Federal Aviation Administration

Memorandum

Date: February 15,2007

From: Richard Doucette, Environmental Protection Specialist

To: LaVerne Reid, Airports Division Manager

John Donnelly, Regional Counsel's Office

Subject: Danbury CT Part 150 Record of Approval

Attached is the Draft Record of Approval (ROA) for the Noise Compatibility Program developed by Danbury Muncipal Airport, Danbury CT. Also included is background on the development of the Part 150 Study, an overview of the comments received during the FAA comment period, and a response to those comments.

In conformance with Regional and National procedures, AEE-1 has reviewed the draft ROA and has no national policy concerns; and APP-400 has concurred with the draft ROA. As soon as your concurrence is obtained, the Federal Register Notice on FAA's approval of the Noise Compatibility Program can be submitted.

John R. Donnelly

John Donnelly
Regional Counsel, ANE-7

2/15/2007
Date

✓
Concur Nonconcur

LaVerne F. Reid

LaVerne F. Reid
Airports Division Manager

2/15/2007
Date

✓
Approved Disapproved

This is an update of an existing Part 150 Noise Study, first completed in 1988. To undertake this latest Study, the City of Danbury received a grant from the FAA in 2002 and contracted Louis Berger & Associates, and Wyle Labs Inc. The City and its consultants established a Noise Working Group made up of 18 individuals representing various interests, including citizens groups, airport users, airport neighbors, local land use officials and appointed/elected officials from the City of Danbury and the Town of Ridgefield. The working group reviewed the Noise Study's scope of work, and the scope was revised based on comments received from the public.

A public scoping meeting was held at the airport, and another public meeting was held at Danbury City Hall with the Airport Commission. The Noise Working group met on 8 occasions, from September 2003 to September 2005. Minutes of all meetings are included in the Noise Compatibility Program document. The Federal Aviation Administration participated in all meetings. The City of Danbury held a public hearing on the Noise Compatibility Program on February 2,2006. A transcript of that meeting is incorporated into the document.

The City of Danbury submitted its Part 150 Noise Compatibility Program document on July 14, 2006. FAA reviewed the Noise Compatibility Program document for completeness and determined it did not meet the submittal requirements as outlined in FAR Part 150. Additional information was requested from the City of Danbury. That information was submitted and reviewed by the FAA, and the entire submittal deemed sufficient on September 6,2006. The Federal Register Notice announcing the beginning of the FAA review period appeared in the September 19, 2006 Federal Register. The public comment period ran until November 6, 2006. Five comment letters were received, and are responded to herein.

Comments of Representative Christopher Shays. Fourth District Connecticut, with responses provided:

Comment 1 objects to the exclusion of "very light jets" from the aviation forecasts. This matter was discussed at length with the Noise Working Group. The new aircraft type known as "microjets" or "very light jets" had not been certified by the FAA upon completion of the noise study. No data were available on the noise signature of the aircraft, as they are utilizing new engine design. While some microjets will be on the market in the foreseeable future, it is not anticipated that Danbury will see much microjet activity in the forecast period. If such activity does materialize, it will likely displace some turboprop activity. Many turboprops would generate more noise than the new stage III microjet engines. The NEMs should be updated as required by the regulations if made necessary by future microject operations at Danbury.

In an effort to be responsive to public comment on this issue, the FAA recommended to Danbury that the noise levels be revisited if microjet activity increases at an unanticipated rate. The City of Danbury agreed to tlus recommendation, and it is included in the Noise Compatibility Program.

Comment 2 objects to the lack of implementation of Danbury's previous Noise Study. As required by FAR Part 150, the current Noise Compatibility Program includes an assessment of the measures outlined in the prior study. This information can be found in section 2.6, pages 2-7 through 2-9.

Comments of Mr. Michael Kroposki, Rideefield CT are paraphrased here. and responses provided:

Comment 1(a) claims the NEM is out of date and not in keeping with the provisions of Part 150. The Part 150 noise study began in 2002. The initial tasks of such a study include an inventory of the existing facilities and aircraft activity. Future aircraft activity can be forecasted from this existing activity, and possible mitigation measures can then be considered. As 2003 was the latest year of data available, that is used as the "existing condition". Part 150 regulations require that a forecast map of at least five years into the future be developed as the "future condition". At the time the forecasts were developed they were considered representative of the level of operations that could occur 5 years in the future. Aggressive forecasts were chosen by the Airport as the future condition, in an effort to not underestimate future noise levels. In response to public concern over possible future noise levels, this was an appropriate decision and a reasonable planning assumption at that time.

