Monday
January 26, 1981

Part VIII

Department of Transportation

Federal Aviation Administration

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. 15278-A and 15671; 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 These 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 1979 (Pub. L. 96-105; 94 Stat. 790) adapting, in modified form, rules recommended by the Environmental Protection Agency and prescribed 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 1979, 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. 70-6), which closely parallel many of the issues considered by the Congress in enacting the 1979 Act. This interim rule does not apply, at this time, to airports used exclusively by helicopters but covers those airports 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: See comments on the rule in duplicate to Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AOC-204), Docket No. 15179-A, Independence Avenue, SW, Washington, DC 20591; or deliver comments in duplicate to: FAA Rules Docket, Room 300, 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 Tedick, Noise Policy and Regulatory Branch (AEE-110), Noise Abatement Division, Office of Environment and Energy, Federal Aviation Administration, 3420 Independence Avenue, SW, Washington, DC 20334; telephone (202) 775-0297.

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 24, 1981, and adoption of internal agency procedures for the administration of the regulatory program. Although this rule is based largely on Notice No. 76-24 (41 FR 51525), full implementation of the statutory requirements dictates certain provisions in the rule that vary substantially from those proposed in that notice. Accordingly, comments are invited on the interim rule based on the text and experience under the rule. When the comment period ends, the FAA will use such comments submitted, together with other available information, to review the regulation. After the review, if the FAA finds that changes should be made, it will initiate rulemaking proceedings to amend the regulation. Comments that provide the basis for supporting the views and suggestions presented are particularly helpful in evaluating the effects of the rule and in determining whether additional rule making 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 "FAA Act"). 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 1979 (Pub. L. 96-105; 94 Stat. 790; the "ASNA Act") that do not involve Federal funding of airport noise compatibility planning. As provided under the ASNA Act, new Part 150 applies to air carrier airports (that is, those operating under certificate issued under § 121 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1452: The "FAA Act").) whose development projects are eligible for terminal development costs under § 201(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 airports 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 airports 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[A]) in units of decibels (dB(A)) 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 in 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 appendices 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 "normal/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 lists were initially developed by the FAA based on its evaluation and assessment of similar determinations made by other Federal agencies which are responsible for specifying Federal programs in which noise exposure is a factor. To the extent practicable, FAA's "normal/compatible" and "noncompatible" land uses are comparable to, and congruous with, although separable from, other Federal programs directed towards similar considerations of noise exposure. By identifying "normal/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. Nor does it oblige the FAA to consider them and to airport operations in developing adequate airport noise compatibility plans. 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 accord with FAA's directive concerning environmental considerations (Order 1060.1C), 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 these approved programs will be made in conjunction with those actions.

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 1970 (49 CFR 147(m); 45 FR 56054; 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 Appendices 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 (ANLUC) program not be ignored and that airport operators be allowed to incorporate, where appropriate, that work in their submissions.

The Director conducts (coordinates within the FAA) the necessary evaluations of noise compatibility programs and, within the prescribed time period, recommends to the Administrator whether to approve or disapprove the programs. The Director is provided broad discretion to conduct the evaluation and to follow necessary procedures to ensure that the decision will be made efficiently and on a well-informed and reasonable 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 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, 1979, the EPA submitted to the FAA a recommended regulation concerning an airport noise regulatory process, pursuant to section 01(e) of the Federal Aviation Act of 1958 as amended by the Noise Control Act of 1972 (Pub. L. 92-574). Section 01(e)(3) provides that the FAA 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 airport or airport operations. The FAA published Notice No. 76-14 on November 25, 1979, containing the
EPA's recommended amendment of Subchapter G of the Federal Aviation Regulations (14 CFR Subchapter G) to establish a new Part 159 prescribing "procedures for the development, approval, and implementation of an Airport Noise Abatement Plan for airports required to be certificated under Part 150" (44 FR 31522; Pursuant to notice, a public hearing was held in Washington, DC, on January 17, 1979, 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 these decisions under section 611(c).

Subsequently, the Air Transport Association of America submitted to the FAA a petition for rulemaking dated January 16, 1979, 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. FR-79-4, "Petition for Rulemaking of the Air Transport Association of America, Airport Noise Abatement Plans: Regulatory Process." (44 FR 52973; September 8, 1979). For the benefit of commenters, the EPA, recommended rule was republished as an appendix to Notice No. FR-79-4. This action is, in part, the Administrator's response to that petition as contemplated under Part 11.

The Aviation Safety and Noise Abatement Act of 1970 (the "ASNA Act") (Pub. L. No. 91-606; December 16, 1970) 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 1,000 feet of the boundary of Federal airfield property. The ASNA Act 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. These 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 FAA Administrator on August 6, 1980 (45 FR 63354; August 14, 1980).

Thus, in order to carry out its statutory responsibilities, 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 the 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 airports not located on other airports under the new Federal Aviation Regulation that might follow the new rule and the ATA's 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 airports 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; and (3) that there is an almost total absence of information concerning the noise implications of the operations of those small airports. The adequacy of the FAA's methodologies to those airports may not achieve the objectives of airport noise compatibility planning, to the benefit of the surrounding community, the small airport 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 regarding a surprising absence of helpful, relevant data on which to evaluate the industry consequences. Either the FAA had to proceed to cover those airports 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 an acceptable decision. The FAA concluded that, since there is no airport used exclusively by helicopters under the ASNA Act definition, the only reasonable action would be to defer the discretionary regulatory decisions affecting those airports. Thus, the term "airport" as used in 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 notices 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 150. 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 without the ASNA Act, makes voluntary the development and submission of noise compatibility programs but prescribes the standardization 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 also recommended that the noise contours be expressed in terms of Day-Night Average Sound Level (Ldn). Part 150 specifies the use of Ldn. Further, the interim rule specifies the complimentary, single event measurement unit (Leq) 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. 76-24 contained seven major land use categories; the table in Part 150 contains five major land use categories and 22 subcategories.

