



U.S Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Los Angeles Airports District Office

P.O. Box 92007
Los Angeles, CA 90009

November 9, 2009

Ms. Gina Marie Lindsey
Executive Director, Los Angeles World Airports
Los Angeles International
1 World Way
Los Angeles, CA 90045

Dear Ms. Lindsey:

**Van Nuys Airport
FAR Part 150 Noise Compatibility Program**

The Federal Aviation Administration (FAA) has evaluated the Noise Compatibility Program (NCP) for the above referenced airport, prepared to comply with 14 Code of Federal Regulations Part 150. The recommended NCP proposed by the City of Los Angeles, Los Angeles World Airports is described in Section V of the Program. I am pleased to inform you that the Associate Administrator for Airports has approved three (3) of fourteen (14) Noise Abatement elements, Two (2) of three (3) Noise Mitigation elements, two (2) of (2) Land Use Planning elements, and eight (8) of sixteen (16) Program Management elements. The specific FAA action for each NCP element is set forth in the enclosed Record of Approval. The effective date of this approval is October 16, 2009. All of the FAA actions on your program recommendations are more fully described in the Record of Approval.

The FAA also has concerns about the length of time it has been since the NEMs were developed and the length of time since the general public was involved in the process. The NCP shows the public involvement process ended in 2001. The NEMs are based on operational data that is older than 10 years. While we received certification from you, in accordance with 14 C.F.R. 150.21, that the NEMs were representative of conditions at the airport for the existing and forecast timeframe as of the date you submitted the documentation in 2007, we believe it would be appropriate to review and revise your NEMs under 14 C.F.R. 150.21 due to their age.

Each Airport NCP developed in accordance with FAR Part 150 is a local program and not a Federal program. The FAA does not substitute its judgment for that of the airport sponsor with respect to which measures should be recommended for action. The FAA's approval, disapproval or other action of the Part 150 program recommendations is based on the approval criteria in Part 150 and applicable sections of the statute (49 U.S.C. section 475). FAA's decisions are limited to the following determinations:

a. The Noise Compatibility Program was developed in accordance with the provisions and procedures of FAR Part 150;

b. Program measures are reasonably consistent with achieving the goals of reducing existing incompatible land uses around the airport and preventing the introduction of new incompatible land uses;

c. Program measures would not create an undue burden on interstate or foreign commerce, unjustly discriminate against types or classes of aircraft, or intrude into areas preempted by the Federal government; and

d. Program measures relating to the use of flight procedures can be implemented within the period covered by the program without derogating safety, adversely affecting the efficient use and management of the navigable airspace and air traffic control responsibilities of the Administrator prescribed by law.

Specific limitations with respect to FAA's approval of an Airport Noise Compatibility Program are delineated in FAR Part 150, Section 150.5. Approval is not a determination concerning the acceptability of land uses under Federal, State or local law. Approval does not, by itself, constitute a FAA implementation action. A request for Federal action or approval to implement specific Noise Compatibility Measures may be required. Prior to an FAA decision on the request to implement the action, an environmental review of the proposed action may be required. 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. Where Federal funding is sought, requests for project grants must be submitted to the FAA's Los Angeles, Airports District Office.

The FAA will publish a notice in the *Federal Register* announcing the approval of this Noise Compatibility Program. You are not required to give local official notice, however, you may do so if you wish.

Thank you for your continued interest in noise compatibility planning. If you have questions concerning this matter, please contact Victor Globa, Environmental Protection specialist at 310/725-3637.

Sincerely,



Brian Q. Armstrong
Manager, Los Angeles Airports District Office

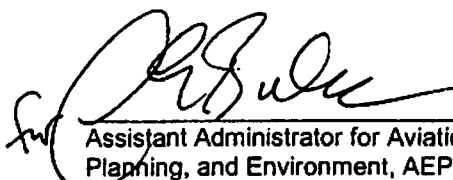

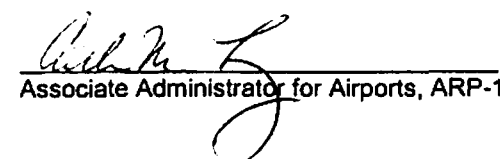
Enclosure

cc: AWP-600, APP-400

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RECORD OF APPROVAL
14 CFR PART 150
NOISE COMPATIBILITY PROGRAM



VAN NUYS AIRPORT
VAN NUYS, CALIFORNIA

 Assistant Administrator for Aviation Policy Planning, and Environment, AEP-1	<u>10/15/09</u> Date	<input checked="" type="checkbox"/> CONCUR	<input type="checkbox"/> NONCONCUR
 Chief Counsel, AGC-1	<u>10/15/09</u> Date	<input checked="" type="checkbox"/> CONCUR	<input type="checkbox"/> NONCONCUR
 Associate Administrator for Airports, ARP-1	<u>10/16/09</u> Date	<input checked="" type="checkbox"/> APPROVED	<input type="checkbox"/> DISAPPROVED

