, and through the prevention of new incompatibilities by planning, increasing public awareness, and enhancing locally adopted land use controls.

Since the issuance of the ANAP in 1976, aircraft noise has become a recognized factor in the planning process of many communities. Many local, state, and Federal agencies, in recognition of this fact, have developed regulations, guidelines, and procedures to deal with noise in the community land use planning process around airports.

A number of Federal agencies have published policies or guidance on noise (many without regard to its source) and land use. These agencies have done this for several different reasons—to carry out public law mandates to protect the public health and welfare and provide for environmental enhancement; to serve as the basis for grant approvals; and to integrate the consideration of noise into the overall comprehensive planning and interagency/intergovernmental coordination process.

Although several of these Federal programs include noise standards or guidelines as part of their eligibility and performance criteria, the primary responsibility for integrating noise considerations into the planning process rests with local government which generally has exclusive control over actual land use and development. Noise,

like soil conditions, physiographic features, seismic stability, flood-plains and other considerations, is a valid land use determinant.

The purpose of considering noise in the land use planning process around airports is not to prevent development but rather to ensure that development is compatible with various existing and projected noise levels. The objective is to guide noise sensitive land uses away from the noise source and to encourage nonsensitive land uses where there is noise. Where this is not possible, measures should be included in development projects to reduce the effects of the noise.

Under Title I of the ASNA Act, the FAA has a responsibility to issue regulations that identify land uses which are normally compatible with various exposures of individuals to noise. It should be clearly recognized that it is neither the FAA's policy, nor within FAA's authority, to preempt the authority of state and local governments and airport proprietors concerning local land-use planning and zoning responsibilities. Title I of the ASNA Act does not constitute or confer Federal land use control authority or responsibility.

Planning land usage requires cooperation between local governments, local planning authorities, airport proprietors, special purpose districts, regional planning agencies, state agencies, and state legislatures. For a particular airport and its environs all of the factors unique to that situation must be considered. Additionally, when performing an assessment of compatible land uses around airports, the benefits should be weighed against the costs in order to develop those alternative actions or control measures that are most effective and that are realistically available for implementation.

Community involvement and public participation are critical factors in successfully assessing the compatibility/noncompatibility of various land uses. The goals, values, and developmental needs of the individual communities regarding land use should always be considered in the early (planning) stages of land use evaluation. Community involvement at this early stage is an invaluable aid in determining acoustical and nonacoustical factors which must be addressed when determining normally compatible land uses for individual communities.

#### Airport and Community Relationship

The airport and the community exert a number of important influences upon each other. Those influences may be

generally classified as economic, social, and environmental. They must be taken into consideration during the process of developing a noise compatibility program. This program must also be integrated in to other applicable comprehensive plans for the community, county, metropolitan area, or region.

#### Economic Considerations

The airport and the community have an interdependent economic relationship which must be considered in the compatibility planning process. Although an airport's economic role in the community varies with size, it can be a significant employment center and often has adjacent commercial or industrial development which amplifies this role. This, in turn, affects housing location, streets, utilities, and resources. The airport is an entry port for air-traveling vacationers and business persons and provides cargo, mail, and emergency transportation services. In many instances, the size, location, and capacity of the local airport are major considerations in the selection of new sites by industries of regional or national stature. The airport is also a magnet for urbanization and an important shaper of the community's growth patterns. Conversely, the airport is affected by the economic posture of the community. Often the airport will be a publicly owned facility and may be dependent on local tax support. In such circumstances, the airport is dependent on support from local governments and citizens for revenue or general obligation bonds and for acceptance of Federal or state aid funds. The public's investment includes not only the obvious direct cost of the airport but also the opportunity costs, the expended social and environmental costs, the commitments and economic costs of private investment associated with the airport, and the costs of other public investments in the infrastructure needed by the airport in its present or proposed location. Thus, there is an extensive and complex interrelationship between the airport operator's action and its effect on the community and vice versa. That relationship is readily apparent in the need for airport noise compatibility planning by both.

#### Social Considerations

The airport plays several important social roles in the life of the community. An airport can be a principal transportation link for the community in terms of passenger carrying service and the movement of goods to and from the community. For smaller isolated communities, the airport also provides a vital emergency link for transporting the

critically ill and injured. The airport's influence upon the community's growth patterns, coupled with its possible traffic and noise impacts, affects the desirability of housing areas and, hence, the geographic aspects of the community's growth.

#### Environmental Considerations

Although noise is the most apparent environmental impact of the airport upon the community, there are others resulting from ground access and air and water pollution. Ground access to an airport by vehicular traffic is often an overlooked environmental impact of airports. Access routes can be designed to minimize pollution and community disruption. The airports' large open spaces can often have a beneficial effect upon the environment, allowing for dissipation of urban air pollution, surface water percolation and visual relief from too much urbanization. Conversely, access routes to an airport simultaneously create the intra-structure necessary to urbanization and that has helped result in the development of incompatible land uses around airports.

#### Safety Considerations

Safety of flight operations and safety of the public must be overriding factors during the consideration of various schemes to achieve or improve airport-environment compatibility. This could include actions which relate to protecting runway approaches from any form of interference, such as towers, buildings, or power lines. Safety is a primary consideration in developing airport or flight operational changes designed to lessen noise impacts.

In framing this rule, the FAA recognizes that the objective of airport-land use compatibility planning and implementation is the achievement and maintenance of compatibility between the airport and its environs. Inherent in this objective is the assurance that the airport can maintain or expand its size and level of operations to satisfy existing and future demands for aviation services and that persons who live, work, or own property near the airport may enjoy a maximum amount of freedom from noise or other adverse impacts of the airport. Equally important is the protection of the public investment (both local and national) in a facility for which there may be no feasible future replacement. In other words, the FAA recognizes that the local communities and the Nation share vital interests in the economic viability of the airport and in the well-being of citizens around the airport. Toward these ends, the FAA has determined that it is best that noise compatibility programs be

developed at the local level, subject to Federal review for considerations of national concerns.

#### Identification of Compatible Land Uses

Section 102 of the ASNA Act states, in part, that the Secretary of Transportation "after consultation with the Administrator of the Environmental Protection Agency and such other Federal, state and interstate agencies as he deems appropriate, shall by regulation . . . identify land uses which are normally compatible with various exposures of individuals to noise." That rulemaking is required to be completed "not later than the last day of the twelfth month which begins after the date of enactment of this Act," that is, February 28, 1981.

In seeking to fulfill the requirements of that provision of the Act, the inherent inexactitude of land use compatibility guidelines was apparent as the FAA reviewed the available data. Though such documents have been developed and employed for at least the last quarter century, no body of scientific data exists that says with certainty that a specific land use, by every individual user, will always be compatible with a particular sound level above a conservatively low level. For that reason, there must be a value judgment made within a range of noise exposure levels generally associated with a given land use. The relative position of the compatibility interval is not defined finitely, usually only within 5 to 10 decibels of a specific norm level. The inexact nature of compatibility intervals is important to note in application of land use guidelines. Land use guidelines (even those adopted by regulation) are a planning tool and as such provide general indications as to whether particular land uses are appropriate for certain measured or calculated noise exposure levels. The FAA has used the recent American National Standard Institute (ANSI S3.23-1980) "American National Standard Compatible Land Use With Respect to Noise," (May 1980) as the starting point for identifying land uses normally compatible with various sound levels around airports. The following paragraphs of explanation are taken from that document:

The compatibility of various land uses with the outdoor noise environment at a site is dependent on factors such as the following:

(1) *Acoustical factors*, such as the sound level at the site and its variation with time; the sound isolation provided by the buildings where people experience the effects of outdoor noise; and the noise environment generated indoors by indoor sources, including sound produced by people themselves.

(2) *Nonacoustical factors*, such as the type of human activity associated with a specific land use; the differing responses of individuals to the same noise environment; attitudes toward the noise sources and the persons responsible for creating the noise; familiarity with an intruding noise through previous experiences; the disturbance of an activity or the annoyance caused by the noise; specific requirements of individual communities; the cost of achieving lower average sound levels; and the technical feasibility of reducing the sound levels.

As already stated, new Part 150 specifies day-night average sound level as the acoustical measure to be used in assessing compatibility between various land uses and an outdoor noise environment resulting from aircraft operations at, and in the vicinity of, an airport. The definition of the noise measure is exact and is specified with the same precision as any physical measurement of the sound. However, the assessment of the relation of land use to prevailing noise is less precise, in view of the nonacoustical factors mentioned above.

Appendix A of Part 150 contains land uses that have been identified as "normally compatible" with various levels of noise. Specifically, Table 2 contains ranges of yearly day-night average sound level for various land uses, reflecting the statistical variability for the response of large groups of people to noise. Any particular value of day-night average sound level may not, therefore, accurately assess a particular individual's perception of an actual noise environment.

The values given in Table 2 (yearly day-night average sound levels that are normally compatible with residential land uses) are based on studies of noise-induced annoyance, including the ANSI standard cited above. Values specified for other land uses are based primarily on noise-induced interference with speech communication. The identified land uses are consistent with, but not identical to, various land-use compatibility recommendations of other Federal Governmental agencies, particularly the Environmental Criteria and Standards of the Department of Housing and Urban Development (24 CFR Part 51: 44 FR 40861; July 12, 1979) and the Guidelines for Considering Noise in Land Use Planning and Control assembled by the Federal Interagency Committee on Urban Noise (June 1980).

Table 2 was developed without consideration of the cost or technical feasibility associated with the application of specific day-night average sound levels at any particular community. Under FAR Part 150, compatibility of a land use with the outdoor noise environment is assessed

by comparing the predicted or measured yearly day-night average sound level at a site with values given in Table 2. The land-use categories are those usually associated with comprehensive or master plans that detail present and future uses of land. Adjustments or modifications of the descriptions of the land-use categories may be necessary in considering specific local conditions.

Table 2 includes several categories of land use in which the indicated activities are primarily carried on outdoors. Where secondary activities may reasonably be expected to occur (such as residences on farms or offices in factories), Table 2 provides guidance for determining compatible use for both primary and secondary uses. Identification of the use most sensitive to noise should be used for planning programs.

#### Administrative Process

An important aspect of both the EPA recommended rule and the petition from the Air Transport Association is the process for the FAA's receiving, evaluating, and acting on noise plans developed by airport operators. The requirements proscribed in Title I of the ASNA effectively resolve a number of issues inherent in those recommendations. Submissions to the FAA under Title I are voluntary rather than mandatory as recommended by both the EPA and the ATA. The FAA is required to provide a relatively prompt determination on specified criteria on major aspects of noise compatibility programs. The 180-day review period does not provide adequate time for formal, adjudicatory hearings on the programs, as recommended by the ATA. Further, a formal procedure is more time consuming and costly both to the Government and the parties. There is no indication that a formal process is necessary to achieve the objectives of the ASNA Act or that it would develop better reasons for the ultimate decisions on the programs. To the extent necessary, the Director may conduct informal, information-gathering sessions with interested persons who may have data that would help to develop a well-founded, reasoned decision. However, most programs should not need extensive, additional fact-finding processes because they will reflect the appropriate considerations in their development and statements of the program.

Part 150 describes the administrative process the FAA will follow when it receives a noise exposure map or airport noise compatibility program (and their revisions) in accordance with the requirements of the ASNA Act. As

previously indicated, FAA's Director of the Office of Environment and Energy (the "Director"), on behalf of the Administrator, has the primary responsibility for administering the Part 150 airport noise compatibility planning program. The Director will coordinate any aspects of the noise program affecting other agency programs with the responsible elements in the FAA.

To facilitate prompt and adequate response to airport "noise exposure maps" and "noise compatibility programs," airport operators are required to submit them simultaneously to the Director and the Director of the FAA Regional Office (the "Regional Director") having jurisdiction over the geographical area in which the airport is located. (The additional submission to the Regional Director is necessary to ensure prompt notice to the local FAA field offices to avoid unnecessary delay in the 180-day review period leading to approval or disapproval of a program.) A noise exposure map and noise compatibility program must be received by both the Director and Regional Director for it to be considered "received" by the FAA. Thus, the FAA will conduct its preliminary review and begin the 180-day approval period provided in § 104(b) of the ASNA Act when both have received the airport operator's noise exposure map and airport noise compatibility program.

The process provides for notice to the public of the receipt of each airport "noise exposure map" and "noise compatibility program" by publication in the Federal Register, identifying the airport involved and indicating whether, based on a preliminary review, the requirements for those submissions are satisfied. It provides a means for timely and thorough evaluation by the FAA of the measures presented in each program to ensure an informed and reasoned determination on whether that program should be approved. That decision is based on the program itself, information presented or developed during the evaluation, and other information available to the Administrator.

The administrative process does not include any adversary pleadings or proceedings in which interested persons submit their complaints, evidence, or arguments for a "record" of hearing as the sole basis upon which the Administrator's determination on a program will be made. Section 104(b) of the ASNA Act requires the Administrator to approve or disapprove each program submitted in accordance with the Act (except those measures relating to flight procedures) within 180 days after it is received or, upon failure

to do so, the program is "deemed" to be approved. Except for those measures relating to flight procedures, the Administrator must approve a program that provides for its appropriate revision whenever the noise exposure map upon which it is based is, or will be, revised as required unless the measures to be undertaken under the program either— (1) would create an undue burden on interstate or foreign commerce or (2) are not reasonably consistent with obtaining the goal of reducing existing noncompatible land uses and preventing the introduction of additional noncompatible land uses. Clearly, those decisions do not preempt local authority or responsibility for land use decisions. The nature of the evaluation involved and the relatively short time for issuing a determination do not lend themselves to a complex process. There is no reason to believe that a formal on-the-record type of proceeding would produce a better basis for the ultimate determination or that it could be accomplished in the required time frame. The letter and spirit of the ASNA Act can best be served by an informal, administrative process geared to the complexities actually presented by the program in each case. Extensive fact-finding should not be necessary because those factors will be considered in developing the program and will be reflected in its noise control and abatement strategies.

Program measures relating to flight procedures for noise control or abatement purposes are treated separately from other measures under the ASNA Act, and the regulation, in view of their potential impact on air safety. Evaluation of those matters usually will be handled separately from other aspects of the program by referring them to the responsible FAA office or service. A separate determination on them for approvals and implementations will be made within an indefinite, but reasonable, time after receipt of the program. That determination will be based on all relevant policy and program areas of the FAA that would be affected by the particular measures provided in the program. While specific procedures, criteria, or standards covering the full, potential breadth of those matters cannot be prescribed in the general regulation, the FAA has numerous orders, handbooks, and other directives; advisory circulars; and technical publications that already provide criteria and guidance for those matters likely to be affected. If they are found to be deficient for purposes of making the necessary evaluations, they will be

supplemented as appropriate. Most airport operators are already familiar with these materials because of their previous experience with them at their airports. Those persons wishing more information on specific flight procedure or other measures should contact the local FAA Airport District Office, or the Air Traffic or Airport Division of the Regional Office, as appropriate.

Under the administrative process, the Director is provided broad discretion in conducting the evaluation to ensure there is ample opportunity for marshalling the facts, conducting the evaluation and developing a sound recommendation for the Administration's decision on the program. The process does not dictate rigid steps or procedures which will not likely provide background data, or insight necessary to adequately satisfy that responsibility. The Director will do whatever is considered necessary in the light of the specific program measures presented for evaluation.

An airport operator may revise or withdraw a noise compatibility program at any time before a determination is issued on that program by the Administrator; in addition, the Director may terminate evaluation of the program immediately upon notice of the intent to revise or withdraw a program. A revised program will be treated as a new program and a new 180-day review period will begin unless the Director finds that, in light of the overall program, the modifications can be evaluated separately and integrated into the unmodified portions of the program without exceeding the 180-day review period or creating an undue workload or expense to the Government. The Director will evaluate only one program at a time for any one airport.

Upon completion of the evaluation, the Director prepares and forwards to the Administrator, through the Chief Counsel, a recommendation for approving or disapproving the program together with the reasons for the recommendation and any terms or conditions that should attend the determination. Based on those recommendations and other available information, the Administrator issues a determination approving or disapproving the program. A determination is effective upon issuance and remains in effect until revoked, modified, or superseded or until the program is required to be revised. Provision is made for revoking or modifying previously issued determinations for cause following notice to the airport operator and an opportunity to respond to the reasons

stated by the Administrator for proposing to modify or revoke the determination.