The EPA recommended that the FAA prescribe a complex method for identifying and estimating (annual) noise levels. This method was identified as the "Airport Noise Evaluation Process" (ANEP). In response to comments in the docket, Part 150 does not contain the ANEP. Instead, the FAA has elected to leave the choice of a method for accounting for nonairport noise levels around the airport to the airport operator. However, because Notice No. 76-24 exempts from identification as noncompatible those areas where the indigenous or ambient noise levels equal or exceed the noise from aviation sources.

Notice No. 76-24 recommended requiring identification of each "governmental entity" which has "comprehensive land use planning and control authority" within the Ldn contour, even though the EPA did not identify any noncompatible land uses below Ldn 65. Part 150 requires the identification of all "public agencies and planning agencies" having jurisdiction within the Ldn 65 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. 76-24 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, 1985, 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.

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 § 811(c) of Part 50 a recommended regulation concerning airport noise certification which was published in Notice No. 76-74. 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 § 811(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 70-0) 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 25, 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 these provisions is to prescribe the FAA's procedural rules for handling those submissions. To provide for orderly and fair administration of that program, those rules should be adopted as soon as practically possible. The FAA has been required to make amendments to the Canada-U.S. Air Navigation Agreement to conform to the ASNA Act. Accordingly, this interim rule as proposed is consistent with the FAA's need to conform to the ASNA Act and the amended Canada-U.S. Air Navigation Agreement. The FAA expects to continue to conform to the ASNA Act and the amended Canada-U.S. Air Navigation Agreement. The FAA expects to continue to conform to the ASNA Act and the amended Canada-U.S. Air Navigation Agreement.
Federal Register / Vol. 49, No. 16 / Monday, January 26, 1981 / Rules and Regulations

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 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 airport 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 operator. 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 establishing that any operator of a certificated airport 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 submit a "noise compatibility program" setting forth measures required by the FAA to correct 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 traffic and economic growth and whether it is reasonably consistent with obtaining the goal of minimizing noncompatible land uses. The program must also contain provisions for 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 preclude, 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 ensures 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 describes 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 Authority 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 (40 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;
(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, 40 U.S.C. 1303 (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; 91; 97; 99; 101; 103; and 127). Similarly, the FAA has exercised its aviation safety authority, including the certification of aircraft, aircraft operators, and aircraft noise compatibility programs 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.

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 not clear Federal standards for the certification and manufacture of aircraft (14 CFR Parts 21 and 39) and set time limits on the use of old, nonconforming airplanes and speed limits on supersonic aircraft in U.S. airspace (14 CFR Part 91, 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 155 and 155). 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 operators/operators, including State and local governments active in the proprietary capacity, are, in certain respects, more restricted than those of State and local governmental exercising police powers. Under the Supreme Court decision in Gregory v. City of Chicago, 398 U.S. 111 (1970), operators 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. Crotty, 209 F. Supp. 98 (N.D. Cal. 1952):

"It is now firmly established that the airport proprietor is responsible for the consequences which attend his operation of a public airport, that 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 aircraft to be used, the hours and the type of service a given airport proprietor wants his facilities to provide, even as to the type of aircraft to utilize those facilities." The Crotty case holds that part of the State of California's airport noise statute imposing noise abatement duties on airport operators was not per se unconstitutional and reserved judgment as to its constitutionality in its implementation. The Court in Crotty 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, 419 F. Supp. 417 (N.D. Cal. 1976), an air freight company sought to enjoin a curfew on noxious aircraft imposed at the municipally owned Hayward Airport. 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. (7) his court cannot, in light of the clear 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 considerations, make the same findings with respect to regulations adopted by municipal airport proprietor * * * Id. at 424, citing S. Rep. No. 3353, 90th Cong., 2d Sess., 9-10; see also, British Airways Board et al. v. Port Authority of New York, 389 F. 2d 86 (2d Cir. 1977).

The court went on to indicate that the FAA had the authority to preempt each 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: * * * insubstantial 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 must not take any action that imposes an undue burden on interstate or foreign commerce and, second, may not unreasonably discriminate between different categories of airport users. [See, British Airways Board v. Port Authority of New York, 389 F. 2d 102 (2d Cir. 1977); Santa Monica Airport Association et al v. City of Santa Monica, 481 F. Supp. 527 (C.D. Cal. 1979).]

The EPA recommendation in Notice No. 76-24 proposed to require airport operators to develop and implement noise control plans with the approval of the FAA. This process would apply to all airports certified by the FAA under FAR Part 139, which governs the certification and operation of land airports. The notice held that the implementation of 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 have to implement the plan without submitting it to the FAA at least 30 days in advance of proposed effectiveness. Upon publication in the Federal Register, the interested party could file a statement in support of or a complaint against the 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 160 days beyond its proposed effectiveness. Interested parties could then submits 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 Administrator would have the option of (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 in connection with its development, 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 Regulatory Impact Assessment clearly disagreed in their approach to noise control plans and their usefulness, both organizations cited need for the FAA to set standards for the plan's development, review, approval, or disapproval, and implementation.

The Congress, in enacting Title III 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 these standards. In so doing, Congress expressed its need for those issues and provided compelling guidance for the course of regulatory development left to the discretion of the Administrator in responding to the outstanding issues. Those matters include the following:

Notes 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 to individuals at airport noise. [Section 103]

Land Use Planning—There is no Federal prohibition 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 noise abatement 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 binding. The FAA may make them a condition of the certification of an airport or require 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) will 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 these measures, the Administrator considers the full range of FAA responsibilities and programs. Accordingly, consideration is given to safety of flight operations 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 for 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 100]

Systems of Noise Measurement and Evaluation—In part, § 303 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. Uniform support was expressed for the designation and use of decibels (A-weighted) for single event measurements and of night-day average sound levels (Ldn) for the cumulative noise measure system. As can be seen from statutory requirements, the purpose of standardization is to make the FAA ha 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—