As is commonplace with such studies, due to the labor-intensive nature of the work, the number of working group meetings and the controversial nature of a noise study; the Noise Compatibility Program document was not submitted until 2006. The Airport is required under relatively new Part 150 regulations (150.21(d)(2)) to submit a revised noise exposure map "if any chance in the operation of the airport would significantly reduce noise over existing noncompatible uses". The continued downward trend in airport operations will likely cause the noise contours to shrink, and this may require the Airport to submit revised noise exposure maps in the near future. The only land identified as noncompatible in the future condition is also noncompatible in the existing condition. The Airport and the FAA will need to weigh the cost of revised noise exposure maps with the value provided by revising them, such as in a case where changes in land use compatibility are likely to occur.

Comment 1(b) objects to the aviation forecasts on two specific points. First, microjet operations have not been included in the forecasts. See response to Shays comment 1. Second, the installation of hangars was not considered. In this case, the City and the FAA would not consider hangar construction "an airside improvement...that would significantly impact operations". While new hangars may have been built, the number of based aircraft and total aircraft operations have decreased. Hangars are not the type of airside improvements to which the document refers. New or significantly extended runways are the types of improvements that could have a significant impact on operations; and no such improvements are anticipated.

Comment 1(c) indicates one nighttime jet operation was not included in the noise model, as agreed to by the consultant. The referenced Tables 4.3 and 6.4 show the breakdown of the aircraft fleet as determined by the City and its consultants. The table is not the "model input data" as suggested by the commentor. The additional nighttime jet operation is in addition to those displayed in the table, and was included in the model input data. The Lear 35 was chosen as this additional nighttime jet operation, and it is the loudest jet in the Danbury fleet mix.

Comment 1(d) questions the omission of microjets from the aviation forecasts. See response to Shays comment 1.

Comment 1(e) questions the validity of the Noise Exposure Map since a school - Maimonides Academy – is not accurately shown on the plan. The FAA agreed that the location of Maimonides Academy was not accurately shown on the plan. The FAA did then accurately locate this school on the plan and it is outside the current and future 65LDN contour. As the school is located outside the 65LDN contour, it is considered to be a compatible land use.

Comment l(f) questions the validity of the Noise Exposure Map, as it is considered illegible. The FAA finds the Noise Exposure Map to be adequate in scale and clarity to determine the location of incompatible land uses. Therefore, the map is sufficient for the purposes of Part 150.

Comment 1(g) objects to unauthorized aircraft substitutions. No aircraft substitutions were made. The City and its consultant, after discussion with the Air Traffic Control Tower, determined that the Gulfstream II rarely utilized this airport. It was therefore not included in the fleet mix. Those concerned that this could result in underreporting of noise contours should refer to the response to comment l(c) above, where the addition of one nighttime jet operation was included in the noise model input.

Comment 101) notes a computation error in runway usage table 4.8. The commentor is correct that the "Helo" column is inaccurate. During final production of the graphic, table 4.7 was copied onto table 4.8, and the only difference is the "Helo" column. The "Helo" column should read 36%, 42.5%, 22.5%, 0%. It should be noted that the data from overall runway use table are not used in the noise model; it is the separate arrival/departuredata that are used. It is agreed that Runway 26 sees the largest percentage of overall helicopter operations. Helicopter operations are approximately 3% of total operations, and these are all accurately shown in the noise contours.

Comment 1(i) notes the lack of required certifications. The original submittal from the City of Danbury did include the necessary certifications. The FAA requested, and received, additional material to ensure the submittal was complete for purposes of review under Part 150. This additional submittal was required by the FAA after its review of the original submittal, and was not a result of public comment as suggested. As the required revisions were more procedural than substantive, there was no need for new or additional certifications.

Comment 1(j)identifies text in section 5.4.1 as inaccurate. The FAA agrees that the referenced text is inaccurate. The text should read "...less than 121 knots". This text in section 5 is not being used to establish the airport's role, but is used as a basis for runway length discussion. It is far less important in this respect than section 2, page 6 where the full explanation is given of the airport's design aircraft. In that section, the text is accurate. This error is considered typographical and has no bearing on the decisions resulting from this document.

Comment 1(k) notes table 8.2 and figure 8.4 are referenced in the document but are not included in it. The commentor is correct, the table and figure have been omitted. These omissions detailed the location of a number of avigation easements obtained by the airport in the early 1960s. No "notice" is due the landowners as is suggested, as these are easements were acquired over 40 years ago. The issue is adequately described in the text of the document, and the omission of the table and figure had no bearing on the decisions resulting froin this document.

Comment 2 notes the lack of two meetings of the general public during the study as identified in the Scope of Work. The commentor is correct that these meetings were not held. Other members of the public have raised this issue. The airport and its consultant have indicated they made a conscious decision to substitute two meetings of the working group for these general public meetings. As the working group represented those members of the public most affected by, and interested in, the study; this decision was likely a valid one. Part 150 regulations require only an opportunity for one public hearing. That hearing was held, as were several meetings with the working group.