**Record of Approval
Van Nuys Airport
Noise Compatibility Program**

INTRODUCTION

The Van Nuys Airport Noise Compatibility Program Report with Noise Exposure Maps and Noise Compatibility Program Mitigation Measures (NEM/NCP) describes the current and future noncompatible land uses based on the parameters as established in Title 14, Code of Federal Regulations (CFR), Part 150, *Airport Noise Compatibility Planning*. The noise compatibility program includes fourteen recommended noise abatement elements, three noise mitigation elements, two land use planning elements, and sixteen program management elements. These measures are summarized in pages 62 through 77 of Section V of the NEM/NCP.

The approvals listed herein include approval of actions that the airport recommends be taken by the Federal Aviation Administration (FAA). It should be noted that these approvals indicate only that the actions would, if implemented, be consistent with the purposes of 14 CFR Part 150. The approvals do not constitute decisions to implement the proposed actions or a commitment by the FAA to provide federal financial assistance for these actions. Later decisions concerning possible implementation of these actions may be subject to applicable environmental or other procedures or requirements.

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

NOISE ABATEMENT ELEMENTS

1. Van Nuys Helicopter Policy. [Measure #5]

Description: Formulate and adopt local plans and ordinances as necessary to regulate the establishment and operation of new helicopter landing facilities in the general area. Monitor, maintain and adjust plans and ordinances over time. (NCP Page 64, NCP Pages 82-83; Volume 1 of 3, Helicopter Study dated November 1991)

The purpose of this measure is to develop plans for the siting of new helicopter facilities and establish operational procedures. Both location and operating criteria are important in minimizing the impact of helicopter operations on noncompatible and sensitive areas. A primary objective of this planning effort would be to develop location criteria that take into account sensitivities of the impacted areas as well as operational needs of the operators to achieve an optimal balance.

There are currently eight primary routes out of VNY for helicopter operators. The planning process would evaluate whether there should be any adjustments to these tracks. Secondly, the plan would identify those locations for helicopter landing facilities that have the closest access to each of the tracks and would minimize noise impacts.

Quantification of the noise benefits would await the completion of the planning and approval process. One key feature of the plan should be the strengthening of steps to have helicopter operators maintain close compliance with existing (or potentially revised) tracks. Another important factor to be considered is establishing minimum altitudes for helicopters within safety constraints. This factor is addressed in other measures of the NCP as well. Addressing these

factors in the most appropriate manner and taking into account the cumulative benefits of all helicopters measures should ensure a significant reduction from noise impacts or nuisance factors associated with helicopters in the area around VNY.

FAA Action: Approved for study. The NCP indicates in several meeting minutes, which were open for public comment, that helicopter operations are problematic around VNY. The helicopter study, while completed in 1991, provides some insight into the MSL altitude at which helicopters fly due to glide slope, fixed wing patterns, and separation requirements.

That portion of the measure that recommends adoption of local plans and ordinances as necessary to regulate the establishment and operation of new helicopter landing facilities is Disapproved.

2. West Side Operations. [Measure #6]

Description: Investigate whether to encourage helicopter pilots operating west of VNY to increase their altitude 300 feet which may be accommodated under the existing Burbank BUR) glideslope. (NCP Pages 64 and 83; Volume 1 of 3 Helicopter Study dated November 1991)

This measure would initiate an investigation and analysis as to whether it would be feasible to encourage helicopter operations to increase their altitude by 300 feet in the area west of the airport. BUR, which is located approximately 7 miles east of VNY, has one of its approach patterns go over VNY. This measure could determine whether the approach pattern in the area west of the airport is high enough to accommodate an increase in operating altitude of helicopters flying beneath the BUR pattern.

Pending the determination of the investigation, the altitude for helicopters could be raised the suggested 300 feet. If this increase were to be made mandatory or otherwise have compliance assured, it would provide relief to residents in the area from the nuisance noise factor that is experienced from helicopters. The primary advantage of such a measure would probably be realized outside of the CNEL 65 dB contour via single event and overflight benefits.