(a) Single event measures: A-weighted sound level (LWA) in decibels; and

(b) Cumulative noise measure: Day-night average sound level (Ldn) 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 at multiple events. Computing cumulative noise exposure in terms of Ldn requires amplitude-versus-time data. For steady state levels from stationary sources (such as electrical generators or ground runway power), it is necessary to provide average sound levels in Ldn and frequency of occurrence in noise sensitive areas. 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 at multiple events. Computing cumulative noise exposure in terms of Ldn requires amplitude-versus-time data. For steady state levels from stationary sources (such as electrical generators or ground runway power), it is necessary to provide average sound levels in Ldn and frequency of occurrence in noise sensitive areas. The A-weighted Sound Level (Lwa) is already widely used. It has been found to correlate well with individual's subjective judgments and much of the public is familiar with it. It is apparent that Lwa (often described as DRA) 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 1972 edition of Sound and Vibration, it is reported that "there are now in excess of 500 local, county and State noise control laws in the United States," (p. 12) and that "AIA 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 comparable unit system for assessment of aircraft noise within the context of other community noise sources. The standard of time A-weighted sound levels associated with predetermined thresholds is used by the Department of Housing and Urban Development policy Circular 1062, as well as the basis 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 specific 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 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 certification of propeller-driven light airplanes, this unit (L_{eq}) corresponds to the "slow" response setting on a standard sound level meter. For certification of jet aircraft, the FAA has integrated the sound over the entire period and established certification sound levels 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_{eq}) 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_{eq} 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_{eq}, for use under Part 150, either with or without other community noise sources, the data should be analyzed and presented in terms of L_{eq}.

For evaluating the exposure of individuals to noise from airports, the appropriate unit is the 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 those 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_{eq}) recommended by the EPA and accepted as the noise system for Part 150 is such a unit.

L_{eq} is an energy-averaged A-weighted sound level (L_{eq}) measured (integrated) over a 24-hour period. Further, it incorporates a 10-decibel penalty (step function weighting) for three events that occur between 10:00 p.m. and 7:00 a.m. The purpose of this 10-decibel penalty is to account for the 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_{eq} 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_{eq} 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) nighttime 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_{eq} 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 and 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. Now 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 noises 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 issues 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 FAA Administrator jointly issued an Aviation Noise Abatement Policy ("ANAP") on November 18, 1976. The intent of the policy was to significantly reduce the adverse noise impacts upon the estimated six to seven million people most heavily impacted by aircraft noise. The ANAP requires coordinated actions by aircraft owners and operators, local governments and state and regional transportation planning authorities and the FAA. The actions identified in the policy statement include actual and potential noise abatement measures such as aircraft retrofit/modifications, noise abatement agreements and land use planning. The land use planning process is intended to be an integral part of the airport planning process, and the airport operator is required by the ANAP to be involved in the development of the comprehensive plans for the communities surrounding the airport.

Economic Considerations

The airport and the local 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 employer and a major factor in the local economy. The airport is an entry point for air travel, and is a major source of economic activity in the local economy. The airport is also a vital link to the global economy, and plays a major role in the national and international economy. The airport is a major source of economic activity in the local economy, and plays a major role in the national and international economy. The airport is a major source of economic activity in the local economy, and plays a major role in the national and international economy.

Social Considerations

The airport plays an important role in the social life of the community. An airport can be a principal transportation link for the community in terms of passenger travel, freight transportation, and the movement of goods to and from the community. For smaller communities, the airport also plays a vital role in providing air services.
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 growth 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 the disipation of urban air pollution surface water percolation and visual relief from too much urbanization. Conversely, access routes to an airport simultaneously create the intrastructure 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 during the consideration of various schemes to achieve or improve airport-land use 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 and in least access 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 it is best that noise compatibility programs be developed at the local level, subject to Federal review for consideration of national concerns.

Identification of Compatible Land Uses

Section 121 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, 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 indefinitely, usually only within 5 to 20 decibels of a specific norm level. The exact nature of compatibility intervals is important to noise in application of land use guidelines. Land use guidelines (even those adopted by regulation) are a planning tool and as such provide general guidelines 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 S1.3-1960) "American National Standard Compatible Land Use With Respect to Noise," (May 1960) as the starting point for identifying land uses normally compatible with various exposure 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 the 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 activity or the sound nuisance 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, 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 relationship of land uses 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 of 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: 41 FR 4090: 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 1. The land-use categories are those usually associated with residential 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 1 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 purposes.

Administrative Process

As 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, making, and acting on noise plans developed by airport operators. The requirements prescribed in Title I of the ASNA effectively receive a number of issues inherent in those requirements. Submissions to the FAA under Title I are voluntary rather than required and may be made by the FAA and the ATA. The FAA is required to provide a relative promptness of action on specified criteria on major aspects of noise compatibility programs. The 100-day review period does not provide adequate time for formal, adjudicatory hearings on the programs, as required 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 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 programs.

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 100-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 100-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 proceedings or hearings 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 100 days after it is received or, upon failure to do so, the program is "deemed" to be approved. Except for these 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 until the measures 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, these 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 limit themselves to a complex process. There is no reason to believe that a formal 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 guided to the complexities actually presented by the program in each case. Extensive fact-finding should not be necessary because these 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 these measures 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 these 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 Administrator's decision on the
program. The process does not dictate
tight 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
can terminate evaluation of the
program immediately upon notice of the
intention 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
cost to the Government. The
Director will evaluate only one program
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.
Provisions for revising or
modifying previously issued
determinations for cause following
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. 56720); ten supported the
proposals 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
joining in support of the docket were in
favor of 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
required the Director to consider many
issues raised in the two FAA notices and
in the comments submitted to the
FAA Rulemaking Board (from the
airports.)

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
proposals 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 disruption." The feeling that land
acquisition for noise abatement
purposes was an extreme measure to be
employed in the most affected cases
was not universal. One municipality
indicated, "if a noise abatement
program is adopted, 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
impact on the economic value of the land.
Several commenters addressed the
funding of the plan. 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
Among other things, the proposal would have
the following effects:

1. The proposal would result in increased
certification costs for new airports
and increased costs for existing
airports.