#### Discussion of Comments and the Rule A. EPA's Recommended Airport Noise Regulatory Process

As previously stated, interested persons have been afforded the opportunity to participate in development of major aspects of this rulemaking by submitting written comments to the public regulatory docket and by participating in a public hearing on the EPA recommendation in Notice No. 76-24. The public hearing was held in Washington, DC, on January 17, 1977. The period for submitting comments closed March 4, 1977. All comments received have been reviewed and duly considered in promulgating this amendment.

Seventy-three public comments were received in response to Notice 76-24 (Docket No. 10729); ten supported the proposal and sixty-three opposed. The comments from some governmental bodies and individuals generally were the major source of support for the EPA recommendation; however, most governmental bodies and virtually all aviation associations, civic groups, and airport owners and operators opposed the recommendations. The two business corporations responding to the notice took opposite positions on the EPA's recommended airport noise rule.

The proposed assignment of specific responsibilities for local airport noise control planning and implementation to the local airport proprietor and the FAA received considerable support. The general consensus among those responding in support of the EPA's recommendation was that without a regulation to accompany the DOT Aviation Noise Abatement Policy, many airport noise problems will be overlooked, until they are beyond the point of simple or effective solution. Although a majority of individuals responding to the docket were in agreement that the development of noise plans by airport proprietors was a desirable goal, many specific and significant objections to individual aspects of the recommendations were raised. The primary objections were the proposed mandatory nature of the universal noise planning according to prescribed methodology and the coupling of noise planning regulations with airport certification. Twenty-one persons testified at the public hearing. All but two of those persons opposed or suggested modifications to the EPA recommendations. (It should be noted that the public also had opportunities for

comment on the ATA petition for rulemaking in PR Notice No. 76-9 and to provide significant input to Congress during the legislative process that led to the enactment of Title I of the ASNA Act. As stated earlier, that statute resolves directly or indirectly many issues raised in the two FAA notices and in the comments submitted to the FAA Rules dockets on those notices.)

The analysis of comments to the EPA recommendation covers the areas of—economic considerations, appropriateness of incorporation with Part 139 certification, authority and responsibility, and technical considerations. These matters are discussed as follows:

#### 1. Economic Considerations

Comments addressing the adverse economic impacts which the EPA proposal may have, if adopted, noted that the acquisition of land near an airport, for noise abatement purposes, is feasible in only the most severely impacted locations. To go beyond those areas, one commenter stated, would involve "too much land, too much money, and too much community disruption." The feeling that land acquisition for noise abatement purposes was an extreme measure to be employed in the most critical cases was not universal. One municipality indicated, "if a noise abatement program is instituted, then an improvement in the environmental considerations will bring about a positive effect on the economic value of the land." However, the commenter indicated that an EPA proposed provision (relating to the mitigation of every possible impact which may have an adverse effect on the economic value of land around the airport) should be modified to indicate that no approval of funding can be permitted for solely improving the economic value of land. Another municipal authority indicated that "it would be virtually impossible to separate the health and welfare boundary from the issue of adverse economic impact on the value of land." The assumption was that anything which is adverse to the health and welfare of citizens would have some effect on the economic value of the land.

Several commenters addressed the funding of the plans. One objection frequently voiced was that the proposal does not identify who would pay for development of abatement plans. One commenter added, "the cost of the preparation of such plans will be excessive for the small or nonhub airports." The FAA agrees in part. The mandatory noise abatement planning process proposed by EPA would be of

marginal benefit at those airports that either may not have serious noise problems and would impose an unnecessary cost burden on those airports with no present or anticipated noise problem. However, in adapting the EPA recommendation to the voluntary program under the ASNA Act, the cost burden is minimized.

The Airport and Airway Development Act Amendments of 1976 (Pub. L. 94-353) authorized for the first time the use of Federal airport development funds on projects designed to achieve noise relief. Specifically, § 11 of the Act authorized Federal financing of land acquisition to ensure compatibility with airport noise levels and the acquisition of noise suppression equipment. Further, in fiscal year 1977, the FAA initiated a program to encourage the preparation of comprehensive noise abatement plans by airport proprietors through the planning grant program of the Airport and Airway Development Act. Section 103(a)(2) of the ASNA Act has extended the role of the FAA in assisting in the funding of noise abatement planning by providing that " \* \* \* the Secretary may make grants of funds for airport noise compatibility planning to sponsors of those air carrier airports whose projects for airport development are eligible for terminal development costs \* \* \* "

The EPA proposal also contains provisions requiring full and timely implementation in accordance with a noise abatement plan. The penalty for failure to comply would be the loss of airport certification and a potential cutoff of Airport and Airway Development Program (ADAP) grants. Termination or suspension of an Airport Operating Certificate (AOC) is not an effective or practical enforcement device for airport noise abatement planning or implementation. By law, terminating an AOC would stop all CAB-certificated air carrier operations at the airport, as well as most other business and personal aviation activities. Consequently, the benefits to the community and the nation from the existence of the airport would be severely constrained, if not completely cutoff. The economic impact in terms of the movement of people, cargo, and mail would also be immediate and severe but could vary from airport to airport. Such action could have substantial local, regional, national, and international implications for air transportation. Those effects negate the viability of mandatory noise certification of airports.

Among the various mechanisms for noise reduction under the proposal, the use of landing fees based on

performance specifications drew many comments. It was the general consensus that landing fees are an attractive enforcement procedure available to the airport proprietor. A submission to the docket from the Council on Wage and Price Stability proposed a special surcharge on airline landing fees pegged to the amount of noise the aircraft make. The Council asserted that "a noise abatement program that includes noise-charge incentives offers several real advantages as compared to a program that relies more exclusively upon regulatory controls." They conclude in summary that—

(1) As a practicality, the addition of noise charges by the airports could accomplish more abatement than regulations and land use controls alone could achieve. This is true because a cost effective and comprehensive abatement program would be difficult to establish without the help of economic incentives that make it profitable for the carriers to take the initiative. In addition, far from conflicting with Federal noise regulations, economic incentives should promote compliance with both airport regulation and Federal aircraft noise standards.

(2) The unique contribution of noise charges would be to make it profitable for the carriers to themselves search for the lowest cost per unit of abatement they can devise. Lower costs per unit of abatement will help to reduce inflationary pressures as well as increase abatement efforts.

(3) Noise charges could be administered by impacted airports with minimal Federal oversight and would reduce the pressure to add overly specific and restrictive Federal regulations of carriers and airports.

The Council on Wage and Price Stability stated that noise charges offer a promising approach to noise control which could be implemented by airports under the support and guidance of the FAA and EPA. Their recommendation to the FAA was that a comprehensive study of how such a system could be implemented and how the FAA might facilitate local initiatives should be undertaken. The FAA concurs in this recommendation and has started such an in-depth evaluation. However, we view this effort as separate from resolution of the issues raised in Notice No. 76-24 and the ASNA Act. Concerning the imposition of user charges, two problems must be recognized. Many airports have revenue bond obligations that prohibit or limit the ability of the airport operator to levy special charges, and there is doubt whether or not the imposition of noise charges can be effectively implemented

in the absence of further clarification of this problem. Further, § 18(a)(1) of the Airport and Airway Development Act of 1970, as amended in 1976, requires "substantially comparable" fees to be charged. This has not been controversial to date but could present a problem in future application.

One question raised concerning the proposed rule was whether all certificated airports would be required to purchase, install, and operate noise monitoring systems without the considerations of cost and benefit. The cost of such a system is approximately \$200,000, and the total number of airports which could possibly be affected is about 500. One commenter inquired if the equipment cost and operating costs would be financed in part through the ADAP program; however, FAA's authority to provide grant-in-aid and financial assistance under that program has expired. The ASNA act provides for the grant of funds to carry out noise compatibility programs prepared in accordance with the Act. Therefore, certain funding for noise monitoring equipment is unclear. Nevertheless, the development and implementation of noise abatement plans does not require noise monitoring equipment.

## 2. Appropriateness of Incorporation with Part 139 Certification

The vast majority of persons opposing the EPA proposal indicated that the use of the airport certification program to enforce a noise rule would be unreasonable and a gross misuse of the certification program. Other adequate means of enforcement are available which do not have such far reaching direct and indirect effects. One individual commented that he could not see the logic of connecting the airport certification program to the EPA's proposal, which deals exclusively with an environmental problem, because noise has no affiliation with safety or other objectives of airport certification and should not be consolidated in the certification program. The FAA is in basic agreement with this comment, but notes that all certificates issued under Title VI of the FA Act are for safety and security but may be subject to noise considerations under § 611 of the Act. The proposal, as submitted by EPA, would make the Airport Noise Abatement Plan a part of the Airport Operating Certificate (AOC). Failure on the part of the proprietor to administer the plan would, under the EPA recommendation, be cause for suspension of the Part 139 certificate with the consequences associated with that suspension.

FAR Part 139 is an airport safety and security regulation which places specific requirements on the airport proprietor related to those matters. An AOC is issued when the airport is in compliance with these requirements. Within the boundaries of an airport, noise from operations at that airport can only be effectively mitigated through modification of the source (the airplane/engines), specification of airspace procedures, or incorporation of sound barrier techniques. The FAA never intended to include those with the airport safety or security requirements under FAR Part 139. Part 139 is not the proper vehicle for implementation of an airport noise abatement planning program. The airport certification program under Part 139 is intended to focus on safety and security and this focus should be maintained and not in any way be diluted. The incorporation of noise planning requirements under Part 139 could lead to the dilution of airport noise programs as well as airport safety and security. That could also act as an "open door" for further add-on programs to Part 139 in the future. The integrity of the original scope and intent of Part 139, and other Title VI certificates, should be kept in mind, and the precedent of attaching extraneous subjective and controversial conditions to the Airport Operating Certificate should be entered into only with the greatest care and demonstrated need. The ASNA Act does not provide a basis for mandatory noise planning but for voluntary development and submission of programs under a standardized Federal program. Thus, the objectives of the Act can, and should, be achieved fully without engraving noise compatibility planning to the airport operating certificate.

Considerable disagreement exists as to the blanket nature of the EPA recommendation which would apply to all Part 139 certificated airports instead of focusing on only those airports with identified existing or potential noise problems. In general, most negative comments asserted that a more selective approach should be employed. One airport authority indicated that the proposed rule should be modified to eliminate the requirement that a noise abatement plan become a part of the FAR Part 139 Certificate for all certified airports, and that actions such as those contained in the proposed rule should only be imposed on the major airports throughout the nation that currently have aircraft noise problems or that are expected to have them in the next 20 years. The EPA response to such arguments is:

The position of the FAA and a substantial number of airports seems to be that airport noise abatement planning should not be undertaken until an airport has a noise problem. To do otherwise, would merely create a noise problem where none existed. EPA is convinced that it was, and is precisely this kind of approach that has resulted in the present airport noise problem. Planning is designed to prevent a noise problem from arising. If airports wait until they are encapsulated with noise impacted noncompatible land use, the benefits to be achieved from airport abatement planning will be greatly diminished.

The FAA disagrees with the EPA's assumption that FAA condones delaying adequate and appropriate noise compatibility planning. A major difference in the approach to the problem between the two agencies is the Federal Government's proper role in, and the means for, that planning and implementation.

The EPA proposal would require each airport holding an AOC to submit a plan. Each airport proprietor involved would be required to expend a relatively significant amount of time and money to meet the proposed regulation, including implementation of the plan as submitted. A total of 729 airports have been certificated under the AOC Program. There are 481 listed as having scheduled service by CAB-certificated air carriers. Many of these airports do not have a noise problem, nor is a significant noise problem anticipated. For those airports, the imposition of mandatory Federal requirements, as recommended by the EPA, are not economically reasonable. At the same time, there are noncertificated airports serving general aviation which also have significant noise problems. Part 139 does not apply to these other airports and, thus, the EPA proposal would not apply. A case-by-case approach appears more appropriate than an across the board rule for all airports within a given category. The former approach is taken in the ASNA Act even though it too does not apply to airports without air carrier service. In that regard, the FAA is expanding the opportunity to develop and submit airport noise compatibility programs under Part 150 to most public use airports electing to do so. In so doing, the benefits of that planning can be realized by most airports having or expected to have, significant noise problems.

### 3. Authority and Responsibility

Another concern expressed by respondents to the notice was the requirement that the airport operator must develop compatible land uses around the airport. Many individuals indicated that this requirement ignores

the fact that many airport operators have little or no land use authority outside the airport boundary. The FAA agrees that questions exist regarding the feasibility of that aspect of the proposal since implementation of the plan would be required of certificated airports while the airport operator may lack authority to act in many areas to achieve full compliance. For example, the airport operator may not be in a position to impose land use restrictions or to condemn property, even though he recognizes the need for those restrictions as part of a comprehensive noise control plan. In this respect, the EPA recommendation fails to accept the institutionalized realities of local land use structures and limitations.

The State of California, Department of Transportation, expressed concern over the effect of statutory delegation of responsibility for noise abatement to the airport operator since such a policy might increase the airports' legal liability for noise and further complicate the progress of noise abatement. Their statement indicated:

The Federal policy (on noise abatement) recognizes that airport proprietors today are legally responsible for the effect of aircraft noise on the surrounding community. The Federal Government has yet to assume this liability. This being the case, we believe the Federal Government should move cautiously in undertaking an authority to direct proprietor actions while at the same time leaving liability with the proprietor.

A number of comments received indicated that many of the noise abatement actions which the proposal recommended fall into areas which are historically and legally outside the control of the airport proprietor. One airport proprietor remarked:

The paradox of the entire situation as being proposed is that in the absence of any airspace use plan, consistent and congruent with the airport operators' Airport Noise Abatement Plan, there can be no legal Airport Noise Abatement Plan. If you cannot insure to the public that you can confine the various noise levels within the boundary lines of the Noise Abatement Plan, you cannot then, at the local government level, substantiate or enforce land use controls of any configuration or type. Again, it should be obvious even to the novice that noise levels and patterns are going to be directly associated with the flight and path of the noise maker, the aircraft. The airport operator, consequently, under the proposed rulemaking, is confronted with being placed in the ridiculous position of establishing geographical boundaries for the confinement of noise levels to protect the public health and welfare when he has no legal capability to confine or control the noise to the designated area, and by the absence of such legal ability he invalidates the local police powers that are available to him.

These comments indicate, as pointed out in the 1976 FAA policy statement, that the control of airport noise is a complex issue with several parties sharing responsibility. A reasonable airport noise program must reflect the reality that noise abatement responsibilities are properly apportioned among Federal, state, and local authorities, as well as airport authorities according to the nature of their authority, and that progress is accomplished through incentives and technical support by the Federal Government.

While the FAA has the statutory responsibility with respect to flight procedures that may be appropriate within the immediate vicinity of the airport, the airport operator can propose preferential runway usage, traffic pattern configuration and other operational techniques to the FAA. Determination of appropriate flight procedures requires careful consideration by FAA since airspace management and aviation safety are involved. The airport owner should retain the initiative to develop local airport noise compatibility plans, subject, however, to review and concurrence by the FAA regarding those aspects of the plans concerning areas of Federal authority and interest.

As pointed out by other comments, state and local governments and planning agencies must retain the authority for land use planning and development, zoning, and housing regulation that will limit the uses of land near airports to purposes compatible with airport operations. The FAA agrees. However, the EPA proposal does not recognize zoning as an effective form of land use control. That position is not wholly consistent with § 16(a)(4) of the Airport and Airway Development Act of 1970, as amended, or the spirit of the ASNA Act which reflects local autonomy in the exercise of those matters.

One municipality expressed great concern over the timing of the proposed regulation and its interface with the Aviation Noise Abatement Policy issued by the Department of Transportation, the retrofit regulations, and noise legislative proposals then pending in Congress. The FAA agrees that there was some question regarding the timing of this rule when Notice No. 70-24 was submitted, since the voluntary program contained in the DOT/FAA Aviation Noise Abatement Policy had just been initiated. However, since that time, 45 airports have received grants for developing noise plans. In addition, the recently enacted ASNA Act requires the

promulgation of regulations establishing specific methodologies and units for use in measuring airport noise and noise impact, and identifying compatible land use around airports, while also providing for the voluntary submission for review and approval of specific elements of airport noise plans. That Act and, thus, this implementing regulation, do not alter the distribution of authority or responsibility or preempt local initiatives in noise control planning and implementation.