Comment 3 suggests that his unfulfilled request for a delay in the public hearing, or a new public hearing at this time, rendered him unable to adequately review and comment on the document. The City of Danbury, its consultants and the FAA have received numerous detailed emails, letters and phone calls from the commentor. These comments have all been well thought out and insightful. The City and its consultant have listened to all the comments prior to their final submittal to the FAA. There would appear to be little gained by another public hearing, as sufficient opportunity for public input has been provided throughout the process.

Comment 4 references various issues pertaining to air traffic on the west end of runway 8/26, and requests additional documentation pertaining to the avigation easements cited in the comment 1(k). That omission is not considered substantive, and has been addressed above.

Comment 5 cites past studies, and indicates the utilization of the noise abatement runway is insufficient, resulting in increased aircraft overflights in Ridgefield. It is true the majority of air traffic flies over the Town of Ridgefield, as that is the only runway with approach lights, sufficient length, prevailing winds and relatively unobstructed topography to accommodate most users. The Airport users, flight school and charter operators, Airport Manager and Air Traffic control Tower Manager were all active members of the Noise Working Group. Compliance with those procedures will likely never be as high as some would like, as the limiting factors described above are not likely to change. It is not unusual for runway utilization to slip backwards sometime after the implementation of a preferential runway system. Only the Tower and the Airport's diligence can make such a system work. The Noise Compatibility program includes measures specifically intended to address this issue.

Comment 6 raises the issue of microjets, which was address in the response to comment 1(d).

Comments of Mr. Edward Tyrrell of Ridgefield CT:

The first comment seeks clarification on the possible underreported nighttime jet activity: See response to Kroposki comment 1(c).

The second comment seeks clarification on the use of 2003 as the base year and 2008 as the future condition. See response to Kroposki comment 1(a).

Comments of Mr. Rudy Marconi, First Selectman of Ridgefield CT:

The first comment objects to the use of 2003 as the base year and 2008 as the future condition. See response to Kroposki comment 1(a).

The second comment rejects the study's findings due to the exclusion of nighttime jet activity. See response to Kroposki comment 1(c).

The third comment objects to the exclusion of microjets from the study's forecasts. See response to Shays comment 1.

Comments of Mr. David Rifkind. Steptoe & Johnson LLP:

The first comment objects to the use of 2003 as the base year and 2008 as the future condition. See response to Kroposki comment 1(a).

The second comment objects to the revised NEM of September 2006, as it lacks an airport operator certification. The FAA required the resubmission of the two Noise Exposure Maps (''existing'' and ''future'' condition), to make two changes to the title blocks. The phrase "Noise Exposure Map'' was to be included on two figures, and the Base Year "2003" was to be included on one figure. No changes were required to the maps themselves, only the title blocks. As the substance of the maps had not changed, no new certification was required.

RECORD OF APPROVAL

Danbury Municipal Airport, Danbury CT

FAR Part 150 Noise Compatibility Program

Introduction

The Danbury Municipal Airport sponsored an Airport Noise Compatibility Planning Study under a Federal Aviation Administration (FAA) grant, in compliance with Federal Aviation Regulation, Part 150. Danbury produced a report entitled "Part 150 Noise Compatibility Plan, Danbury Municipal Airport". The Noise Compatibility Program (NCP) and its associated Noise Exposure Maps (NEM) were developed concurrently and submitted to FAA for review and approval on September 6, 2006. The NEM were determined to be in compliance on September 9, 2006. This determination was announced in the Federal Register on September 19, 2006 and included:

"Part 150 Noise Compatibility Plan, Danbury Municipal Airport"
June 30, 2006, revised September 6, 2006

1. Figure 4.2 Base Year 2003 Average Daily Noise Contours
2. Figure 6.1 Future Year 2008 Baseline DNL Noise Contours

The study focused on defining an optimum set of noise and land use mitigation measures to improve compatibility between airport operations and community land use, presently and in the future. Danbury Municipal Airport's Noise Compatibility Program consists of 3 administrative measures as well as 4 prior measures from the Airport's prior (1987) Noise Compatibility Program. These include 3 noise abatement measures (noise abatement pattern procedures, preferential runway use, prohibition of intersection takeoffs) and 1 land use element (notification of relevant land developments by the Danbury Planning Commission to the Airport Administrator). The recommended program measures are included in Section 9 of the "Part 150 Noise Compatibility Plan, Danbury Municipal Airport".