2. The proposal would have a
negative impact on the
economic efficiency of
airport development projects.

3. The proposal would increase
the financial burden on
small airports and
municipalities.

4. The proposal would
lead to increased
costs for air travelers.

5. The proposal would
jeopardize the
long-term viability of
many small airports.

The proposal, as submitted by the
FAA, to the Congress in January 1977,
was not adopted and no actions have
been taken on it since then.
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/engine), specification of airspace, procedures, or incorporation of sound barrier techniques. The FAA never intended to include these 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 dilated. 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 certificate, should be kept in mind, and the precedent of attaching extraordinary 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 engrafting noise compatibility planning into the airport operating certificate.

Considerable disagreement exists as to the blanket nature of the EPA recommendation which would apply to all Part 139 certified 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 voluntary development and submission of programs under a standardized Federal program. Thus, the objectives of the Act can, and should, be achieved fully without engrafting noise compatibility planning into the airport operating certificate.

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 existing. If airports wait until they are encumbered with noise impacts unacceptable 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 condemns 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 728 airports have been certified under the AOC Program. There are 401 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 no certificated 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 139 to most public use airports elected 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 use 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 Federal Government has no such 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 these restrictions as part of a comprehensive noise control plan. In this respect, the EPA recommendation fails to accept the institutional reality of how 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 be expeditiously in undertaking an authority to direct proprietor actions while at the same time leaving interstate commerce to the proprietor."

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

"The paradox of the entire situation is being proposed is that in the absence of any airport 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 trace 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 notice that noise levels and patterns are going to be directly associated with flight and flight 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 in the abated 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 according to the nature of their authority, and that progress is accomplished through intensive 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 specific 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 use 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 § 180.12 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 about 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 were questions regarding the timing of this rule when Notice No. 76-24 was submitted; since the voluntary program contained in the DOT/FAA Aviation Noise Abatement Policy has not been initiated. However, since that time, 40 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 (ANEIP) 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 people. The ANEIP disagrees. The methodology employed by the EPA to provide this display is itself very difficult to explain to persons without technical training. The ANEIP methodology recommended by the EPA is based on the use of the Day/Night Average Sound Level (Ldn) cumulative event noise units system. The methodology is used to determine a series of independent 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 (Ldn) 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 independent noise levels (L1) and contributions of specific residential sources (LORS), such as limited access highways, etc. The methods used in estimating the categories of community background noise levels appear weak and are not convincing. The total noise (L1) consists of the logarithmic summation of LCB and Ldn. The EPA has, however, in explaining the use of ANEIP 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 reflect a balance of aviation and land use options. Therefore, considering aircraft 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 ANEIP 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 ANEIP methodology as acceptable as the EPA did. They indicated:

"It would be feasible both to calculate and to present the day/night average sound level due to aircraft only, along the linear area surrounding an airport providing the boundary is within a few miles of the property. 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' instead of 'boundary' is not clearly evident from the definition presently given. It would be impractical either to measure or to calculate the day/night 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 may be more readily used, provide more flexibility, and be just as effective for airport noise compatibility planning. As described above, new Part 180 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, Ldn contours around an airport can be developed and the predicted noise impacts 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, transfer 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 concerns expressed by numerous persons the timing of requirements contained in the proposal, one airport proprietor expressed his views as follows:

"Requiring the airport operator to identify airport noise levels boundary lines within 120 days is wishful thinking on someone's part. Also, to produce a meaningful agreement 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-to-date) 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 the new plan."

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 50 of the major airports submit maps and programs that 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 611(c)(3) of the Federal Aviation Act of 1980 [49 U.S.C. 1453(c)(3)], 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 611.

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. 10901 was established to receive public comments on the petition for rulemaking submitted by the Air Transport Association published as Notice 1981-65 at 46 FR 30376, Nov. 5, 1981. 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 government 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 150 (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 non-scheduled 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 96-163, 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 authority to specify criteria for general aviation airports, the FAA has determined to extend the voluntary program to "public use" non-carrier airports, rather than those that are used exclusively for helicopters, as discussed elsewhere in this preamble. The FAA recognizes that there exist non-carrier airports with serious noise problems at this time. However, experience has shown it best to eliminate noise problems before they arise.

Many of these 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 airports. The comments of Hughes Air Corporation, 6/b/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 the "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 resolution 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 that noise that any rules perceived as numerous 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 the 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 issues 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 pointed to the judicial branch as the proper 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 (ACOI) 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. ACOI stated that the policies of these agencies challenging a proposed local action. The ATO 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 local action. Federal courts review 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 ACOI and others.

Also difficult to reconcile is that of a "Federal preemption in the field of aviation noise abatement." The ATA petition advocated preemption to the extent necessary to ensure that the FAA's authority in aircraft noise abatement—airport operators and state and local governments—do not interfere with the authority of the Federal Government (44 FR 58508-51).

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 repeated by commentators 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 these opposing the ATA petition preferred to view the preemption question in terms of "inadequate Federal responsibility." 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, certificated 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 standard of regulation can adequately deal with problems that are unique to a particular locality. The latter position was also expressed by a number of commenters, who believe 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 Tonawanda 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, 404 F. 2d 1002 (2d Cir. 1077), 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 it the proper forum for dealing with airport noise.