#### 4. Technical Considerations

The EPA proposal indicated that the Airport Noise Evaluation Process (ANEP) has the very important quality of providing for the display of the relative effectiveness of various noise abatement actions in a form which is understandable to both technical and nontechnical persons. The FAA disagrees. The methodology employed by the EPA to provide the display is itself very difficult to explain to persons without technical training. The ANEP methodology recommended by the EPA is based on the use of the Day/Night Average Sound Level ( $L_{dn}$ ) cumulative event noise unit system. The methodology is used to determine a series of indigenous noise impact areas. The stated objective of this concept is to determine the incremental extent and severity of aircraft noise above ambient noise and the effectiveness of noise impact reduction options. The EPA method included the use of the aircraft noise level ( $L_A$ ), community background noise level (LCB), and the population density of the study area. The use of "noise units" as a measure of impact (as defined in the proposal) is extremely complicated. That complexity reduces understanding of the relationship between specific causes of annoyance and effect of abatement options. The community background noise level is defined as the logarithmic summation of indigenous noise levels (LI) and contributions of specific residential sources (LORS), such as limited access highways, etc. The methods and procedures used in estimating the categories of community background noise levels appear weak and are not convincing. The total noise (LT) consists of the logarithmic summation of LCB and  $L_A$ . The EPA has, however, in explaining the use of ANEP said:

"EPA's ANEP serves to merge two professional fields (aircraft noise prediction and urban land use planning based on census/demographic data) of interest to develop an aircraft noise prediction which is presented in a land use oriented format. This process was specifically formulated to bring

together aircraft noise prediction and land use planning since solutions to the airport noise impact problems must reflect a balance of aviation and land use options. Therefore, considering the process includes both aviation noise, as well as, land use, it is not difficult to understand why some persons who have specialized in one or the other of these fields might view it as being 'complex.' As a matter of fact, EPA's ANEP has been illustrated to a number of private consulting firms, government agencies, and informed individuals in both the aviation noise and urban planning fields who have commented favorably on the feasibility of this approach. In addition, the methodology has been used by at least three consulting firms, two Federal agencies, and several individuals with no major problems. Perhaps much of the comment on the complexity of the ANEP would disappear if (a) its operations were explained, with examples, in an education setting and (b) its use becomes more widespread; EPA intends to pursue both of these courses."

The Acoustical Society of America did not, however, find the ANEP methodology as acceptable as the EPA did. They indicated:

"It would be feasible both to calculate and to monitor the day/night average sound level due to aircraft only, along the line surrounding an airport providing the boundary is within a few miles of the runway. But it would not be feasible for a boundary line many miles away. It is not at all evident that the noise along the airport boundary would necessarily be related to a 'community impact,' if people do not work or live along that boundary. The meaning of community impact boundary level is not really evident from the definition presently given. It would be impractical either to measure or to calculate the indigenous sound level, as defined in the proposed regulation because a major research (effort) would be required at each location . . ."

The Society concludes that the EPA goal of designing and developing a process which has the important objective of providing various noise abatement actions in a form which is understandable to both technical and nontechnical persons, has not been attained. The FAA agrees that the ANEP, as proposed, does little to improve the understanding of the methodology or the state-of-the-art. On the other hand, the FAA also agrees with the EPA that consideration of ambient noise levels is important in evaluating the true impact of noise from any particular source. Thus, the FAA plans to issue supplementary guidance material on the recommended techniques for considering ambient noise.

A simpler method can be more readily used, provide more flexibility, and be just as effective for airport noise compatibility planning. As described above, new Part 150 uses two of the

units proposed by the EPA: A-Weighted Sound Level ( $L_A$ ) as the single event maximum sound level unit system and Day-Night Sound Level ( $L_{dn}$ ) as the cumulative noise unit system. Further, it provides for the use of a computer-based mathematical program, such as the Integrated Noise Model (INM), for developing standardized noise maps and predicting noise impacts.

Using a program such as the INM,  $L_{dn}$  contours around an airport can be developed and the predicted noise impact assessed. The resulting noise map would help identify noncompatible land uses and provide a basis for developing a noise compatibility program. The detail of further noise analysis depends upon individual airport problems, local community needs, and any state or local government requirements. It is the intent of the FAA to allow the maximum flexibility in the approach to noise compatibility planning consistent with the ASNA Act, including the goals of confining, insofar as possible, severe aircraft noise exposure levels to the areas included within the airport boundary or over which the airport has a legal interest, of precluding development of noise sensitive areas around the airport, and of reducing substantially the number and extent of noise sensitive areas in the vicinity of airports that are subject to significant noise exposure.

On concern expressed by numerous persons was the timing of requirements contained in the proposal. One airport proprietor expressed his views as follows:

"Requiring the airport operator to identify airport noise level boundary lines within 120 days is wishful thinking on someone's part. Also, to produce a meaningful agreed upon Noise Abatement Plan (other than a paper exercise) within approximately twelve months is wishful thinking. It will take at least two and more likely three years, plus forced delays. The requirement of implementation shows a complete ignorance of local government police power, notwithstanding the fact that (up-dating) the average Airport Noise Abatement Plan every five years would put the airport operator in the position that he would hardly get through with one plan before he would have to start on its replacement."

The FAA agrees that the careful development of a noise map and a meaningful compatibility program can take a considerable amount of time which may vary depending on the size of the airport, the magnitude of the noise problem, the cooperative efforts of all local authorities, and other local factors. Therefore, a fixed schedule has not been specified but airport operators submitting a noise compatibility

program will be required to submit their own schedule for revising it, with supporting justification, for FAA approval.

As previously discussed, the ASNA Act specifies a voluntary system of planning while the EPA's recommendation called for a mandatory program under airport operating certificates. The goals of the EPA's recommendation can be achieved without mandatory actions if noise impacted, or potentially impacted, airports participate in the airport noise compatibility planning under Part 150. The FAA and the EPA urge that 40 to 60 of the major airports submit maps and programs, or at least indicate their intent to do so, during the first year following adoption of this interim rule. That level of activity would be indicative of the success of the ASNA Act in obtaining noise abatement planning where it is needed on a voluntary basis. It would also help provide the information base needed to determine if this interim rule should be continued as adopted or should be modified in some way.

In consideration of the foregoing, under section 811(c)(1) of the Federal Aviation Act of 1958 (49 U.S.C. 1431(c)(1)), as amended, the FAA has determined that it should adopt the EPA recommended regulation, as modified, to reflect, among other things, the requirements and spirit of Title I of the ASNA Act. The FAA has consulted with the EPA and the Secretary of Transportation concerning this decision as contemplated by § 811.

While the EPA indicated that it still prefers a mandatory program for developing and submitting noise exposure maps and noise compatibility programs, it acknowledges the potentially valuable contribution of the Part 150 program in reducing and controlling airport noise impact problems. The EPA supports the issuance of Part 150 as an interim rule to facilitate later modifications based on the initial experience with its use.

#### *B. ATA Petition For Rulemaking: Airport Noise Abatement Plans*

Docket No. 10691 was established to receive public comments on the petition for rulemaking submitted by the Air Transport Association published as Notice PR-70-0 (44 FR 52070; Nov. 5, 1979). The majority of 37 respondents to that notice opposed the ATA petition with several indicating that it could create more problems than it solved. Comments were received from governmental units, civil associations, businesses, and private citizens.

Most of the favorable comments revolved around a number of specific issues. A number of commenters thought that the proposed rule suggested by the ATA petition should not be limited to airports holding operating certificates under Part 139 (air carrier airports), but be extended to cover certain general aviation airports.

One commenter indicated that the effects of airport noise abatement regulations adopted on a local level had their most serious effect on the nonscheduled airline fleet. Therefore, he recommended that the petition be approved. Another, claiming that use restrictions at general aviation airports were due to political considerations, made the same request. A third commenter expressed the fear that local ordinances could force many general aviation airports out of business.

Without expressing any opinions as to the validity of the reasoning behind such expressions, the FAA does, nevertheless, agree with the goal of those commenters, which is the maintenance of a strong and viable national aviation system including adequate local airports for the Nation's 100,000 general aviation aircraft.

The program to be implemented in Part 150 of Title 14 is voluntary. Public Law 96-193, signed into law by the President in early 1980, required establishment of a voluntary program that would be available to air carrier airports, but said nothing regarding general aviation airports. Since the ASNA Act did nothing to limit that authority to specified air carrier airports, the FAA has determined to extend the voluntary program to "public use" nonair carrier airports, other than those that are used exclusively for helicopters, as discussed elsewhere in this preamble. The FAA recognizes that there are few nonair carrier airports with serious noise problems at this time. However, experience has shown it best to eliminate noise problems before they arise.

Many of those favoring the ATA proposal were troubled by the increasing number and variety of local restrictions to which they were subjected in the operation of their aircraft. The comments of Hughes Air Corporation, d/b/a Hughes Airwest, reflect this concern.

The Hughes' comment stated that where a proprietor adopts an operating rule, he cannot be expected to have necessarily assessed "the consequences of its rule on a national basis without (FAA) support and in the face of an inflamed citizenry." The commenter expressed dismay at the passive role of the FAA in the process.

Another commenter, the Air Line Pilots Association, described "randomly generated complexity brought about by untried local arrival and departure routings, climb and descent profiles, noise limitations, and curfews."

While the FAA does not agree with these characterizations, it has a responsibility, under the ASNA Act, to set national standards applicable to the measurement and evaluation of airport noise. That can best be done through the adoption of the new Part 150. Adoption of this part by the FAA will facilitate a more organized process for the early review of the impacts of proposed local actions on interstate and foreign commerce.

Those favoring the ATA petition pointed to what they regard as excessive litigation that may arise in cases of local control. Typical is the Hughes statement which notes that any rules perceived as onerous will most likely end up being the subject of litigation. That this will happen independent of a preliminary agency determination was troublesome to Hughes. However, the commenter did not have benefit of the ASNA Act at the time this comment was being prepared. Since the law now contemplates a prior review of interstate and foreign commerce issues for those actions proposed under Part 150 programs, that concern in large measure is alleviated under Part 150.

The Oregon Department of Environmental Quality viewed the same issue in a totally different light. Opposing the ATA petition, the commenter stated that the effect of the petition would be to shift the forum for analysis of constitutional questions with respect to abatement plans from the courts to the FAA. The Oregon DEQ indicated that the judicial branch is the more correct forum for the resolution of such disputes, and that protracted litigation results in alerting all affected parties to the nature of their responsibilities.

The Airport Operators Council International (AOCI) was troubled not by the choice of forum in which disputes would be resolved, but by the standard of judicial review that would be in effect in the chosen forum. AOCI stated that the burden of proof is currently on those challenging a proposed local action. The ATA petition, they argued, could restrict Federal Courts of Appeal by allowing them to determine only if the Administrator met due process requirements in ruling on a proposed action; thus, Federal court review of a proposal on its merits would be precluded.

In accordance with the ASNA Act, Part 150 adopts a program that requires review by the FAA but that does not preclude resort to the courts on any finally determined issue, because final decisions of the Administrator are subject to judicial review of the determination and the record of the supporting process and recommendations. That should meet the concern expressed by AOCI and others.

A most difficult area is that of Federal preemption in the field of aviation noise abatement. The ATA petition advocated preemption to the extent necessary to ensure that the FAA's partners in aircraft noise abatement—airport operators and state and local governments—do not interfere with the authority of the Federal Government (44 FR 52080-81).

Clearly, to date this area of interaction between airport operators and Federal, state and local Governments has been less defined by specific Federal actions than by court decisions. The theme of that lack of clarity was much repeated by commenters supportive of the ATA petition. The Chicago Association of Commerce and Industry, in its comments, notes the absence of "clearly defined Federal preemption." Writing that a variety of noise abatement plans at state and local levels may have serious detrimental effects on the national air transportation system, the commenter calls for FAA approval of plans imposing restrictions on aircraft operators. Hughes Air Corporation states that the Congressional mandate expressed in the language of the Airline Deregulation Act dictates preemption in this area. The New York State Department of Transportation refers to FAA review of airport noise abatement plans prior to their adoption as "an inescapable Federal responsibility."

Many of those opposing the ATA petition preferred to view the preemption question in terms of potential liability. Air California, for example, noted that, if Federal preemption is proper in the area of noise abatement plans, then it is not fair to free the Federal Government from liability and impose it on the local proprietors. In the words of Air California, "It seems obvious to us that rights and responsibilities must go hand in hand."

One private citizen wrote that a right of the locality is preempted when a national judgment, concerning what degree of service should be made available and what environmental destruction will be allowed, is substituted for the local judgment.

The FAA is cognizant of all of those arguments. Part 150 is intended to come to terms with them. It endeavors, within established limits, to leave a substantial degree of decisionmaking to the local airport proprietors/operators. Nevertheless, it recognizes the importance of a noise abatement policy with some degree of uniformity; thus § 150.15 of Part 150 gives the Administrator discretionary power in conducting the evaluation of a noise compatibility program and approving the programs in accordance with the ASNA Act. The process permits maximum consideration of both national and local interests.

The concerns of Air California, previously discussed, are repeated frequently by those opposing the ATA petition. The City of Long Beach, California, believed that the ATA program presents airport proprietors with a serious dilemma: "On the one hand [they are] exposed to liability and damages for airport noise, yet on the other hand, [their] authority to adopt effective noise abatement measures would be greatly hampered by a cumbersome administrative review procedure which has the effect of a national referendum." Those fears should be reduced under Part 150. The unwanted liability of local proprietors should not arise in the cases in which the proprietors participate in the voluntary program established by Part 150. The submission of noise exposure maps will not in itself subject an operator to potential liability. The incentive for participating in the program is the fact that potential suits are less likely to be filed after the submission of the noise exposure map. In fact, one provision in the ASNA Act (§ 108) precluded the use, as evidence, of any noise exposure maps and related information or the land uses identified as compatible and noncompatible. Section 107 grants immunity to airport operators participating in that program from damage claims of subsequent purchasers in the area, unless significant changes in specified airport operations occur after the map is published. Finally, under the ASNA Act, certain Part-150 participants are eligible for Federal grants to study alternatives to solve noise problems.

While some commenters favored the ATA proposal because there is a need for a uniform system of regulation, some opposed it because no national system of regulation can adequately deal with problems that are unique to a particular locality. The latter perception appeared to be grounded, in part, in a belief that the ATA proposal totally disregards

local interests and concerns. The Massachusetts Port Authority comment refers to the proposal as being "wrong on the facts, wrong on the law, and wrong as a matter of sound public policy." New York's Senate Transportation Committee goes beyond mere objection, to propose an alternative. That body proposes a program that requires airport proprietors to develop aircraft noise reduction programs, while supplying them with financial and technical assistance for that purpose.

Citing *British Airways v. Port Authority of NY and NJ*, 504 F.2d 1002 (2d Cir. 1977), the City of Newport Beach, California says that an airport operator's knowledge of local conditions and his ability to acquire necessary property and easements makes him the proper force for dealing with airport noise.

Part 150 attempts to reconcile legitimate local and Federal interests that are illustrated by the commenters. By encouraging airport operators to construct and implement noise abatement programs, the ASNA Act recognizes the special knowledge that a local proprietor has about particular situations in the community. But in retaining Federal control of the process in the requirement for review and approval or disapproval of programs by the FAA, the ASNA Act recognizes that any plan is but a part of a whole U.S. national air transportation system. The FAA, under the ASNA Act, is responsible for considering that system's independent parts and reviewing them as a whole.

The FAA also notes that if it were to adopt the ATA approach to airport control, it would shift the focus from the local to national scene which would have the unfortunate effect of discouraging air carriers and other aircraft operators from fulfilling their responsibilities of working cooperatively with airport operators at the local level as envisioned by the 1976 DOT/FAA Aviation Noise Abatement Policy and the ASNA Act. It would also tend to heighten the conflict between local and national authority by effectively "readjudicating" the local efforts at the Federal level in formal proceedings. The Federal bureaucracy would have expanded to staff the necessary program, including the employment of potentially a significant number of administrative law judges or other hearing officers to conduct and preside over the proceedings. Such a process for evaluating airport noise compatibility programs is not necessary

to ensure an adequate review and determination on the matters presented.