The approvals listed herein include approvals of actions that the airport recommends be taken. It should be noted that these approvals indicate only that the actions would, if implemented, be consistent with the purposes of Part 150. These approvals do not constitute decisions to implement the actions. Later decisions concerning possible implementation of these actions may be subject to applicable environmental or other procedures or requirements. Approval does not constitute a commitment by the FAA to financially assist in the implementation of the program nor a determination that all measures covered by the program are eligible for grant-in-aid funding from the FAA. Eligibility for federal funding of measures that are determined in this Record of Approval to meet the approval criteria of 150.33 will be determined at the time the FAA receives an application for funding, using the criteria in the most current version of FAA Order 5100.38, Airport Improvement Program Handbook.

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

Administrative (A) Measures.

A-1 Pilot Education (Page 9-1 through 9-5 of Noise Compatibility Plan)
The Airport proposes to utilize Pamphlets, Airfield Signs and NOTAMs (Notice to Airmen) to increase compliance with all noise abatement procedures including the preferential runway system and noise abatement pattern procedures. Examples of educational pamphlets and airfield signs are included in the Noise Compatibility Plan. These elements are to be part of an ongoing pilot education program. Increased use of the noise abatement runway is particularly relevant, as this is a source of numerous noise complaints.

FAA Action: Approved.

A-2 Community Outreach Efforts (Page 9-5 through 9-8 of Noise Compatibility Plan)
The Airport proposes to improve the noise complaint system and to continue the Noise Working Group. An improved noise complaint system, with a dedicated phone line, standardized form and link to the City's web site can improve the Airport's ability to manage the noise complaint system. Continued participation in the Noise Working Group is a useful tool in promoting face-to-face dialog on noise issues. It is hoped that these measures will increase communication and understanding between Airport Management and those most affected by aircraft noise.

FAA Action: Approved.

A-3 Noise Exposure Map Updates (Page 9-8 of Noise Compatibility Plan)
The Airport proposes to update its Noise Exposure Maps when microjet activity meets or exceeds 15% of total operations. This commitment is in addition to the existing provisions of 14 CFR Part 150.21(d) regarding the conditions under which Noise Exposure Maps should be updated. Aircraft operations at Danbury have been on a general downward trend for many years, yet noise concerns continue to rise. One area of concern is the growth of "microjet" or "very light jets". Review of the NEM, regularly or as a result of the 15% growth of microjet, is a useful tool in assuring that the Noise Exposure Map is current and relevant.

FAA Action: Approved.

The following measures were put forth in the 1987 Part 150 Study, and are not altered by this Update. These measures were incorporated as part of the existing condition in the latest NEMs. The FAA's 1987 decisions also are repeated for information purposes.

Noise Abatement (NA) Measures

NA-1 Noise Abatement Pattern Procedures (Page 9-9 of Noise Compatibility Plan)
The following traffic pattern has been implemented to reduce noise exposure by raising the traffic pattern 200' and guide traffic away from noise sensitive areas.

Runway	Left/Right Pattern	Turn to Crosswind at	Turn to Downwind at	Turn to Final at	Pattern Altitude
8	Right	1200' MSL	45 deg. to R/W	45 deg. to R/W	1700' MSL
26	Left	ASAP	45 deg. to R/W	45 deg. to R/W	1700' MSL
17	Left	Past Lake	45 deg. to R/W	45 deg. to R/W	1700' MSL
35	Left	At Route 84	45 deg. to R/W	Past Lake	1700' MSL

FAA Action: Approved.

NA-2 Preferential Runway Use (Page 9-9 of Noise Compatibility Plan)
During fair weather and calm winds (less than 5 knots), or when wind is from a direction between 124 degrees and 214 degrees magnetic at any speed, ATC personnel will continue to assign R/W 17 as the preferred runway to single engine and twin engine propeller aircraft.

FAA Action: Approved.

NA-3 Prohibition of Intersection and Formation Takeoffs (Page 9-9 of Noise Compatibility Plan)
The airport would continue to issue NOTAMS to inform pilots that intersection and formation takeoffs are prohibited.

FAA Action: Disapproved for purposes of Part 150. As with the 1987 NCP, no quantification of noise benefit has been provided; but some benefit could be inferred. Aircraft utilizing the full runway would achieve higher altitudes before passing over residential areas, and single aircraft takeoffs would produce lower noise levels than multiple aircraft takeoffs. Disapproval of a Part 150 noise abatement measure does not preclude the airport from instituting this, or similar measures, for safety or other reasons outside the confines of Part 150.

Land Use (LU) Measures

LU-1 Notification, by the City of Danbury Planning Commission, to the Airport Administrator of Proposed Subdivisions or Special Exemption Uses in the Airport Protection District (Page 9-9 of Noise Compatibility Plan)
This communication between the Planning Department and the Airport Administrator allows the Airport to evaluate and comment on proposed development with regard to potential noise impacts.

FAA Action: Approved.