Part 150 attempts to reconcile legitimate local and Federal interests that are illustrated by the comments. By encouraging airport operators to construct and implement noise abatement programs, the ASNA Act recognizes that a local operator 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 it is a plan but a part of a whole U. S. national airmen 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 in airport control, it would shift the focus from the local to national scene which would have the unfortunate effect of discouraging all carriers and other aircraft operators from fulfilling their responsibilities of working cooperatively with airport authorities at the local level as envisioned by the 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 "redistributing" the local efforts at the Federal level in formal procedures. The FAA notes that to avoid this, the Federal Government would have to expand its staff the necessary program, including the expenditure of potentially a significant number of administrative jaw 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. To the contrary, the provision for rulemaking from the Air Transportation Association to the extent that it is inconsistent with the 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 appendices 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 receiving 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 commercial 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 (helisports). Further evaluation concerning the noise implications of those helisports 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, helisports 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 725 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 environment. The FAA approval of a proposed airport noise compatibility program, as required by § 194(b), relates to the program as a whole, when the measures undertaken by the program are consistent with obtaining the goal of reducing existing non-compatible uses and preventing the introduction of additional non-compatible uses. Those approvals also do not determine that all measures covered by the program are eligible for Federal grant-in-aid funding. Rather, they determine the effectiveness of the program for reducing noise. Part 150,蜿蜒此,
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 FAA), other than those used exclusively by helicopters. An airport—

(1) Has a valid operating certificate issued under 14 C.F.R. Part 139
(2) Is eligible for grant-in-aid funding of terminal costs under 14 C.F.R. Part 155(b) of the Airport and Airway Development Act (currently FAR Part 152) whether or not it is served by certificated air carriers;

(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 14 C.F.R. Part 139 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 operations to voluntarily submit "noise exposure data" 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 defined in §107.5 and indicate the required depiction of the airport and surrounding areas, including noise exposure contours, public and subdivision boundaries, and land use areas not normally considered compatible with the airport noise exposure levels occurring 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 airport operations at that airport during 1996 and, if submitted after 1992, during the 4th year of 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 requirement of implementation of §107 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 194 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. Pursuant to §194(b) of the Airport and Airway Development Act (currently FAR Part 152), the Air Force can develop the necessary methods for determining the effects of noise on the human environment and the procedures for developing those programs specified under Appendix B of Part 150.

Several technical noise terms are defined in §107.5 because those terms are essential to airport noise measurements and noise compatibility planning. The terms "average sound level," "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 applied to the rules 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 150.5 contains the designation of standardized noise maps 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 particular airports 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_AN). 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 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 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 all public and planning agencies to whom they are required to submit to the FAA he 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 incompatible land use.

Section 150.22 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-55. 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 the three portions of a program involving the use of flight procedures for noise control or abatement purposes.

Section 150.53 describes 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 notify the airport operator, 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 either 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 150.53 describes the process for additional evaluation of the program. 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 issue. 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. Test evaluation includes the examination of the range of available alternatives that would eliminate or reduce 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 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 its application. 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 §134(c) of the ASNA Act, a program may not be approved unless it provides for its review 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 FAA 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 operators, 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 cases with at least 90 days written notice to the airport operators of the Administrator's intention to take that action for the reason stated in the notice. During the 90-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 § 140.3(b) of the ASNA Act, to determine whether such an assessment should be conducted before noise compatibility programs may be approved or disapproved under that section. It is concluded that such an assessment is not required. Section 140(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 § 140(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 § 140(b) are met. However, it did not affect the Administrator's responsibilities or authority under the FA Act. Thus, § 140(b) states that the Secretary "shall approve" each program that meets the applicable conditions. At best, the 180-day period will permit cursory review of the environmental impacts that a noise compatibility program could have on regional and local planning and land use. And, once that assessment was prepared, it could not be used as a decision document once the conditions are not 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 § 140(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 and disapproved under § 140(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 (LN) designated under § 150.6(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 § 150.6(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 102 of the ASNA Act prescribes the content requirements for noise exposure maps, including depiction of at least the 65, 70, and 75 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 (Leq, noise contours above Leq, 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 less than 3 aircraft activity, it may be desirable to also depict the 65Leq or 60 Leq noise contour. Other specific information is required to identify political subdivisions having jurisdiction over land use in the area and other pertinent details. It also prescribes the general requirements for the description of aircraft operation at the airport reported for each year (and, if submitted after 1982, the fifth year after submission of the map), and the ways, if any, these 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 use can be matched with the various noise levels (yearly day-night averages and levels (Leq) or in units of decibels) to determine whether they are normally compatible. This also indicates the amount of "noise level reduction" (outdoor levels to indoor levels) that must be achieved, through noise abatement measures in the design and construction of the structure to accommodate the specified indoor activity. Those noise levels 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.
Appendix B—Airport Noise Compatibility Program Development

Appendix B to Part 150 prescribes the content and technical methodology for developing airport noise compatibility programs. These 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 set forth under § 150.5, 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 150.5 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 § 150.5.

The alternative analysis is conducted in accordance with § 150.7 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) 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, therefore, 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 rulemaking 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 before or 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.

Breach 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 16, 1979 (Petition Notice No. FR-79-9; 44 FR 62076; 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.


PART 160—AIRPORT NOISE COMPATIBILITY PLANNING

Subpart A—General Provisions

Sec. 160.1 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 these programs, in order to provide a reliable relationship between projected noise exposure and the surveyed reaction of people to noise and (5) determining the 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.

160.2 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 § 112 of the Federal Aviation Act of 1970, as amended; or (2) is eligible for grant-in-aid funding of terminal development costs under § 20(b) of the Airports and Airway Development Act, 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 µPascal.

"Compatibility" 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 65 or below that identified for that or similar sites on 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, determined 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 action affecting the operation of aircraft in the air or on the ground.

"Noise exposure map" means a scaled, georeferenced, and topographically depicted depiction of an airport, its noise contours, and surrounding area developed in accordance with § 160.101 of Appendix A of this part, including the required descriptions of projected aircraft operations at
airport during 1985 and, if submitted after 1982, during the fifth calendar year beginning after submission of the map, together with the way in which those operations for each of those years will affect the map (including noise contours and the projected land use). 

“Noise level reduction” (NLR) means the amount of noise level reduction (L_NLR) achieved through incorporation of noise attenuation (both 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 level for indoor activities involved at the location) because the yearly day-night average sound level is above the level identified for that 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 the 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_Ny) means the 365-day average, in decibels, of yearly day-night average sound level.