In consideration of the foregoing and the effect of this amendment, the FAA has determined, in accordance with Part 11 of the Federal Aviation Regulations, that it should deny the petition for rulemaking from the Air Transportation Association to the extent that it is inconsistent with this amendment.

#### Section-by-Section Analysis of the Rule

The interim rule establishing the FAA's "Airport Noise Control and Abatement Planning" program is prescribed in a new Part 150 to the Federal Aviation Regulations (14 CFR Part 150). The new part consists of three subparts and two technical appendixes described as follows:

##### Subpart A—General Provisions

Section 150.1 is entitled "Scope and purpose" and contains the general description of the new part, including the implementation of statutory requirements and the FAA's process for receiving and evaluating submissions to it from airport operators.

The applicability of new Part 150 is specified in § 150.3. As prescribed in the ASNA Act, it covers the airport noise control and abatement plans of operators of certificated, air carrier airports whose terminal development projects are eligible for specific grant-in-aid funding. It does not, at this time, cover airports used exclusively by helicopters (heliports). Further evaluation concerning the noise implications of those heliports on the community is needed before the FAA can, with confidence, provide the technical and other assistance to the operators of those airports. Comments, information, and suggestions are specifically invited on this matter excluded in the interim rule. If appropriate, heliports not operated in conjunction with airports for other aircraft may be added to Part 150 at a later date. In addition, the FAA is extending a similar opportunity for FAA technical assistance, evaluation, and determinations to operators of most other public use airports who comply with the requirements of Part 150. The FAA will receive and evaluate submissions of noise programs from any of the covered airports in order to provide the benefits of the planning, evaluation, and FAA advice to those airport operators wishing to participate. By so doing, the rule covers approximately 2,800 airports rather than only the 720 or so airports covered by the ASNA Act. While priority of handling must be accorded those covered by that Act, the FAA should be

able to provide prompt and comparable attention to all operators of Part 150 airports. However, submissions for those additional public use airports are not accorded, by the ASNA Act, the legal benefits granted eligible air carrier airports. The ASNA Act does not cover those airports.

Part 150 implements Title I of the ASNA Act by providing for airport noise compatibility planning, including land use programs, necessary to the purposes of those provisions. That Act does not in any way interfere with established prerogatives of State and local governments concerning land use and related noise compatibility actions and responsibilities. Accordingly, approvals and disapprovals of programs submitted to the FAA under Part 150 do not constitute a Federal determination that the use of land covered by the program is acceptable or unacceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses remains with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined noise assessment procedures or land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.

Section 150.5 specifies the limitations of Part 150. It states that the FAA makes no determination under Part 150 on the acceptability of particular land uses under Federal, State, or local law in any specific airport environments. The FAA approval of a proposed airport noise compatibility program, as required by § 104(b), relates to the program as a whole, when the measures undertaken by the program "are reasonably consistent with obtaining the goal of reducing existing noncompatible uses and preventing the introduction of additional noncompatible uses." Those approvals also do not determine that all measures covered by the program are eligible for Federal grant-in-aid funding. Neither do those approvals confer authority for, or direct, any implementing action. If subsequent Federal actions are necessary to implementation of a program, a specific request for those actions will be required. During review of any proposed action requested, the appropriate environmental assessment of that action will be made.

Section 150.7 prescribes the definitions of certain terms used in Part 150. Other special usages of terms are provided in those appendixes in which the term appears.

The word "airport" is defined to cover any area of land or water that is normally used or intended to be used for the landing and takeoff of aircraft (the Part 1 definition generally applicable in the FARs), other than those used exclusively by helicopters, if that airport—

- (1) Has a valid operating certificate issued under § 612 of the FAA Act of 1958, as amended (currently Part 139);
- (2) Is eligible for grant-in-aid funding of terminal costs under § 20(b) of the Airport and Airway Development Act (currently FAR Part 152) whether or not it is served by certificated air carriers; or
- (3) Is open to use by the general public, without prior authorization of the airport operator being necessary to use the airport.

A Part 150 "airport operator" is that person who holds a valid airport operating certificate issued under § 612 of the FA Act for that airport or, for uncertificated airports, the person who has the operational control of, and responsibility for, an airport covered by Part 150.

Section 103 of the ASNA Act contains the provisions for airport operators to voluntarily submit "noise exposure maps" to the Administrator after rules become effective that designate the necessary systems for measuring airport noise and determining the exposure of individuals to that noise. The implementing description and content requirements for those maps are prescribed as a definition under § 150.7 and indicate the required depictions of the airport and surrounding areas, including noise exposure contours, political subdivision boundaries, and land use areas not normally considered compatible with the airport noise exposure levels outdoors at those locations. The definition references Appendix A of Part 150 which describes the required methodologies and procedures for developing noise exposure maps. It should be noted that those maps include an accompanying description of the projected aircraft operations at that airport during 1985 and, if submitted after 1982, during the fifth year after submission of the map, together with the ways, if any, in which those operations will affect the map.

For purposes of Part 150 noise planning, "compatible land use" means the use of an area of land that is identified in accordance with the regulatory implementation of § 103 of the ASNA Act as being "normally compatible" with the outdoor noise environment at that location. Various land use categories are thereby associated with the outdoor, yearly day-

night average sound levels that have been found not to routinely interfere with the activities connected with that or a similar use of the land.

Section 104 of the ASNA Act prescribes the general nature and content requirements of an airport "noise compatibility program" that an airport operator may develop and submit to the Administrator if an acceptable noise exposure map has been submitted. Section 150.7 contains the definitional aspects of those provisions of the ASNA Act and references the methodologies and procedures for developing those programs specified under Appendix B of Part 150.

Several technical noise terms are defined in § 150.7 because those terms are essential to airport noise measurements and noise compatibility planning. The terms "average sound level," "day-night average sound level," "noise level reduction," "sound exposure level," and "yearly day-night average sound level" are defined in accordance with national and international acoustical definitions and are being provided in the rule to ensure proper understanding and application of those terms in Part 150 airport noise compatibility planning.

The regulatory provisions are simplified by eliminating repetitive use of the terms "Director, Office of Environment and Energy" and "Regional Director of the FAA region having jurisdiction over the area in which the airport is located"; they appear in the rules as "Director" and "Regional Director," respectively.

Section 150.9 contains the designation of standardized noise systems prescribed under § 102 of the ASNA Act. Those systems apply under Part 150 and include FAA approved equivalents. An equivalency determination may be made to reflect the existence of unusual conditions at a particular airport that would result in unacceptable distortion or frustration of the purposes of Part 150 if the designated system features were strictly applied and equivalent results can be obtained through other means. The fundamental system of noise measurement is the A-weighted sound pressure level ( $L_A$ ) in units of decibels (dBA). Exposure of individuals to airport noise is evaluated in terms of "yearly day-night average sound level ( $L_{dn}$ )."

Normally compatible land uses for various noise exposure levels are established under Appendix A. Determinations of what land usage applies must be based on professional planning criteria and procedures utilizing the full range of methods available to local authorities, including

master planning, land use planning, zoning, and building and site designing, as appropriate. When more than one current or future use is permitted, those determinations must reflect the use most adversely affected by noise.

#### *Subpart B—Development of Noise Exposure Maps and Proposed Noise Compatibility Programs*

Subpart B of Part 150 prescribes the substantive and procedural requirements for airport operators wishing to develop original or revised noise exposure maps (and the related descriptions of projected airport operations) and proposed noise compatibility programs. It also describes the initial response of the Director, Office of Environment and Energy, in acknowledging receipt of the submission and in publishing, for comment, notice of receipt in the Federal Register.

Noise exposure maps and the related descriptions under § 103 of the ASNA Act are covered by § 150.21. It specifies that a Part 150 airport operator may, after following the prescribed public procedures and consultations with public and planning agencies, submit to the FAA its noise exposure maps and related descriptions. Upon receipt, if the submissions are found to satisfy the applicable requirements, they are acknowledged as acceptable and are reflected in a notice of receipt published in the Federal Register. Section 150.21 also indicates the circumstances under which an acceptable map must be revised because of changes in airport operations that might create any substantial, new noncompatible land uses.

Section 150.23 governs Part 150 noise compatibility programs and their revisions, pursuant to portions of § 104 of the ASNA Act. Any Part 150 airport operator, who has submitted an acceptable noise exposure map, may submit to the FAA a "noise compatibility program." While a program may be submitted at the same time as a map, it must be developed in accordance with Appendix B of Part 150 and in consultation with the appropriate officials of public and planning agencies and aircraft operators using the airport. Further, in accordance with the requirement of § 150.23(c), before submitting a program, the airport operator is required to afford interested persons an adequate opportunity to review and critique the program and to consider and respond to any views, data, and comments received. A summary of that public procedure and disposition of public input must be submitted as part of the program. An acceptable means of compliance for

public involvement in developing a program is contained in the Office of Management and Budget's OMB Circular A-95. That process may be required by the terms of Federal grant-in-aid or other assistance in developing a program.

*Subpart C—Evaluation and Determination of Effects of Noise Compatibility Programs*

In addition to authorizing the development and submission of noise compatibility programs, § 104(b) of the ASNA Act directs the Administrator (acting for the Secretary pursuant to delegation) to approve or disapprove each program submitted under the applicable requirements of § 104(a).

Subpart C of Part 150 describes the procedure followed and general criteria applied by the FAA to determine the pertinent effects of proposed noise compatibility programs and whether the proposed program should be approved or disapproved. It also specifies the separate process that may be followed for those portions of a program involving the use of flight procedures for noise control or abatement purposes.

Section 150.31 prescribes the procedure and initial response of the FAA when it receives (from a Part 150 airport operator) a noise compatibility program. The FAA's Director, Office of Environment and Energy, conducts a preliminary review of the submission. Based on that review and other available information, the Director acknowledges to the airport operator receipt of the program and publishes, for public comment, in the Federal Register a notice of receipt of the program. The acknowledgment and notice identify the airport involved, and the date of receipt of the program. They indicate that the program is available in the offices of the Director, the Regional Director (of the appropriate region), and the airport operator and that other the submission satisfies the applicable requirements and will be evaluated and a determination issued or that it is not acceptable as presented, and is "disapproved" and returned to the airport operator for further development. The acknowledgment and notice indicate to each State whether the program includes the use of new or modified flight procedures to control aircraft for noise control (or abatement) purposes and, if so, whether a separate evaluation of those procedures might be necessary. The acknowledgment and notice will also indicate that any program could include features of a nature that, if implemented, might reduce the level of aviation safety or create an undue burden on interstate or

foreign commerce (including unjust discrimination), or might not be reasonably consistent with obtaining the noise compatibility objectives; thus, further evaluation may be necessary to determine whether the program should be approved or disapproved. If no further evaluation is necessary, the acknowledgment may include the appropriate approval or disapproval.

Section 150.33 describes the process for additional evaluation of the programs. The inquiry is directed towards the factors pertinent to approvals and disapprovals. Under the ASNA Act, proposed programs must be approved (except in those aspects relating to flight procedures) if the program measures would not create an undue burden on interstate and foreign commerce and would be reasonably consistent with obtaining the goal of reducing existing, noncompatible uses and preventing the introduction of additional noncompatible uses. In addition, the program must provide for its timely revision, as required by the ASNA Act. Those aspects of a program involving the use of flight procedures are evaluated in light of the full range of the Administrator's authority and responsibilities under the Federal Aviation Act of 1958, as amended.

In conducting the evaluation, the Director may, to the extent considered necessary, confer with other officials, persons, and agencies which may have responsibilities or information pertinent to the issues. In that connection, the Director may convene an informal meeting between personnel of the FAA and other Federal agencies, the airport operator, and other persons involved in the development or implementation of the program. With regard to flight procedure measures, the Director requests the head of the responsible office or service of the FAA to explore the objectives of the program and the measures and any alternative measures for achieving them. That evaluation includes the examination of the range of available alternatives that would eliminate the reasons, if any, for disapproving the program as submitted.

An airport operator may, at any time before approval or disapproval of a program withdraw or modify the program. If the airport operator, in writing, withdraws or modifies the program (not involving flight procedures) or indicates, in writing, during the 180-day review period the intention to modify the program, the FAA terminates the evaluation and the "clock stops" with respect to the 180-day review period. A new evaluation is begun upon receipt of a modified

program and a new 180-day period applies. The FAA will not evaluate more than one program for a given airport until any previously submitted program for that airport is withdrawn or modified, or a determination on it is issued.

Upon completion of the evaluation, the Director prepares, subject to approval of the Chief Counsel, a recommended determination for the Administrator's signature, approving or disapproving the program, together with the reasons for the determination, including any terms or conditions that should attend the determination.

Section 150.55 governs the issuance of determinations on noise compatibility programs. Based on the recommended determination and other available information, the Administrator issues a determination approving or disapproving the particular program. As provided by the ASNA Act, except for flight procedure portions of a program, the determination is issued within 180 days after receiving it or it may be considered approved. As provided by the ASNA Act, a determination on the use of flight procedures for noise purposes may be issued either in connection with other portions of the program or separately. Due to the variety of flight procedure matters that might be involved, and their complexity, a more specific time for determinations cannot be specified in the rule. In no case may approval of flight procedures be implied in the absence of the Administrator's express approval of them.

Section 150.55 also reflects the statutory and constitutional criteria for approving noise compatibility programs—that is, the Administrator finds that measures to be implemented would not create an undue burden on interstate or foreign commerce (including unjust discrimination) and are reasonably consistent with achieving the goals of reducing existing noncompatible land uses around the airport and of preventing the introduction of additional noncompatible land uses. Consistent with § 104(b) of the ASNA Act, a program may not be approved unless it provides for its revision whenever necessary when a revised noise exposure map must be submitted under § 150.21(d). The ASNA Act does not diminish or otherwise affect the Administrator's authority and responsibilities under the FA Act.

Determinations on the flight procedure aspects of a program are not governed by the provisions of the ASNA Act except in directing the Administrator to make them. Thus, the Administrator, in

accordance with the authority and responsibilities under the various statutes, must decide on a case-by-case basis whether the flight procedure measures would have any significantly adverse effect on any program, standard, or duty established pursuant to law. Accordingly, consideration will be given to the effects of the recommended flight procedure measures within the period covered by the program, including whether they would be consistent with flight safety, the efficient use and management of the navigable airspace and the Air Traffic Control system, and providing the requisite level of protection for aircraft occupants, and persons and property on the ground.

Part 150 determinations become effective upon issuance and remain in effect until the program is required to be revised or a determination is superseded by a determination on a proposed revision to the program. A determination may be sooner rescinded or modified for cause with at least 30 days written notice to the airport operators of the Administrator's intention to take that action for the reasons stated in the notice. During the 30-day period, the operator may submit for consideration any reasons or circumstances why the determination should not be rescinded or modified. Thereafter, the Administrator either rescinds or modifies the determination consistent with the notice of intent.

The FAA has reviewed applicable environmental assessment procedures, in the light of § 104(b) of the ASNA Act, to determine whether such assessment should be conducted before noise compatibility programs may be approved or disapproved under that section. It is concluded that such assessment is not required. Section 104(b) provides that a noise compatibility program becomes approved by operation of law unless disapproved within 180 days. There is no exception to this automatic approval. On the other hand, applicable procedures for reviewing the environmental impacts of Federal actions require that action be delayed until the required review is complete. It is clear that the Congress intended § 104(b) approvals to exist in all cases in which the governmental review process exceeds 180 days from the date of submission. The Act also removed discretion to disapprove a noise compatibility program if the conditions in § 104(b) are met. However, it did not affect the Administrator's responsibilities or authority under the FA Act. Thus, § 104(b) states that the

Secretary "shall approve" each program that meets the applicable conditions. At best, the 180-day period would permit cursory review of the environmental impacts that a noise compatibility program could have on regional and local planning and land uses. And, once that assessment were prepared, it could not be used as a decision document once the conditions are met because approval is required by law. A primary purpose of environmental review requirements is to provide a framework for subsequent decision making. If the conditions in § 104(b) are not met, even delaying disapproval in order to assess the environmental impacts of a disapproval would result in approval by default (by operation of law).