§ 150.5 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 (dB) 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_Ny) 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 design, 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. § 802(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:


§ 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, during 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 area); 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 Ldn noise 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 each interested person an adequate opportunity to submit their views, data, and comments concerning the correctness and adequacy of the draft noise exposure map and description 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 the maps. The Director publishes in the Federal Register a notice of receipt of each noise exposure map and description.

(d) Each air carrier airport involved in the airport noise program (as defined in 14 CFR 150.21) shall afford interested persons an adequate opportunity to submit their views, data, and comments with regard to the noise program and the feasibility and reasonableness of the noise program for that airport.

(e) Each noise compatibility program submitted to the FAA must contain at least the following:

1. A copy of the current noise exposure map and description and description of projected future operations of the airport (at the program) and accompanying documents (or a summary of them) submitted to, and accepted by, the FAA under § 150.23 of this part. Any summary of accounts showing 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.

(f) 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.

(g) Program measures proposed to reduce or eliminate present and future noise exposure map and description of consultation with 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 air carriers and other users of the airport.

(h) 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 1983, 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 population and demographic changes in the community.

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

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

(k) 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.

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

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. The director acknowledges receipt of the program.
(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 § 150.22 will be necessary.

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

(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 § 150.23 is necessary to determine whether it should be approved or disapproved under this part.

(c) 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 part; 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 § 150.35, 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 these 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 190-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 190-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 190-day approval period or undue expense to the government.

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

§ 150.35 Determinations on programs; publication; effectiveness.

(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 120 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 certificates issued under § 012 of the Federal Aviation Act of 1958, as amended, and whose projects for airport development are eligible for terminal development costs under § 25(b) of the Airport and Airway Development Act. A determination on a program for an airport covered by the exceptions to the 190-day review period for approval will be issued within a reasonable time after receipt of the program information 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 the 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 the program as stated in the notice. The Administrator is therefore authorized to amend the notice to withdraw the notice of intent and terminates the action. 

(i) 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 any implementation comply with prescribed criteria.

Appendix A—Noise Exposure Maps

Part A—General

Sec. A150.2 Purpose.
A150.3 Noise descriptors.
A150.5 Noise measurement procedures and equipment.

Part B—Noise Exposure Map Development

A150.101 Noise contours and land usage.
A150.103 Use of computer prediction models.
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

§ 150.2 Purpose.

(a) This Appendix establishes a uniform methodology for the development and dissemination of aircraft noise exposure maps. That methodology includes a single system of measuring noise at airports for which there is a highly reliable relationship between predicted noise exposure and survey data. The data is 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 §150.502 of this appendix.

A150.203 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. 114, 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 source allows for general purposes, 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 Response and Associated Tolerances for Free Field Conditions" in the appendix to IEC Publication No. 114. (Tolerances 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 S1.1, dated 1971 as revised 1976, entitled "ANSI—Methods for the Measurement of Sound Pressure Levels;" ARP No. 709, dated 1959, entitled "Measurement of Airplane Exterior Noise in the Field;" "Handbook of Noise Measurement," Ninth Ed. 1956, by Arnold P. D. Peterson or "Acoustic Noise Measurement," dated Jan. 1976, by J. R. Hassell and K. Zavert. For purposes of this part, measurements intended for comparison to a State or local standard or with another transportation noise source (other than aircraft) must be reported in maximum A-weighted sound values; for computation or validation of the maximum day-night average level [Ldn], measurements must be reported in sound exposure level [Leq] as defined in §150.203 of this appendix.
### Table 1: Radiation Allowable on the Aircraft

<table>
<thead>
<tr>
<th>Altitude Group</th>
<th>No. of Days</th>
<th>Allowable Radiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>0 to 1</td>
<td>10 mSv (100 mrem)</td>
</tr>
<tr>
<td></td>
<td>1 to 3</td>
<td>5 mSv (50 mrem)</td>
</tr>
<tr>
<td></td>
<td>4 to 6</td>
<td>2.5 mSv (25 mrem)</td>
</tr>
<tr>
<td></td>
<td>7 to 9</td>
<td>1 mSv (10 mrem)</td>
</tr>
<tr>
<td></td>
<td>10 to 12</td>
<td>0.5 mSv (5 mrem)</td>
</tr>
<tr>
<td></td>
<td>13 to 15</td>
<td>0 mSv (0 mrem)</td>
</tr>
</tbody>
</table>

### Tolerance Limits in Exceeds

<table>
<thead>
<tr>
<th>Altitude Group</th>
<th>No. of Days</th>
<th>Tolerance Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 2</td>
<td>0 to 1</td>
<td>5 mSv (50 mrem)</td>
</tr>
<tr>
<td></td>
<td>1 to 3</td>
<td>2.5 mSv (25 mrem)</td>
</tr>
<tr>
<td></td>
<td>4 to 6</td>
<td>1 mSv (10 mrem)</td>
</tr>
<tr>
<td></td>
<td>7 to 9</td>
<td>0.5 mSv (5 mrem)</td>
</tr>
<tr>
<td></td>
<td>10 to 12</td>
<td>0 mSv (0 mrem)</td>
</tr>
</tbody>
</table>

*Note: Radiation levels are measured in milliSieverts (mSv) or millirems (mrem).*

---

**Federal Register, Vol. 46, No. 15/ Monday, January 20, 1981 / Rules and Regulations**

---

Part B: Noise Exposure Map

(1) To determine the noise exposure level on the aircraft, the following steps should be taken:

(a) For each altitude group, determine the noise exposure level at each flight altitude using the appropriate noise exposure model.

(b) Calculate the average noise exposure level for the entire flight.

(c) Compare the calculated noise exposure level with the allowable radiation level for each altitude group.

(d) Adjust the flight altitude as necessary to ensure compliance with the allowable radiation level.