Furthermore, environmental assessment, leading to a finding of no significant impact or to an environmental impact statement, will be conducted where required by applicable procedures prior to taking any Federal implementing action, including making any grants under § 104(c)(1) of the ASNA Act to carry out all or part of any program not disapproved under § 104(b). The making of those grants is discretionary. Approval of a noise compatibility program does not "trigger" a commitment to fund, or to take other Federal actions, to implement that program. Finally, much of the public disclosure objective of applicable environmental review procedures implementing the National Environmental Policy Act of 1969 is afforded to the public by § 104(a) of the ASNA Act. That section requires consultation with potentially affected public agencies and planning agencies before any noise compatibility program is submitted to the FAA for review.

For all of these reasons, the FAA has determined that approval of noise compatibility programs (by specific approval or by inaction) and disapproval of those programs, under § 140(b), are "categorical exclusions" contemplated by FAA guidelines and procedures for the review of environmental impacts. This categorical exclusion will be added to the applicable FAA Order when it is next revised.

#### Appendix A—Noise Exposure Map Development

Appendix A to Part 150 contains the technical description and standards constituting the methodology for developing acceptable airport noise exposure maps. That methodology utilizes the system of measuring noise at airports ( $L_{dn}$ ) designated under § 150.9(a) for which there is a highly reliable relationship between projected noise

exposure and surveyed reactions of people. The system for determining the exposure of individuals resulting from the operation of an airport, designated under § 150.9(b), is also incorporated into the methodology for developing noise exposure maps. That system accounts for noise intensity, duration, frequency, and time of occurrence. Appendix A also contains the list of land uses identified by the Administrator as "normally compatible" with the various exposures of individuals to noise. Those provisions reflect the requirements of § 102 of the ASNA Act.

Section A150.101 prescribes the content requirements for noise exposure maps, including depiction of at least the 65, 70, and 75  $L_{dn}$  noise contours around the airport and identification of the land uses within those contours that are not listed among the compatible land uses (on Table 2) for those noise levels. ( $L_{dn}$  noise contours above  $L_{dn} 75$  need not be shown on the map even though compatibility of land uses at those levels is provided under Table 2.) At airports with little or no air carrier activity, it may be desirable to also depict the 55  $L_{dn}$  or 60  $L_{dn}$  noise contour. Other specific information is required to identify political subdivisions having jurisdiction over land uses in the area and other pertinent details. It also prescribes the general requirements for the description of aircraft operation at the airport projected for 1985 (and, if submitted after 1982, the fifth year after submission of the map), and the ways, if any, those operations will affect the noise exposure map.

As previously noted, Appendix A, Table 2, identifies the land uses which are normally compatible with the various exposure levels of individuals to noise. Under five general categories, the classifications of land uses can be matched with the various noise levels (yearly day-night averages and levels ( $L_{dn}$ ) in units of decibels) to determine whether they are normally compatible. It also indicates the amount of "noise level reduction" (outdoor levels to indoor levels) that must be achieved through noise attenuation measures in the design and construction of the structure to accommodate the specified indoor activity. Those values are indicated for those uses that are generally compatible but for which indoor levels must be reduced by the specified amount in order to be considered normally compatible for purpose of Part 150.

Where the community determines that existing residential uses must be continued or new residential uses

allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) through the use of sound attenuation materials should be incorporated into building codes. Normal construction can be expected to provide an NLR of about 20 dB, thus, the reduction requirements are often stated as 5, 10, or 15dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, it should be noted that the NLR criteria will not eliminate outdoor noise problems. It is FAA policy to discourage residential use, particularly new residential development, within the 65  $L_{dn}$  contour. The absence of viable alternative development options should be determined, and an evaluation indicating that a demonstrated community need for residential use would not met if development were prohibited in these zones should be conducted, prior to a community's allowing new development within the 65  $L_{dn}$ .

The use of an FAA approved computer prediction program, such as the FAA's Integrated Noise Model, is required under § A150.3. Approval of a program indicates its capability to produce the required results from the input of standardized technical information about the airport, its operations, and environs. Public availability to an approved computer program assures the opportunity for those interested to substantiate the results.

Section A150.105 requires that, with the submission of noise exposure maps, the airport operator identify and depict the geographic boundaries of each public and planning agency within the 65  $L_{dn}$  contour and describe the land use planning and control authority either vested in each agency or available under current or prospective legal authorization.

The mathematical methodology required to compute the necessary sound levels based on airport noise measurements is prescribed under §§ A150.201 through A150.205. Those provisions provide the technical description of the formulas, symbology, and processes for computing average sound levels, day-night average sound levels, and sound exposure levels. As appropriate, those sound levels are applied in developing noise exposure maps (and related descriptions of projected 1985 and later airport operations) and airport noise compatibility programs under Part 150.

#### Appendix B—Airport Noise Compatibility Program Development

Appendix B to Part 150 prescribes the content and technical methodology for developing airport noise compatibility programs. Those programs set forth the specific measures the airport operator (or other person or agency responsible) has taken, or proposes to take, in light of the noise exposure map for that airport, to reduce existing noncompatible land uses and to prevent the introduction of additional noncompatible uses.

The purpose of an airport noise compatibility program, as stated under § B150.1, is to identify for implementation the measures available in achieving the optimal accommodation of both the airport and community activities around the airport consistent with safety, economic, and environmental considerations that apply.

Section B150.3 indicates the need for an accurate and complete noise exposure map as the basis for developing a responsive airport noise compatibility program. Based on that map, the airport operator may evaluate the possible noise control and abatement measures. The objectives of those measures are reflected in § B150.5. The analysis of alternative measures is conducted in accordance with § B150.7 which helps to identify those measures and the factors that should be considered in developing the program and the supporting documentation required to be submitted to the FAA under § 150.23.

#### Effective Date

Section 102 of the ASNA Act requires the FAA to adopt by regulation, not later than February 28, 1981, three specific things—(1) a single, highly reliable system of measuring airport noise, (2) a single system for determining the noise exposure of individuals from airport operations; and (3) identification of land uses which are normally compatible with various levels of exposure of individuals to noise. Section 103 of the ASNA Act authorizes any airport operator to submit to the FAA, after the effective date of these regulations, a noise exposure map and, thereafter, a noise compatibility program for approval. Virtually every topic and issue involved in this action was covered in Notice No. 70-24 and was the subject of public hearing and comment. However, the statutory implementation dates did not provide adequate time to complete the required consultations and to also develop and propose the resulting provisions for further, meaningful public discussion after enactment of the ASNA

Act. Accordingly, I find that further notice and public procedure before adopting interim rules is impracticable and unnecessary. Further, airport operators and other interested persons must be provided the noise measurement systems and the identification of "normally compatible land uses" to develop and submit noise exposure maps based on them. The FAA must also establish at least a tentative, interim administrative process for receiving those maps and for evaluating and determining whether to approve or disapprove noise compatibility programs that may be submitted soon after, or with, noise exposure maps after February 28, 1981. That process should be available to the public as far in advance of those potential submissions as possible to ensure that they are developed and prepared with the knowledge of the procedure, standards, and criteria under which they will be processed and evaluated. The FAA has concluded that a comprehensive regulatory provision, including the necessary procedural and substantive rules, is the most effective means to establish the required program, even though a major portion of the regulation concerns the FAA's internal process and management of that program. Since that program as an interim rule should be in place before the statutory implementation date, I find that notice and public procedure on that portion of the interim rule is impracticable and unnecessary. I further find that, for the reasons stated, good cause exists for making this amendment effective in less than 30 days after its publication in the Federal Register.

As previously discussed, this amendment is an interim rule and, based on early, first-year experience with it and on commenters' views and suggestions on the interim rule, the FAA will consider any necessary changes to it before adopting the final rule.

#### Denial of Petition for Rulemaking and Adoption of Amendment

Accordingly, the Federal Aviation Administration hereby takes the following actions:

(1) Pursuant to the provisions of § 11.51 of Part 11 of the Federal Aviation Regulations (14 CFR Part 11), I find that, in light of this amendment, further rulemaking proceedings on the petition for rulemaking of the Air Transport Association of America, dated January 10, 1979 (Petition Notice No. FR-79-9; 44 FR 52076; September 6, 1979), is not necessary or justified. Thus, to the extent the rule requested by petitioner is inconsistent with the amendment issued as part of this action, the petition of the

Air Transport Association of America is hereby denied.

(2) In response to the U.S. Environmental Protection Agency recommendation for rulemaking contained in Notice No. 76-24 (41 FR 51522; November 22, 1976) and, in accordance with Title I of the Aviation Safety and Noise Abatement Act of 1970 (Pub. L. 90-193; 84 Stat. 50; February 18, 1980) pursuant to 49 CFR 1.47(M), Subchapter I of the Federal Aviation Regulations (14 CFR Chapter I, Subchapter I) is amended, effective February 28, 1981, by adding a new Part 150 to read as follows:

## PART 150—AIRPORT NOISE COMPATIBILITY PLANNING

### Subpart A—General Provisions

#### Sec.

- 150.1 Scope and purpose.
- 150.3 Applicability.
- 150.5 Limitations of this part.
- 150.7 Definitions.
- 150.9 Designation of noise systems.
- 150.11 Incorporations by reference.

### Subpart B—Submission of Noise Exposure Maps and Noise Compatibility Programs

- 150.21 Noise exposure maps and descriptions of projected operations.
- 150.23 Noise compatibility programs.

### Subpart C—Evaluations and Determinations of Effects of Noise Compatibility Programs

- 150.31 Preliminary review; acknowledgments.
- 150.33 Evaluation of programs.
- 150.35 Determinations on program; effectivity.

#### Appendix A—Noise Exposure Maps.

#### Appendix B—Noise Compatibility Programs.

Authority: Secs. 301(a), 307, 313(a), 601, and 611, Federal Aviation Act of 1958, as amended (49 U.S.C. 1341(a), 1340, 1354(a), 1421 and 1431); sec. 9(c), Department of Transportation Act (49 U.S.C. 1053(c)); secs. 101, 102, 103(a), and 104(a) and (b), Aviation Safety and Noise Abatement Act of 1970 (49 U.S.C. 2101, 2102, 2103(a), 2104(a) and (b)); and 49 CFR 1.47(m).

## PART 150—AIRPORT NOISE COMPATIBILITY PLANNING

### Subpart A—General Provisions

#### § 150.1 Scope and purpose.

This part prescribes the procedures, standards, and methodology governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs, including the process for evaluating and approving or disapproving those programs. It prescribes single systems for—(a) measuring noise at airports and surrounding areas that generally provides a highly reliable relationship between projected noise exposure and

surveyed reaction of people to noise; and (b) determining exposure of individuals to noise that results from the operations of an airport. This part also identifies those land uses which are normally compatible with various levels of exposure to noise by individuals. It provides technical assistance to airport operators, in conjunction with other local, State, and Federal authorities, to prepare and execute appropriate noise compatibility planning and implementation programs.

#### § 150.3 Applicability.

This part applies to the airport noise compatibility planning activities of the operators of specified airports not used exclusively by helicopters, including air carrier airports certificated under § 612 of the Federal Aviation Act of 1958, as amended; airports whose development projects are eligible for terminal development costs under § 20(b) of the Airport and Airway Development Act of 1970; and public use airports, as prescribed under § 150.7 of this part.

#### § 150.5 Limitations of this part.

(a) Pursuant to 49 U.S.C. 2101 et seq., this part provides for airport noise compatibility planning and land use programs necessary to the purposes of those provisions. No determination is made, under this part, that it or any approval or disapproval, in whole or part, of any map or program submitted under this part is, or should constitute, the use of the land which is acceptable or unacceptable for that land under Federal, State, or local law.

(b) Approval of a noise compatibility program under this part neither represents a commitment by the FAA to support or financially assist in the implementation of the program, nor does it determine that all measures covered by the program are eligible for grant-in-aid funding from the FAA.

(c) Approval of a noise compatibility program under this part does not direct any implementing action. Requests for subsequent Federal actions to implement specific noise compatibility measures may be required, and, if appropriate, FAA review of the request will include an environmental assessment of the proposed action, pursuant to the National Environmental Policy Act (42 U.S.C. 432 et seq.) and applicable regulations, directives, and guidelines.

#### § 150.7 Definitions.

As used in this part, unless the context requires otherwise, the following terms have the following meanings:

"Airport" means any airport, as defined under Part 1 of this chapter, not used exclusively by helicopters, which—(1) is operated under a valid operating certificate issued under § 612 of the Federal Aviation Act of 1958, as amended; (2) is eligible for grant-in-aid funding of terminal development costs under § 20(b) of the Airports and Airway Development Acts; or (3) is open to the general public without prior authorization of the airport operator being necessary to use the airport.

"Airport noise compatibility program" and "program" mean that program reflected in documents (and revised documents) developed in accordance with Appendix B of this part, including the measures proposed or taken by the airport operator to reduce existing noncompatible land uses and to prevent the introduction of additional noncompatible land uses within the area.

"Airport operator" means any person holding a valid operating certificate issued under this chapter for an airport under this part, or, if none, the person having the operational control and responsibility of an airport covered by this part.

"Average sound level" means the level, in decibels, of the mean-square, A-weighted sound pressure during a specified period, with reference to the square of the standard reference sound pressure of 20 micropascals.

"Compatible land use" means the use of land that is identified under this part as normally compatible with the outdoor noise environment (or an adequately attenuated noise level reduction for any indoor activities involved) at the location because the yearly day-night average sound level is at or below that identified for that or similar use under Appendix A (Table 2) of this part.

"Day-night average sound level" means the 24-hour average sound level, in decibels, for the period from midnight to midnight, obtained after the addition of ten decibels to sound levels for the periods between midnight and 7 A.M. and between 10 P.M. and midnight, local time.

"Director" means the FAA, Director, Office of Environment and Energy.

"Flight procedures" means any requirements, limitations, or other actions affecting the operation of aircraft in the air or on the ground.

"Noise exposure map" means a scaled, geographic, and topographic depiction of an airport, its noise contours, and surrounding area developed in accordance with § A150.101 of Appendix A of this part, including the required descriptions of projected aircraft operations at that

airport during 1985 and, if submitted after 1982, during the fifth calendar year beginning after submission of the map, together with the ways, if any, those operations for each of those years will affect the map (including noise contours and the projected land uses).

"Noise level reduction" (NLR) means the amount of noise level reduction ( $L_{A}$ ) achieved through incorporation of noise attenuation (between outdoor and indoor levels) in the design and construction of a structure.

"Noncompatible land use" means the use of land that is not identified under this part as normally compatible with the outdoor noise environment (or an adequately attenuated noise reduction level for the indoor activities involved at the location) because the yearly day-night average sound level is above that identified for that or similar use under Appendix A (Table 1) of this part.

"Regional Director" means the Director of the FAA Region having jurisdiction over the area in which an airport covered by this part is located.

"Sound exposure level" means the level, in decibels, of the time integral of squared A-weighted sound pressure during a specified period or event, with reference to the square of the standard reference sound pressure of 20 micropascals and a duration of one second.

"Yearly day-night average sound level" ( $L_{dn}$ ) means the 365-day average, in decibels, day-night average sound level.

#### § 150.9 Designation of noise systems.

For purposes of this part, the following designations apply:

(a) The noise at an airport and surrounding areas covered by a noise exposure map must be measured in A-weighted sound pressure level ( $L_{A}$ ) in units of decibels (dBA) in accordance with the specifications and methods prescribed under Appendix A of this part, or an FAA approved equivalent.

(b) The exposure of individuals to noise resulting from the operation of an airport must be established in terms of yearly day-night average sound level ( $L_{dn}$ ) calculated in accordance with the specifications and methods prescribed under Appendix A of this part, or an FAA approved equivalent.

(c) Uses of land which are normally compatible or noncompatible with various noise exposure levels to individuals around airports must be identified in accordance with the criteria prescribed under Appendix A of this part, or an FAA approved equivalent. Determination of land use must be based on professional planning criteria and procedures utilizing comprehensive,

or master, land use planning, zoning, and building and site designing, as appropriate. If more than one current or future land use is permissible, determination of compatibility must be based on that use most adversely affected by noise.

#### § 150.11 Incorporations by reference.

(a) *General.* This part prescribes certain standards and procedures which are not set forth in full text in the rule. Those standards and procedures are hereby incorporated and are approved for incorporation by reference by the Director of the Federal Register under 5 U.S.C. § 552(a) and 1 CFR Part 51.

(b) *Changes to incorporated matter.* Incorporated matter which is subject to subsequent change is incorporated by reference according to the specific reference and to the identification statement. Adoption of any subsequent change in incorporated matter that affects compliance with standards and procedures is made under 14 CFR Part 11 and 1 CFR Part 51.

(c) *Identification statement.* The complete title or description which identifies each published matter incorporated by reference in this part is as follows:

*International Electrotechnical Commission (IEC) Publication No. 170, entitled "Precision Sound Level Meters," dated 1973.*

(d) *Availability for purchase.* Published material incorporated by reference in this part may be purchased at the price established by the publisher or distributor at the following mailing addresses:

#### IEC Publications

(1) The Bureau Central de la Commission Electrotechnique, Internationale, 1, rue de Varembe, Geneva, Switzerland.

(2) American National Standards Institute, 1430 Broadway, New York, NY 10018.

(c) *Availability for inspection.* A copy of each publication incorporated by reference in this part is available for public inspection at the following locations:

(1) FAA Office of the Chief Counsel, Rules Docket, Room 918, Federal Aviation Administration Headquarters Building, 800 Independence Avenue, SW., Washington, DC 20591.

(2) Department of Transportation, Branch Library, Room 930, Federal Aviation Administration Headquarters Building, 800 Independence Avenue, SW., Washington, DC 20591.

(3) The respective Regional Offices of the Federal Aviation Administration as follows:

(i) New England Regional Office, 12 New England Executive Park, Burlington, Massachusetts.

(ii) Eastern Regional Office, Federal Building, John F. Kennedy (JFK) International Airport, Jamaica, New York.

(iii) Southern Regional Office, 3400 Normanberry Street, East Point, Georgia.

(iv) Great Lakes Regional Office, 2300 East Devon, Des Plaines, Illinois.

(v) Central Regional Office, 601 East Twelfth Street, Kansas City, Missouri.

(vi) Southwest Regional Office, 4400 Blue Mound Road, Fort Worth, Texas.

(vii) Rocky Mountain Regional Office, 10455 East 25th Avenue, Aurora, Colorado.

(viii) Northwest Regional Office, FAA Building, 9010 East Marginal Way South, King County International Airport (Boeing Field), Seattle, Washington.

(ix) Western Regional Office, 1500 Aviation Boulevard, Hawthorne, California.

(x) Alaskan Regional Office, 701 "C" Street, Anchorage, Alaska.

(xi) Pacific-Asia Regional Office, Federal Building, 300 Ala Moana Boulevard, Honolulu, Hawaii.

(xii) European Office, Tour Madou Building, 1 Place Madou, 1020 Brussels, Belgium.

(4) The Office of the Federal Register, Room 8401, 1100 "L" Street, NW., Washington, DC.

#### Subpart B—Development of Noise Exposure Maps and Noise Compatibility Programs

#### § 150.21 Noise exposure maps and related descriptions.

(a) Each airport operator may, after completion of the consultations and public procedure specified under paragraph (b) of this section, submit simultaneously to the Director and the Regional Director, a noise exposure map (or revised map) which identifies each noncompatible land use in each area depicted on the map, as of the date of submission, together with a description of—

(1) The projected aircraft operations at the airport for 1985 and, if submitted after 1982, the fifth calendar year beginning after the date of submission (based on reasonable assumptions concerning future aircraft operations at the airport, any planned airport development, planned land use changes, and population and demographic changes in the surrounding areas); and

(2) The nature and extent, if any, of those operations which will affect the land uses depicted on the map.

(b) Each map, revised map, and related descriptions submitted under

this section must be developed and prepared in accordance with Appendix A of this part, or an FAA approved equivalent, and in consultation with public agencies and planning agencies whose area, or any portion of whose area, of jurisdiction is within the 65 L<sub>dn</sub> contour depicted on the map, FAA regional officials, and other Federal officials having local responsibility for the area depicted. For air carrier airports, consultation must include any air carriers and, to the extent practicable, other aircraft operators using the airport. For nonair carrier airports, consultation must include, to the extent practicable, aircraft operators using the airport. Prior to submission of the map, the airport operator shall afford interested persons adequate opportunity to submit their views, data, and comments concerning the correctness and adequacy of the draft noise exposure map and descriptions of projected aircraft operations.

(c) The Director acknowledges receipt of noise exposure maps and descriptions and indicates whether they are accepted because they comply with the requirements applicable to them. The Director publishes in the Federal Register a notice of receipt of each noise exposure map and description, identifying the airport involved and whether it has been accepted as complying with applicable requirements.

(d) If, after submission of a noise exposure map under paragraph (a) of this section, any actual or proposed change in the operation of the airport might create any substantial, new noncompatible use in any area depicted on the map, the airport operator shall, in accordance with this section, promptly prepare and submit a revised noise exposure map showing the new noncompatible use.

(e) Each map and revised map must be accompanied by a description of the consultation required under paragraph (b) of this section and the opportunities afforded the public to review and comment during the development of the map.

(f) Each map, or revised map, and description of consultation submitted to the FAA must be certified as true and complete under penalty of 18 U.S.C. 1001.

#### § 150.23 Noise compatibility programs.

(a) Any airport operator who has submitted an acceptable noise exposure map under § 150.21 may, after FAA notice of acceptability and other consultation and public procedure specified under paragraphs (b) and (c) of this section, as applicable, submit simultaneously to the Director and the

Regional Director a noise compatibility program (or revised program).

(b) Each noise compatibility program (and revised program) must be developed and prepared in accordance with Appendix B of this part, or an FAA approved equivalent, and in consultation with the officials of any public agencies and planning agencies whose area, or any portion of whose area, of jurisdiction within the 65 L<sub>dn</sub> noise contours is depicted on the noise exposure map, FAA regional and other Federal officials having local responsibility for the area depicted. For air carrier airports, consultation must include any air carriers and, to the extent practicable, other aircraft operators using the airport. For nonair carrier airports, consultation must include, to the extent practicable, aircraft operators using the airport.

(c) Prior to submission of a program, the airport operator shall afford interested persons an adequate opportunity to submit their views, data, and comments with regard to the merits of the draft noise compatibility program for that airport.

(d) Each noise compatibility program submitted to the FAA must consist of at least the following:

(1) A copy of the current, noise exposure map (and the related descriptions of projected, future operations of aircraft at the airport) and accompanying documents (or a summary of them) submitted to, and accepted by, the FAA under § 150.21 of this part. Any summary of accompanying documents must adequately describe the impact of current operations on areas surrounding the airport and list the public agencies and planning agencies identified under § A150.105 of Appendix A of this part.

(2) A description and analysis of the alternative measures considered by the airport operator in developing the program, together with a discussion of why each measure not included in the program was not included.

(3) Program measures proposed to reduce or eliminate present and future noncompatible land uses and the relative contribution of each of the proposed measures to the overall effectiveness of the program.

(4) A description of the consultation with officials of public agencies and planning agencies in areas surrounding the airport, FAA regional and other Federal officials having local responsibility for the area depicted on the noise exposure map, and any air carriers and other users of the airport.

(5) The actual or anticipated effect of the program on reducing noise exposure to individuals and noncompatible land

uses in the surrounding community during 1985 and, if the noise exposure map is submitted after 1982, the fifth calendar year beginning after the date of submission of the noise exposure map. The effects must be based on expressed assumptions concerning the future aircraft operations at the airport, planned airport development, planned land use changes, and projected populations and demographic changes in the community.

(6) A description of how proposed future actions relate to any existing FAA approved airport layout plan, master plan, and system plan.

(7) A summary of the comments and material submitted to the operator under paragraphs (b) and (c) of this section, together with the operator's response and disposition of those comments and materials to demonstrate the program is feasible and reasonably consistent with obtaining the objects of airport noise compatibility planning under this part.

(8) The period covered by the program, the schedule for implementation of the program, the persons responsible for implementation of each measure in the program, and, for each measure, documentation supporting the feasibility of implementation, including any essential governmental actions and anticipated sources of funding, that will demonstrate that the program is reasonably consistent with achieving the goals of airport noise compatibility planning under this part.

(9) The schedule for periodic review and updating the airport noise compatibility.

#### Subpart C—Evaluations and Determinations of Effects of Noise Compatibility Programs

##### § 150.31 Preliminary review: acknowledgements.

(a) Upon receipt of a noise compatibility program (or revised program) submitted under § 150.23, the Director conducts a preliminary review of the submission.

(b) Based on that review and other available information, the Director acknowledges to the airport operator receipt of the program and publishes in the Federal Register a notice of receipt of the program each of which indicates—

(1) The airport covered by the program, and the date of receipt.

(2) The availability of the program for examination in the offices of the Director, the Regional Director, and the airport operator.

(3) That comments on the program are invited and, to the extent practicable, will be considered by the Director.

(4) A preliminary determination on whether the submission conforms to the requirements for a noise compatibility program under this part.

(5) Whether the program includes the use of new or modified flight procedures to control the operation of aircraft for purposes of noise control and abatement and, if so, whether an evaluation under § 150.33 will be necessary.

(6) That any program submitted might include measures for which need further evaluation, because if implemented they—

(i) Might reduce the level of aviation safety provided;

(ii) Might create an undue burden on interstate or foreign commerce (including unjust discrimination); or

(iii) Might not be reasonably consistent with obtaining the goal of reducing existing noncompatible uses of land and preventing the introduction of additional, noncompatible uses; and, therefore, additional evaluation under § 150.33 is necessary to determine whether it should be approved or disapproved under this part.

(c) If, based on the preliminary review—

(1) The Director finds that the submission does not conform to the requirements of this part, the acknowledgment and notice of receipt state that finding and the acknowledgment indicates the reasons for the finding, and the Director disapproves and returns the unacceptable program to the airport operator for reconsideration and development of a program in accordance with this part;

(2) The Director finds that the submission conforms to the requirements of this part for noise compatibility programs and that no further evaluation of the program is necessary, the acknowledgment may include a determination on the program under § 150.35 of this subpart; or

(3) The Director finds that further evaluation of the program is necessary, the acknowledgment and notice of receipt indicate that the additional evaluation will be conducted under § 150.33, and, based on that evaluation and other available information, a determination will be issued under § 150.35 of this part.

#### § 150.33 Evaluation of programs.

(a) To the extent necessary, the Director conducts an evaluation of the anticipated effects of each noise compatibility program (and revised

program) and, based on that evaluation, recommends that the Administrator either approves or disapproves the program. The evaluation includes consideration of proposed measures that—

(1) Adversely impact on interstate and foreign commerce (including undue discrimination); and

(2) Are reasonably consistent with obtaining the goal of reducing existing noncompatible land uses and preventing the introduction of additional noncompatible land uses.

That evaluation, or a separate evaluation, considers the use of any flight procedures contained in the program for purposes of reducing exposure of persons to noise in the area surrounding the airport. It may also include an evaluation of those proposed measures that might adversely affect the execution of the authority and responsibilities of the Administrator under the Federal Aviation Act of 1958, as amended.

(b) To the extent considered necessary, the Director may—

(1) Confer with the airport operator, the Regional Director and other officials of governmental agencies having jurisdiction over the areas affected by the program; and other persons known to have information and views material to the evaluation;

(2) Explore the objectives of the program and the measures, and any alternative measures, for achieving the objectives.

(3) Consult and coordinate various aspects of the program with other elements of the FAA having responsibility for any FAA programs and policy affected by the program.

(4) Examine the program for developing a range of alternatives that would eliminate the reasons, if any, for disapproving the program.

(5) Convene an informal meeting with the airport operator and other persons involved in developing or implementing the program for the purposes of gathering all facts relevant to the determination of approval or disapproval of the program and of discussing any needs to accommodate or modify the program as submitted.

(c) An airport operator may, at any time before approval or disapproval of a program, withdraw or revise the program. If the airport operator withdraws or revises that part of the program not involving flight procedures, or indicates to the Director, in writing, the intention to revise the program, the Director terminates the evaluation and notifies any known interested persons of that action. That termination stops the

180-day review period. The Director does not evaluate more than one program for any airport until any previously submitted program has been withdrawn, revised, or a determination on it is issued. A new evaluation is commenced upon receipt of a revised program, and a new 180-day approval period is begun, unless the Director finds that the modifications made, in light of the overall revised program, can be evaluated separately and integrated into the unmodified portions of the revised program without exceeding the original 180-day approval period or undue expense to the government.

(d) The Director prepares and forwards, through the Chief Counsel, to the Administrator a recommendation for approving or disapproving the program together with the reasons for the recommendation and any terms or conditions that should attend the determination.

#### § 150.35 Determinations on programs; publication; effectivity.

(a) The Administrator, based on the recommendations of the Director and other available information, issues a determination approving or disapproving each airport noise compatibility program (and revised program). A determination on a program acceptable under this part is issued within 180 days after the program is received under § 150.23 of this part or it may be considered approved, except for (1) any portion of a program relating to the use of flight procedures for noise control purposes; or (2) programs for airports not operated under a valid certificate issued under § 612 of the Federal Aviation Act of 1958, as amended, and whose projects for airport development are eligible for terminal development costs under § 20(b) of the Airport and Airway Development Act. A determination on a program for an airport covered by the exceptions to the 180-day review period for approval will be issued within a reasonable time after receipt of the program. Determinations relating to the use of any flight procedure for noise control purposes may be issued either in connection with the determination on other portions of the program or separately. Except as provided by this paragraph, no approval of any noise compatibility program, or any portion of a program, may be implied in the absence of the Administrator's express approval.

(b) The Administrator approves programs under this part, except for any aspects of programs that relate to the use of flight procedures for noise control purposes, if—

(1) It is found that the program measures to be implemented would not create an undue burden on interstate or foreign commerce (including any unjust discrimination) and are reasonably consistent with achieving the goals of reducing existing noncompatible land uses around the airport and of preventing the introduction of additional noncompatible land uses;

(2) The program provides for revision of the program, including whenever revision of the noise exposure map is specified under § 150.21(b) of this part.

(c) The Administrator may approve those aspects of programs relating to the use of flight procedures for noise control purposes if, in addition to the requirements specified under paragraph (b) of this section, the proposed measures can be implemented within the period covered by the program and without—

(1) Reducing the level of aviation safety provided;

(2) Degrading the requisite level of protection for aircraft, their occupants and persons on the ground;

(3) Adversely affecting the efficient use and management of the Navigable Airspace and Air Traffic Control System; or

(4) Adversely affecting any other of the Administrator's powers and responsibilities prescribed by law or any other program, standard, or requirement established by the Administrator in accordance with law.

(d) When a determination is issued, the Director notifies the airport operator and publishes a notice of approval or disapproval in the Federal Register identifying the nature and extent of the determination.

(e) Determinations issued under this part become effective upon issuance and remain effective until the later of the following—

(1) The program is required to be revised under this part, or under its own terms and is not so revised; or

(2) If a revision has been submitted for approval, a determination is issued on the revised program.

A determination may be sooner rescinded or modified for cause with at least 30 days written notice to the airport operator of the Administrator's intention to rescind or modify the determination for the reasons stated in

the notice. The airport operator may, during the 30-day period, submit to the Administrator for consideration any reasons and circumstances why the determination should not be rescinded or modified on the bases stated in the notice of intent. Thereafter, the Administrator either rescinds or modifies the determination consistent with the notice or withdraws the notice of intent and terminates the action.

(f) Determinations may contain conditions that must be satisfied before portions of the program which are implemented may affect aircraft or aircraft operations or that require that those implementations comply with prescribed criteria.

#### Appendix A—Noise Exposure Maps

##### Part A—General

###### Sec.

A150.1 Purpose.

A150.3 Noise descriptors.

A150.5 Noise measurement procedures and equipment.

##### Part B—Noise Exposure Map Development

A150.101 Noise contours and land usages.

A150.103 Use of computer prediction model.

A150.105 Identification of public agencies and planning agencies.