---

**Note:** This document contains important information related to noise exposure on aircraft. Reading and understanding the content is crucial for ensuring the safety and comfort of passengers and crew.
### Table 2—Land Use Compatibility with Yearly Day-Night Average Sound Levels

<table>
<thead>
<tr>
<th>Land Use</th>
<th>40 dBA</th>
<th>45 dBA</th>
<th>50 dBA</th>
<th>55 dBA</th>
<th>60 dBA</th>
<th>65 dBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residences, other than mobile homes and</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>transient lodgings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile home parks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transient lodgings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schools, hospitals and nursing homes</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Churches, auditoriums, and concert halls</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Inns, tourist lodgings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community centers and recreation areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial use</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Offices, business and professional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governmental use, such as offices, banks</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Manufacturing and production</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Communicating</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Aerial and surface transportation</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Recreational and amusement</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Judicial and transportation</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Residential buildings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial buildings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The designations shown in the table do not constitute a Federal determination that any use of land covered by the program is acceptable or incompatible under Federal, State, or local use. The responsibility to determine the acceptability and compatibility of uses rests with the local authorities. FAA determinations under Part 150 are not required to establish land-use compatibility and may be shown in a manner determined by each local authority in response to specific determinations made by local authorities.*

#### 1405.40 Use of computer prediction program

(a) The airport operator shall acquire the aviation operations database 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, the FAA will consider the capability of the program to produce accurate predictions of noise contours and the public availability of the program. In order to provide the public with the opportunity to participate in the results, the following information must be included in the computer program output:

1. A map of the airport and its environs at an adequately detailed scale (not less than 1 inch to 2,000 feet) indicating runway lengths, alignments, landing thresholds, takeoff sites, and flight track, and at least 30,000 feet from the end of each runway.

2. Airport activity levels and operational data which will include, on an annual basis, the number of aircraft, by type of aircraft, which utilize each flight track, both the standard day (0500-2200 hours) and nighttime (2200-0500 hours) periods for both landings and takeoffs.

3. For landings—glide angles, glide slope, landing aids, and other pertinent information used to establish approach profiles along with the engine power levels needed to fly that approach profile.

4. For takeoffs—the flight profile which is the relationship of altitude to distance from start-to-roll along with the engine power levels needed to fly that profile.

(b) The relationship of altitude to distance from start-to-roll along with the engine power levels needed to fly that profile will be used to establish climb profiles, which will be used to establish the climb angle and climb power levels.

(c) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(d) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(e) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(f) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(g) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(h) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(i) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(j) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(k) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(l) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(m) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(n) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(o) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(p) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(q) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(r) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(s) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(t) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(u) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(v) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(w) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(x) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(y) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

(z) The climb angle and climb power levels will be used to establish the climb profile, which will be used to establish the climb angle and climb power levels.

### Mathematical expressions

1. **Equation 1**

   \[ L_A(t) = 10 \log_{10} \left[ \frac{10}{10} \right] \]
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 caused by a number of identifiable noise events, such as aircraft flyovers, average sound level may be conveniently calculated from the sound exposure levels of the individual events occurring within a time period \( T \):

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

(2) Note: When \( T \) is one hour, \( L_{A} \) is referred to as a one-hour average sound level.

(3) Day-night average sound level (individual day) must be computed in accordance with the following formula:

\[
L_{DA} = 10 \log_{10} \left( \frac{1}{86400} \int_{0}^{24} \left[ L_{A}(t)+10 \right]/10 \ dt + \int_{24}^{24+10} \left[ L_{A}(t)+10 \right]/10 \ dt \right)
\]

(3) Hour average sound levels obtained during successive hours.

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

\[
L_{DA} = 10 \log_{10} \left( \frac{1}{365} \sum_{i=1}^{365} \frac{L_{DAi}/10}{10} \right)
\]

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

\[
L_{AE} = 10 \log_{10} \left( \frac{1}{T} \int_{0}^{T} \frac{L_{A}(t)/10}{10} \ dt \right)
\]

(5) Appendix B—Noise Compatibility Programs

Sec. 1080.3 Program standards.

1080.1 Scope and purpose.

1080.3 Requirement for noise map.

(5) 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 incompatible land use and the prevention of the introduction of additional incompatible land uses within the area covered by the noise exposure map submitted by the operator.

(6) 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 non-compatible land uses in the vicinity of the airport and preventing the introduction of new non-compatible land uses in the future. To that end, the airport operator must examine a wide range of feasible alternatives of land use patterns and noise control actions.

\[ 210.2 \text{ Requirement for noise map.} \]

To identify non-compatible land uses within the 400, 50, and 28 contours, it is necessary that a current and complete noise exposure map be developed and submitted in accordance with § 150.311 of this part.

\[ 210.3 \text{ Program standards.} \]

Based upon the airport noise exposure and non-compatible 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 incompatible uses and prevents additional incompatible uses; and
(b) Has no adverse impact on commercial and public aviation, as well as the health and welfare of the community.

\[ 210.4 \text{ Analysis of program alternatives.} \]

(a) Noise abatement alternatives must be examined and presented according to the following criteria:

(i) Noise abatement alternatives for which the airport operator has adequate implementation authority;

(ii) Noise abatement alternatives for which the airport operator requires implementation authority is vested in a local agency or political subdivision governing body, or a state agency or political subdivision governing body.

(iii) Noise abatement options for which the airport operator has adequate implementation authority is vested in a local agency or political subdivision governing body.

(iv) Noise abatement options for which the airport operator has adequate implementation authority is vested in a Federal agency.