##### Part C—Mathematical Descriptions

A150.201 General.

A150.203 Symbols.

A150.205 Mathematical computations.

##### Part A—General

###### § A150.1 Purpose.

(a) This Appendix establishes a uniform methodology for the development and preparation of airport noise exposure maps. That methodology includes a single system of measuring noise at airports for which there is a highly reliable relationship between projected noise exposure and surveyed reactions of people to noise along with a separate single system for determining the exposure of individuals to noise. It also identifies land uses which are normally compatible with various exposures of individuals to noise around airports.

(b) This appendix provides for the use of a computer-based mathematical program, such as the FAA's Integrated Noise Model (INM), for developing standardized noise exposure maps and predicting noise impacts. Noise monitoring may be utilized by airport operators for data acquisition and data refinement, but is not required by this part for the development of noise exposure maps or airport noise compatibility programs. Whenever noise monitoring is used, it should

be accomplished in accordance with § 150.105 of this appendix.

###### § A150.3 Noise descriptors.

(a) *Airport Noise Measurement.* The A-Weighted Sound Level, measured, filtered and recorded in accordance with § A150.5 of this appendix, must be employed as the unit for the measurement of single event noise at airports and in the areas surrounding the airports.

(b) *Airport Noise Exposure.* The yearly day-night average level ( $L_{dn}$ ) must be employed for the analysis and characterization of multiple aircraft noise events and for determining the cumulative exposure of individuals to noise from airports.

###### § A150.5 Noise measurement procedures and equipment.

(a) The A-weighted sound levels must be measured or analyzed with a device which shows "slow response" characteristics as defined in International Electrotechnical Commission (IEC) Publication No. 179, entitled "Precision Sound Level Meters" as incorporated by reference in Part 150 under § 150.11. Further, the A-weighting filter characteristics for the sound level measuring device should meet the specifications and tolerances specified. However, for purposes of this part, the tolerances allowed for general purpose, type 2 sound level meters in Table 1, are acceptable.

(b) The A-weighting values, in a digital processing data reduction system or assigned arithmetically to measured, one-third octave sound pressure level values, must be the "curve A" values specified in the table entitled "Relative Responses and Associated Tolerances for Free Field Conditions" in the appendix to IEC Publication No. 179. [Tolerance limits associated with the table do not apply.]

(c) Noise measurements and reporting of them must be made in accordance with accepted acoustical measurement methodology, such as those described in American National Standards Institute publication ANSI S1.13, dated 1971 as revised 1979, entitled "ANS—Methods for the Measurement of Sound Pressure Levels"; ARP No. 790, dated 1969, entitled "Measurement of Aircraft Exterior Noise in the Field"; "Handbook of Noise Measurement," Ninth Ed. 1960, by Arnold P. C. Peterson; or "Acoustic Noise Measurement," dated Jan., 1979, by J. R. Hassell and K. Zavari. For purposes of this part, measurements intended for comparison to a State or local standard or with another transportation noise source (including other aircraft) must be reported in maximum A-weighted sound levels; for computation or validation of the yearly day-night average level ( $L_{dn}$ ), measurements must be reported in sound exposure level ( $L_{dn}$ ), as defined in § A150.205 of this appendix.

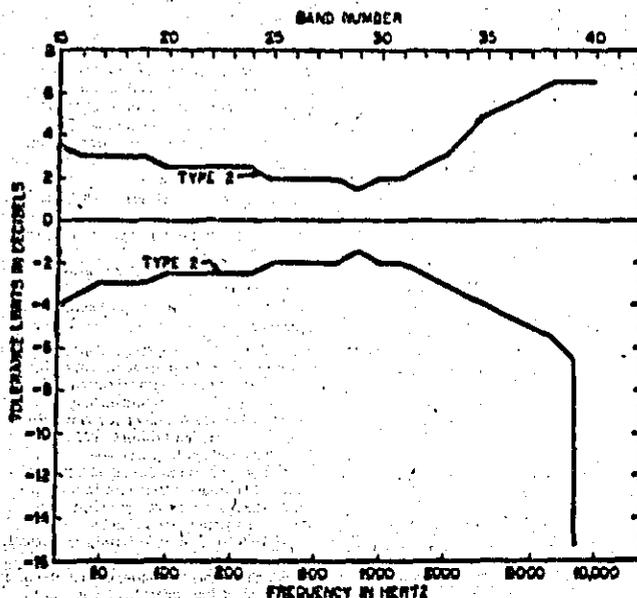


TABLE 1 - Tolerances Allowed On The A-Weighting Characteristics For Type 2 Meters

Part 11—Noise Exposure Maps

§ 1150.101 Noise contours and land uses.

(a) To determine the extent of the noise impact of an airport, airport proprietors developing noise exposure maps in accordance with this part shall develop  $L_{50}$  contours around the airport. Continuous contours must be developed for  $L_{50}$  levels of 65, 70, and 75 (additional contours may be developed and depicted when appropriate). In those areas where  $L_{50}$  values exceed 65  $L_{50}$ , the airport operator shall identify land uses and determine land use compatibility in accordance with the standards and procedures of this appendix.

(b) Table 2 of this appendix describes compatible and use information for several land uses as a function of  $L_{50}$  levels. The ranges of  $L_{50}$  level in Table 2 reflect the statistical variability for the responses of large groups of people to noise. Any particular level might not, therefore, accurately assess an individual's perception of an actual noise environment. Compatible or noncompatible land use is determined by comparing the predicted or measured  $L_{50}$  level at a site with the values given. Adjustments or modifications of the descriptions of the land-use categories may be desirable after consideration of specific local conditions.

(c) Compatibility designations in Table 2 generally refer to the major use of the site. If other uses with greater sensitivity to noise are permitted at a site, a determination of compatibility must be based on that use which is most adversely affected by noise.

When appropriate, noise level reduction through incorporation of sound attenuation into the design and construction of a structure may be necessary to achieve compatibility.

(d) All land uses are normally compatible with noise levels less than 65  $L_{50}$ . Local needs or values may dictate further delineation based on local requirements or determinations.

(e) The noise exposure maps must also contain and identify:

- (1) Runway locations.
- (2) Flight tracks.

(3) Noise contours of 65, 70, and 75  $L_{50}$  resulting from aircraft operations.

(4) Outline of the airport boundaries.

(5) Noncompatible land uses within the noise contours, including those within the 65  $L_{50}$  contours. (No land use shall be identified as noncompatible where the self-generated noise from that use and/or the ambient noise from other nonaircraft and nonairport services is equal to or greater than the noise from aircraft and airport sources.)

(6) Location of noise sensitive public buildings (such as schools, hospitals, and health care facilities).

(7) Locations of any aircraft noise monitoring sites utilized for data acquisition and refinement procedures.

(8) Total areas (in square miles) within the 65, 70, and 75  $L_{50}$  contours, in accordance with § 1150.8 of this appendix.

(9) Estimates of the number of people residing within the 65, 70, and 75  $L_{50}$  contours.

Table 2—Land Use Compatibility\* With Yearly Day-Night Average Sound Levels

Land use	Yearly day-night average sound level (L <sub>dn</sub> ) in decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
<b>Residential:</b>						
Residential, other than mobile homes and transient lodgings	Y	*N	*N	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	*N	*N	*N	N	N
<b>Public use:</b>						
Schools, hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	*Y	*Y	*Y	*Y
Parking	Y	Y	*Y	*Y	*Y	*Y
<b>Commercial use:</b>						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail—building materials, hardware and farm equipment	Y	Y	*Y	*Y	*Y	N
Retail trade—general	Y	Y	25	30	N	N
Offices	Y	Y	*Y	*Y	*Y	N
Communication	Y	Y	25	30	N	N
<b>Manufacturing and production:</b>						
Manufacturing, general	Y	Y	*Y	*Y	*Y	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	*Y	*Y	*Y	*Y	*Y
Livestock farming and breeding	Y	*Y	*Y	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
<b>Recreational:</b>						
Outdoor sports arenas and spectator sports	Y	*Y	*Y	N	N	N
Outdoor music arenas, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts and camps	Y	Y	Y	N	N	N
Golf courses, riding stables and water recreation	Y	Y	25	30	N	N

\*The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is compatible or unacceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses remains with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.

Key

- SLURCH—Standard Land Use Coding Manual.
- Y (Yes)—Land Use and related structures compatible without restriction.
- N (No)—Land Use and related structures are not compatible and should be prohibited.
- NLR—Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.
- 25, 30, or 35—Land use and related structure generally compatible; measures to achieve NLR of 25, 30, or 35 must be incorporated into design and construction of structure.
- 1 Where the community determines that residential uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assure mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.
- 2 Measures to achieve NLR of 25 must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- 3 Measures to achieve NLR of 30 must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- 4 Measures to achieve NLR of 35 must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- 5 Land use compatible provided special sound reinforcement systems are installed.
- 6 Residential buildings require an NLR of 25.
- 7 Residential buildings require an NLR of 30.
- 8 Residential buildings not permitted.

§ 150.103 Use of computer prediction program.

- (a) The airport operator shall acquire the aviation operations data necessary to develop noise exposure contours using an FAA approved computer program, such as the Integrated Noise Model (INM). In considering approval of a computer program key factors include the capability of the program to produce the required output and the public availability of the program or methodology to provide interested parties the opportunity to substantiate the results.
- (b) The following information must be obtained for input to the computer program:
  - (1) A map of the airport and its environs at an adequately detailed scale (not less than 1 inch to 5,000 feet) indicating runway length, alignments, landing thresholds, takeoff start-of-roll points, airport boundary, and flight tracks out to at least 30,000 feet from the end of each runway.

- (2) Airport activity levels and operational data which will indicate, on an annual average-daily-basis, the number of aircraft, by type of aircraft, which utilize such flight track, in both the standard daytime (0700-2200 hours local) and nighttime (2200-0700 hours local) periods for both landings and takeoffs.
- (3) For landings—glide slopes, glide slope intercept altitudes, and other pertinent information needed to establish approach profiles along with the engine power levels needed to fly that approach profile.
- (4) For takeoffs—the flight profile which is

$$L_T = 10 \log_{10} \left[ \frac{1}{T} \int_0^T 10^{L_A(t)/10} dt \right] \quad (1)$$

the relationship of altitude to distance from start-or-roll along with the engine power levels needed to fly that takeoff profile; these data must reflect the use of noise abatement departure procedures and, if applicable, the takeoff weight of the aircraft or some proxy for weight such as stage length.

(6) Existing topographical or airspace restrictions which preclude the utilization of alternative flight tracks.

(8) The government furnished data depicting aircraft noise characteristics (if not already a part of the computer program's stored data bank).

(7) Airport elevation and average temperature.  
 § 150.105 Identification of public agencies and planning agencies.

(a) The airport proprietor shall identify and depict on each noise exposure map (and revised map) the geographic areas of jurisdiction of each public agency and planning agency which is either wholly or partially contained within the 65 L<sub>dn</sub> boundary and shall describe—

- (1) The land use planning and control authority available to each agency; and
  - (2) The results of the consultations conducted with those agencies.
- (b) To be accepted, an analysis of the types of land use control available to the impacted jurisdictions must include, but not be limited to, the following general categories of land use control:

- (1) Acquisition and disposition of land.
- (2) Regulatory (police) power.
- (3) Capital improvement programs.
- (4) Monetary and fiscal policy.
- (5) Contractual agreements.

(c) For prospective applications of local land use control authority, the airport proprietor shall indicate whether the specified authority is (1) as a matter of administrative discretion, (2) pursuant to the enactment of a local law, or (3) as requiring State or local enabling legislation.

Subpart C—Mathematical Descriptions

§ 150.201 General

The following mathematical descriptions provide the most precise definition of the yearly day-night average sound level (L<sub>dn</sub>), the data necessary for its calculation, and the methods for computing it.

§ 150.203 Symbols

The following symbols are used in the computation of L<sub>dn</sub>:

Measure (in dB)	Symbol
Average Sound Level, During Time T	L <sub>T</sub>
Day-Night Average Sound Level (individual day)	L <sub>dn</sub>
Yearly Day-Night Average Sound Level	L <sub>dn</sub>
Sound Exposure Level	L <sub>se</sub>

§ 150.205 Mathematical computations.

(a) Average sound level must be computed in accordance with the following formula:

where T is the length of the time period, in seconds, during which the average is taken;  $L_A(t)$  is the instantaneous time varying A-weighted sound level during the time period T.

(1) Note: When a noise environment is

$$L_T = 10 \log_{10} \left[ \frac{1}{T} \sum_{i=1}^n 10^{L_{AEi}/10} \right] \quad (2)$$

where  $L_{AEi}$  is the sound exposure level of the i-th event, in a series of n events in time period T, in seconds.

(2) Note: When T is one hour,  $L_T$  is referred

to as a one-hour average sound level. (b) Day-night average sound level (individual day) must be computed in accordance with the following formula:

$$L_{dn} = 10 \log_{10} \left[ \frac{1}{86400} \left( \int_{0700}^{0700} 10^{[L_A(t)+10]/10} dt + \int_{2300}^{0700} 10^{L_A(t)/10} dt + \int_{0700}^{2300} 10^{[L_A(t)+10]/10} dt \right) \right] \quad (3)$$

Time is in seconds, so the limits shown in hours and minutes are actually interpreted in seconds. It is often convenient to compute day-night average sound level from the one-

hour average sound levels obtained during successive hours.

(c) Yearly day-night average sound level must be computed in accordance with the following formula:

$$L_{dn} = 10 \log_{10} \frac{1}{365} \sum_{i=1}^{365} 10^{L_{dni}/10} \quad (4)$$

where  $L_{dni}$  is the day-night average sound level for the i-th day out of one year.

(d) Sound exposure level must be computed in accordance with the following formula:

$$L_{AE} = 10 \log_{10} \left( \frac{1}{t_0} \int_{t_1}^{t_2} 10^{L_A(t)/10} dt \right) \quad (5)$$

where  $t_0$  is one second and  $L_A(t)$  is the time-varying A-weighted sound level in the time interval  $t_1$  to  $t_2$ .

The time interval should be sufficiently large that it encompasses all the significant sound of a designated event.

The requisite integral may be approximated with sufficient accuracy by integrating  $L_A(t)$  over the time interval during which  $L_A(t)$  lies within 10 decibels of its maximum value, before and after the maximum occurs.

**Appendix B—Noise Compatibility Programs**

Sec.

B150.1 Scope and purpose.

B150.3 Requirement for noise map.

B150.5 Program standards.

B150.7 Analysis of program alternatives.

**§ B150.1 Scope and purpose.**

(a) This appendix prescribes the content and the methods for developing noise compatibility programs authorized under this part. Each program must set forth the measures which the airport operator (or other person or agency responsible) has taken, or proposes to take, for the reduction of existing noncompatible land uses and the prevention of the introduction of additional noncompatible land uses within the area covered by the noise exposure map submitted by the operator.

(b) The purpose of a noise compatibility program is to seek optimal accommodation of both airport operations and community

activities within acceptable safety, economic, and environmental parameters. That may be accomplished by reducing existing noncompatible land uses in the vicinity of the airport and preventing the introduction of new noncompatible land uses in the future. To that end, the airport operator and other responsible officials must examine a wide range of feasible alternatives of land use patterns and noise control actions.

**§ 150.3 Requirement for noise map.**

To identify noncompatible land uses within the L<sub>50</sub>, D<sub>50</sub>, 70, and 75 contours, it is necessary that a current and complete noise exposure map be developed and submitted in accordance with § 150.21 of this part.

**§ 150.5 Program standards.**

Based upon the airport noise exposures and noncompatible land uses identified in the map, the airport operator shall evaluate the several alternative noise control actions and develop a noise compatibility program which—

- (a) Reduces existing noncompatible uses and prevents additional noncompatible uses;
- (b) Does not impose undue burden on interstate and foreign commerce;
- (c) Provides for revision in accordance with § 150.21 of this part;
- (d) Are not unjustly or unreasonably discriminatory.

**§ 150.7 Analysis of program alternatives.**

(a) Noise control alternatives must be considered and presented according to the following categories:

- (1) Noise abatement alternatives for which the airport operator has adequate implementation authority;
- (2) Noise abatement alternatives for which the requisite implementation authority is vested in a local agency or political subdivision governing body, or a state agency or political subdivision governing body;
- (3) Noise abatement options for which requisite authority is vested in a Federal agency.