(b) Minimizing the noise impact can be accomplished through actions that are discretionary with the Federal Aviation Administration or the airport operator or a governmental body in FAA approval or discretionary in 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 urban airport with restrictive zoning is not appropriate if there are no flight flights and none are forecasted and that they are not discriminatory in nature and application:

(i) The implementation of a preferential runway system;

(ii) The implementation of any restriction on the use of the airport by any type of class of aircraft based upon the noise characteristics of those aircraft. Such restrictions may include, but are not limited to—

(iii) Complete or partial curfews;

(iv) Limitation of use of the airport to aircraft types or classes which do not meet Federal noise standards;

(v) Capacity limitations based on the relative noisiness of different types of aircraft;
DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 21

(Docket No. 20260; Notice No. 11-1)

Proposed Exception in Definition of "Acoustical Change" To Permit Temporary, Limited Engine/Nozzle
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 executive order on Executive Order 12866 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 will permit the temporary installation and use (intermix) of different engines or nozzles on a particular airplane without documenting that the airplane continues to meet Part 36 noise standards if that airplane is brought back into conformance with an acoustically certified 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 in 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/nozzle configuration combination complies with applicable noise levels. They must also provide complimentary airplane flight manual materials approved by the FAA or each affected airplane. These 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 proposed change in type design and the requirement is unduly restrictive to achieve its intended purposes even after fail noise level compliance is required. Thus, a limited change to the rule should be made. This proposed deals with the type change involving "acoustical changes." It necessarily also affects the operating noise level requirements applicable to aircraft under Part 21, Subpart E, which rely upon Part 36 certified 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, 1986, (41 FR 14350).

DATES: Comments must be received on or before: March 27, 1987.

ADDRESSES: Send comments on the proposal in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-201), Docket No. 20260, 800 Independence Avenue, SW.,
Washington, DC 20591.

Or deliver comments in duplicate to: FAA Rules Docket, Room 314, 800 Independence Avenue, SW.,
Washington, DC 20591.

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. Tidrick, 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) 267-5027.

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 their comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 20260." The comment will be docketed 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 by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Information Center, APA-439, 800 Independence Avenue, SW.,
Washington, DC 20591 by calling (202) 267-6058. 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.

Synopses of the Proposal

The FAA is considering the amendment of § 21.92(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, 1983. A summary of that petition was published in the Federal Register for public information and comment on March 6, 1986 (41 FR 14350). Section 21.92(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 § 21.92(b) so that temporary (less than 90 days) engine/nozzle 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, as in the past, small increases in noise level that significant cost savings would result in that it would reduce spare 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 through operating restrictions?
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 airplane conform to during the temporary interim period?

Summary of Public Comments

Three comments were received in response to the petition published in the Federal Register. In addition, the ATAs commented on the cost of the present interim approach for engine/nacelle certification for the type certificate procedure for the airplane. These data were used to show how the potential incremental noise impact on communities near airports from the proposed changes in the rule governing noise certification would be very small. The FAA estimates that the cumulative noise level for those airplanes would usually result in the average noise level being less than 90 decibels at a medium altitude airport. The actual noise level measured could be higher depending on the number of airplanes at or near the airport during any given period.

The ATA also noted that the proposed changes would not affect safety. Each type certificate procedure for the airplane type design certification would be performed in a previously approved configuration under appropriate conditions 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 the aircraft. The procedures applicable to type design changes failed to 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 status 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. This type design certification would be excluded from the definition of "acoustical change" (and thereby, the Parts 21 and 29 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 certification. Further, the proposed rule would apply 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 levels established under Part 21, Subpart D, but also after full compliance is required. It is the limited exception to the acoustical changes rule for intermixes that would also be available after the date the operator's fleet is required to be fully in compliance with Part 80 noise standards. After that date, the operator would not need to have available sufficient quantities of acoustically treated engines/nacelles to ensure 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 reinstatement of a complying engine/nacelle combination (as acoustically certified configuration at or below the otherwise applicable noise levels for the airplane) prior to the expiration of the 90-day 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 not subject clearly the requirement that the airplane would be brought into conformance with an acoustically certified configuration—shown to meet applicable noise levels within the 90-day period. Since the purpose for initiating a type design change for a particular time 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 who 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 regulations 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 these 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 paperwork and documentation requirements for temporary design changes covered by the proposal are grossly disproportionate to the noise reductions that may be preserved 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, if promulgated, 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(2) 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 36 of this chapter for that airplane as complying with the otherwise applicable acoustical change requirements of §21.97 of Part 36 for that airplane.

[B] (Secs. 219(a), 221(a), 203, and 211, Federal Aviation Act of 1958, as amended (49 U.S.C. §1341(a), 1451(a), and 14371) sec. 85).

Department of Transportation Act (49 U.S.C. 1665(e)); Title I, National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

Executive Order 11514, March 5, 1970; and 14 CFR 119.45)

Note—The FAA has determined that this document involves a proposed regulation which is not significant under Executive Order 12291, as implemented by DOT Regulatory Policies and Procedures (45 FR 9124, February 1, 1980). 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, D.C. on January 19, 1981...

John E. Weaver,
Director of Environment and Energy, AEE-1.

[FR Doc. 81-10542 Filed 11-13-81; 8:45 am]

BILLING CODE 4310-15-4
would you like to know

If any changes have been made in certain titles of the CODE OF FEDERAL REGULATIONS without reading the Federal Register every day? If so, you may wish to subscribe to the LSA (List of CFR Sections Affected), the "Federal Register Index," or both.

LSA (List of CFR Sections Affected) $10.00 per year

The LSA (List of CFR Sections Affected) is designed to aid users of the Code of Federal Regulations to amendatory actions published in the Federal Register, and is issued monthly in cumulative form. Entries indicate the nature of the changes.

Federal Register Index $8.00 per year

Indexes covering the contents of the daily Federal Register are issued monthly, quarterly, and annually. Entries are carried primarily under the names of the issuing agencies. Significant subjects are carried as cross-references.

A finding aid is included in each publication which lists Federal Register page numbers with the date of publication in the Federal Register.

Note to FR Subscribers: FR Indexes and the LSA (List of CFR Sections Affected) will continue to be mailed free of charge to regular FR subscribers.


There is enclosed $ for subscription(s) to the publications checked below:

LSA (LIST OF CFR SECTIONS AFFECTED) ($10.00 a year domestic; $12.00 foreign)

FEDERAL REGISTER INDEX ($8.00 a year domestic; $10.00 foreign)

Name

Street Address

City ___________________________ State _______________ ZIP ____________

Make check payable to the Superintendent of Documents