(b) Minimizing the noise impact can be achieved through actions that are discretionary to the Federal Aviation Administration or the airport operator or pursuant to FAA approval or discretionary to state or local governing bodies. At a minimum, the operator shall consider the following alternatives, subject to the constraints that the strategies are appropriate to the specific airport (for example, an evaluation of night curfews is not appropriate if there are no night flights and none are forecast) and that they are not discriminatory in nature and application:

- (1) The implementation of a preferential runway system;
- (2) The implementation of any restriction on the use of the airport by any type or class of aircraft based on the noise characteristics of those aircraft. Such restrictions may include, but are not limited to—
  - (i) Complete or partial curfews;
  - (ii) Denial of use of the airport to aircraft types or classes which do not meet Federal noise standards;
  - (iii) Capacity limitations based on the relative noisiness of different types of aircraft;

(iv) Requirement that aircraft using the airport must use noise abatement takeoff or approach procedures previously approved as safe by the FAA; and

(v) Landing fees based on FAA certificated or estimated noise emission levels or on time of arrival.

(3) The construction of barriers and acoustical shielding, including the soundproofing of public buildings.

(4) The use of flight procedures (including the modification of flight tracks) to control the operation of aircraft to reduce exposure of individuals (or specific noise sensitive areas) to noise in the area around the airport.

(5) Acquisition of land and interests therein, including, but not limited to air rights, easements, and development rights, to ensure the use of property for purposes which are compatible with airport operations.

(6) Other actions which would have a beneficial noise control or abatement impact on public health and welfare.

(7) Other actions recommended for analysis by the FAA for the specific airport. (Secs. 301(a), 307, 313(a), 601, and 611 (b) and (c), Federal Aviation Act of 1958, as amended (40 U.S.C. 1341(a), 1346, 1354(a), 1421, and 1431 (b) and (c)); sec. 9(c), Department of Transportation Act (40 U.S.C. 1655(c)); secs. 101, 102, 103(a), and 104 (a) and (b), Aviation Safety and Noise Abatement Act of 1979 (40 U.S.C. 2101, 2102, 2103(a), and 2104 (a) and (b)); and 40 CFR 147(m))

Note.—The FAA has determined that this document involves a regulation which is not significant under Executive Order 12044, as implemented by DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). A copy of the final regulatory evaluation prepared for this action is contained in the regulatory docket. A copy of it may be obtained by contacting the person identified above under the caption "FOR FURTHER INFORMATION CONTACT."

Issued in Washington, D.C., on January 19, 1981.

Langhorne Bond,  
Administrator.

[FR Doc. 81-2622 Filed 1-23-81; 8:49 am]  
BILLING CODE 4910-13-M

**DEPARTMENT OF TRANSPORTATION**

Federal Aviation Administration

**14 CFR Part 21**

[Docket No. 20026; Notice No. 81-3]

**Proposed Exception in Definition of "Acoustical Change" To Permit Temporary, Limited Engine/Nacelle Intermix for Turbojet Engine Powered, Transport Category, Large Airplanes**

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking.

**SUMMARY:** In the spirit of the President's direction in Executive Order 12044 for improving government regulations by eliminating unnecessary paperwork and requirements that do not fulfill their intended purposes, the FAA is publishing this proposed rule change for public comment. This notice proposes to amend the definition of "acoustical change" in the aircraft noise certification rules as applied to turbojet engine powered transport category, large airplanes. The amendment would permit the temporary installation and use (intermix) of different engines or nacelles on a particular airplane without documenting that the airplane continues to meet Part 36 noise standards provided that that airplane is brought back into conformance with an acoustically certificated configuration that has been shown to meet the otherwise applicable noise requirements for that airplane within 90 days of the initial change. Under the current rule, any voluntary change in type design of an airplane that might increase noise is an "acoustical change" and after the design change the airplane may not exceed specified noise levels. Thus, it is frequently necessary for aircraft manufacturers or operators to show that each possible engine/nacelle configuration combination complies with applicable noise levels. They must also provide complementary airplane flight manual materials approved by the FAA or each affected airplane. Those processes impose a considerable manpower and paperwork obligation on the part of the manufacturer, the operator, and the FAA. The FAA's review has shown that the potential increase in aircraft noise from this proposal would be minimal and the requirement is unduly restrictive to achieve its intended purposes even after full noise level compliance is required. Thus, a limited change in the rule should be made. This proposal deals with the type design changes involving "acoustical changes." It necessarily also

affects the operating noise level requirements applicable to aircraft under Part 91, Subpart E, which rely upon Part 36 certificated noise levels. The proposal is based upon a petition for rulemaking from the Air Transport Association of America, a summary of which was published in the Federal Register on March 6, 1980, (45 FR 14590). **DATES:** Comments must be received on or before: March 27, 1981.

**ADDRESSES:** Send comments on the proposal in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-204), Docket No. 20026, 800 Independence Avenue, SW., Washington, D.C. 20591; Or deliver comments in duplicate to: FAA Rules Docket, Room 916, 800 Independence Avenue, SW., Washington, D.C.

Comments may be examined in the Rules Docket weekdays, except Federal holidays, between 8:30 a.m. and 5:00 p.m.

**FOR FURTHER INFORMATION CONTACT:** Mr. Richard N. Tedrick, Noise Policy and Regulatory Branch (AEE-110), Noise Abatement Division, Office of Environment and Energy, Federal Aviation Administration, 900 Independence Avenue, SW., Washington, DC 20591; telephone (202) 755-8027.

**SUPPLEMENTARY INFORMATION:****Comments Invited**

Interested persons are invited to participate in this proposed rulemaking by submitting such written data, views, or arguments as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decisions on the proposals. Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposals. Communications should identify the regulatory docket or notice number and be submitted in duplicate to the address listed above. Commenters wishing the FAA to acknowledge receipt of their comments on this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 22026." The postcard will be date/time stamped and returned to the commenter. All communications received before the specified closing date for comments will be considered by the Administrator before taking action on the proposed rule. The proposals contained in this notice may be changed in the light of

comments received. All comments submitted will be available for examination in the Rules Docket both before and after the closing date for comments. A report summarizing each substantive public contact with FAA personnel concerned with this rulemaking will be filed in the docket.

**Availability of NPRMs**

Any person may obtain a copy of this notice of proposed rulemaking (NPRM) by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Information Center, APA-430, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 426-8058. Communications must identify the notice number of this NPRM. Persons interested in being placed on a mailing list for future NPRMs should also request a copy of Advisory Circular No. 11-2 which describes the application procedure.

**Synopsis of the Proposal**

The FAA is considering the amendment of § 21.93(b) of the Federal Aviation Regulations (14 CFR Part 21: the "FARs") to amend the definition of "acoustical change" as applied to turbojet engine powered, transport category large airplanes. The proposal is based upon a recommended change to the rule submitted in a petition for rulemaking under FAR Part 11 by the Air Transport Association of America ("ATA") dated January 4, 1980. A summary of that petition was published in the Federal Register for public information and comment on March 6, 1980 (45 FR 14590). Section 21.93(b) currently defines "acoustical change" as any voluntary change in the type design of an airplane that might increase the noise levels of the airplane.

The petition requested an amendment to § 21.93(b) so that temporary (less than 90 days) engine/nacelle intermixes for maintenance purposes on turbojet engine powered, transport category large airplanes would not be classified as "acoustical changes" and, thus, not be governed by the applicable requirements of § 36.7 of Part 36. Petitioner's reasons for the amendment indicate that granting of the petition would have a minimum effect on individual airplane noise and an even lesser effect, if any, on national fleet noise level; that significant cost savings would result in that it would reduce spares inventory, prevent unnecessary engine changes, permit better allocation of manpower resources, reduce industry and Government workload, and reduce the paperwork burden.

As part of the summary, the following additional questions were posed for commenter response to assist the FAA in reviewing the petition:

1. What is the potential cost savings to the operating airlines?
2. What is the potential for the reduction of paperwork for industry and government?
3. What is the potential noise impact on communities near airports?
4. What aircraft types and models are affected and to which aircraft type certificate would the airplanes conform to during the temporary intermix period and after?

#### Summary of Public Comments

Three comments were received in response to the summary of the petition published in the Federal Register. In addition, the ATA's comments incorporated copies of comments from four ATA member airlines. The consensus appears to be that though it is difficult to estimate the total cost of the present intermix, acoustic change process for engine/nacelle, the cost is substantial. Cost ranges from thousands of dollars for some airlines to millions of dollars for others. The potential savings in paperwork is also substantial but difficult to quantify with firm figures because of the lack of predictability of the occurrence of the conditions requiring engine changes.

The ATA commented that all turbojet airplanes operated by their member airlines with the possible exception of the A-300, DC-10, and L-1011, would be affected by this proposal. The degree to which each airplane type is affected will vary from airline to airline depending on its fleet makeup.

Delta Airlines commented that its B727-232 aircraft can be operated in compliance with no more than one acoustically untreated engine/nacelle without incurring potentially penalizing takeoff weight restrictions. Manpower requirements to ensure maintaining that configuration have increased to the point where purchase of additional acoustical tailpipes at approximately \$11,000 each are being considered as an alternative means of preventing unauthorized intermix configurations.

All four airlines commented that qualifying cost or paperwork savings was impossible. However, United offered some items of potential savings. They spent \$14,000 to allow intermix on one configuration of their Boeing 727 airplanes. Many operators have aircraft of the same type, but of different age. The newer aircraft, which are certificated to FAR Part 36 noise levels, require different nacelle or engine treatment than the older aircraft. That

requires duplicate spares engines and nacelles with capital costs of \$10 to \$15 million to support a fleet of 20 aircraft. Relaxed requirements on noise intermix constraints would allow reduction in the duplicate spares. Temporary intermix would allow reduction of spares inventory by two or three engines with an estimated savings of \$2 to \$3 million. Texas International also supported that estimate and claimed a possible reduction of as many as three spares at \$500,000 each.

Several of the airlines provided information on their B-727 aircraft which shows the changes in the takeoff, sideline, and approach noise levels for various intermix configurations. Those data were used to show that the potential incremental noise impact on communities near airports from the proposed changes in the rule governing acoustical change approvals would be very small. The FAA estimates that the cumulative Day-Night Noise Level ( $L_{dn}$ ) for those airplanes would usually rise an average less than 0.1 decibels at a medium size hub airport. The actual ( $L_{dn}$ ) level measure could be higher or lower depending on the number of airplanes with one or more untreated engines/nacelles that actually operate into the airport during any given period.

The ATA also pointed out that the proposed changes would not affect safety. Each intermix configuration must have FAA approval from a physical and safety airworthiness standpoint. That would be done under the existing type certificate procedure for the airplane type design configuration and would be conformed to a previously approved configuration under appropriate authority to return the airplane to service in that configuration.

No substantive comments were received from private individuals on the petition. However, two comments were received on the need for the FAA to better administer the documentation requirements for noise certification of aircraft. The procedures applicable to type design changes provide adequate documentation to determine the noise certification status of the airplane. Any discrepancy in that documentation for any design change affects the airworthiness certification basis of the airplane and would be investigated accordingly and appropriate action would be taken.

#### Description of the Proposal

As requested by the petitioner, the proposed amendment applies to turbojet engine powered, transport category large airplanes. It would amend the provision concerning acoustical changes to permit, under specified conditions,

the intermixing of engines or nacelles on an affected airplane. Those type designs involved in reconfiguring the airplanes would be excluded from the definition of "acoustical change" (and, thereby, the Parts 21 and 36 requirements for acoustical changes for the specified engine/nacelle intermixes). It would not affect any other applicable requirements for certification of type design or airworthiness, or for operating the affected aircraft—only those governing noise level certification. Further, the proposed rule would apply not only during that period of phased compliance, during which the affected fleet of the operator consists of some airplanes that are not required to comply with the operating noise level rule under Part 91, Subpart E, but also after full compliance is required. That is, the limited exception to the acoustical changes rule for intermix would also be available after the date the operator's fleet is required to be fully in compliance with Part 36 noise standards. After that date, the operator would not need to have available sufficient quantities of acoustically treated engines/nacelles to ensure maintaining each of those airplanes in compliance with the noise requirements in those cases where the operator has selected acoustical treatment as the method of achieving compliance.

However, the proposed amendment applies to intermix only for fewer than 90 days, thereby requiring the reinstallation of a complying engine/nacelle combination (an acoustically certificated configuration at or below the otherwise applicable noise levels for the airplane) before the end of the 90 days period. Operation of the airplane after that period in the intermixed configuration would constitute an unapproved acoustical change and would be contrary to the certification requirements of the airplane.

The petitioner (ATA) requested the exception in the rule for engine/nacelle intermix "for maintenance purposes" and did not specify clearly the requirement that the airplane would be brought back into conformance with an acoustically certificated configuration shown to meet applicable noise levels within the 90-day period. Since the purpose for initiating a type design change for a particular airplane is irrelevant to the acoustical change requirements under the current rule, the FAA has considered whether the proposed exception should be limited to factors inherently extraneous to changes in type design basis of the airplane. An operator would not reasonably incur the expense of changing engines or nacelles

on an acoustically certificated airplane without a compelling purpose; thus, there appears to be little, if any, incentive to do so in order simply to avoid the otherwise applicable noise requirements for less than 90 days. Many factors dictate engine/nacelle removal and installation of another engine or nacelle, including routine and preventative maintenance or the requirements of "airworthiness." Not all of those reasons clearly fall within the traditional definition of "maintenance" addressed by the petition. The FAA believes that, as "purposes" for a type design change, they should not be dispositive of whether the exception to the acoustical change rule applies. To do so would necessitate creating additional, verifiable documentation of the purpose of the engine/nacelle change and would confuse the reasons for the change with its regulatory effect of being a type design change that might temporarily increase noise levels. The two regulatory concepts should not be mixed.

The FAA agrees with the petitioner that the paper work and documentation requirements for temporary design changes covered by the proposal are grossly disproportionate to the noise benefits they preserve for a short period such as 90 days or less. However, the proposed exception must be carefully prescribed to limit its impact on aircraft noise emissions to those clearly shown to be unwarranted in fulfilling the rule's intended purposes. Thus, the proposed exception would apply only if an engine/nacelle change accomplished on an individual airplane is temporary—that is, the airplane is brought back into conformance with the previous configuration or another configuration that is acoustically certificated at or below the otherwise applicable noise levels for that airplane within 90 days after the initial change.

It has been determined under the criteria of the Regulatory Flexibility Act that this proposed rule, at promulgation, will not have a significant impact on a substantial number of small entities.

#### The Proposed Amendment

Accordingly, the Federal Aviation Administration proposes to amend § 21.93(b) of Part 21 of the Federal Aviation Regulations (14 CFR Part 21) by revising paragraph (b)(2) to read as follows:

§ 21.93 Classification of change in type design.

(b) (2) Turbojet powered airplanes (regardless of category) except that for

individual turbojet powered transport category large airplanes, a design change limited to an engine or nacelle change is not an acoustical change under this paragraph if, within 90 days of the initial design change, the airplane is brought into conformance with a configuration certificated under Part 30 of this chapter for that airplane as complying with the otherwise applicable acoustical change requirements of § 30.7 of Part 30 for that airplane.

(Secs. 313(a), 601(a), 603, and 611, Federal Aviation Act of 1956, as amended (49 U.S.C. § 1354(a), 1423(a), and 1431); sec. 6(c), Department of Transportation Act (49 U.S.C. 1656(c)); Title I, National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), Executive Order 11514, March 5, 1970; and 14 CFR 11.45)

Note.—The FAA has determined that this document involves a proposed regulation which is not significant under Executive Order 12044, as implemented by DOT Regulatory Policies and Procedures (44 FR 11034; February 20, 1979). A copy of the draft regulatory evaluation for this action is contained in the regulatory docket. A copy of it may be obtained by contacting the person identified above under the caption "FOR FURTHER INFORMATION CONTACT."

Issued in Washington, DC, on January 19, 1981.

John E. Weslar,

Director of Environment and Energy, AEE-1.

[FR Doc. 81-2023 Filed 1-22-81; 8:45 am]

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