FAA Action: Disapproved. The FAA review indicates that changing the altitude of helicopters in the area would increase complexity for both controllers and pilots. It has been discussed with pilots and controllers who have indicated it would be difficult to implement and add complexity to the congested airspace. Because the NCP did not include a quantitative analysis, and the narrative indicates the proposal would likely derive benefits outside of the sponsor's selected CNEL noise contour study area, implementation would not be justified for purposes of noise mitigation. (pages 14-15).

3. Helicopter Training Facility. [Measure #7]

Description: This measure recommends conducting testing and research to determine whether a helicopter training facility would be appropriate on the Bull Creek Site. Such a facility would preclude the need for helicopters to leave the airport to train elsewhere. Any such facility would be limited in the number of operations allowed as determined by the study. (NCP Page 64, NCP Page 83; Volume 1 of 3 Helicopter Study dated November 1991).

The objective of this measure is to reduce helicopter training operations that can now only be met at other airports. If it is determined that a facility at the Bull Creek Site could be provided, plans would have to be developed to set a schedule for development and the scope of the facility. Quantification of noise benefits would depend on how many operations could be diverted. By establishing such a facility at VNY it would provide a good opportunity to directly instill the philosophy of flying friendly and mitigating noise impacts. The curriculum could stress the need

to follow noise abatement procedures and advocate potentially new procedures to be developed in the NCP.

FAA Action: Disapproved. The airport has no authority to regulate numbers of operations; such action would be subject to analysis and approval under 14 CFR Part 161. Also, the NCP does not provide sufficient information to determine whether the Bull Creek Site would be noise beneficial and there appears to be conflicting information in the Helicopter study, which indicates there is opposition to helicopter operations in the Bull Creek area (see pages 4, 9, 12, 15-17) because it is noise-sensitive. Due to the age of the study(ies), updated land use information also would be needed to determine whether there are new noncompatible land uses that might be affected should operations be shifted to this site.

4. Improve Use of Established [Helicopter] Routes. [Measure #8]

Description: This measure recommends developing a program to require helicopter operators to fly along established routes, in particular Stagg Street instead of Saticoy Street, and be encouraged to maximize operations over the least noise sensitive areas such as the industrial development to the east and the Flood Control Basin to the south. (NCP Page 65, NCP Page 84; Volume 1 of 3 Helicopter Study dated November 1991).

Emphasis is placed on the need for pilots to adhere to the Stagg Street track instead of some operators flying over Saticoy Street. It also calls for the further encouragement of helicopter operators to fly over industrial areas east and the Flood Control Basin to the south to avoid noise sensitive areas. The purpose is to initiate development of a program to ensure compliance with these and other operational procedures. Quantification of noise benefits would have to wait for the specific aspects of the program to be developed. As with other helicopter related measures, much of the benefit to be realized would be outside the CNEL 65 dB noise contour and not necessarily mitigate or affect the contour to a great extent. The measure would improve the nuisance factors typically associated with helicopter operations around VNY.

FAA Action: Disapproved. FAA review of the recommendation indicates an increase in the use of Stagg Street arrival/departure procedures would create a safety hazard for ATC and it is not acceptable for this reason. Increased use of the Stagg Street route will increase the frequency of traffic crossing over mid-field and produce unacceptable levels of risk to safety. It also is noted that the documentation states an analysis of benefits was not conducted, and that it is not likely that benefits will occur within the CNEL noise contours of the official NEMs.

5. Bull Creek [Helicopter] Route to Balboa. [Measure #9]

Description: Investigate the feasibility of moving the Bull Creek route to the west, over Balboa Boulevard, to reduce noise over residents in the Creek area. Surface traffic on the Balboa Boulevard route should mask some of the noise from helicopters. This recommendation should be considered, but careful evaluation is needed by local residents and pilots. (NCP Page 65, NCP Page 84, Volume 1 of 3 Helicopter Study dated November 1991).

This measure reiterates the intent to evaluate the noise abatement efficacy of current helicopter tracks to determine whether adjustments should be made. The specific measure focuses on the potential to move the track currently over Bull Creek westerly to Balboa Boulevard. The purpose of this measure would be to *initiate a feasibility study* to evaluate the effectiveness of the proposal, incorporating feedback from local residents to account for subjective interpretation of noise impacts and mitigation. Because of the close proximity of the helicopter track over Bull Creek to the western sideline of the CNEL 65 dB, movement of the track to Balboa Boulevard may only have a marginal effect on the CNEL 65 dB contour. This is because the track is essentially outside the 65 dB, which would lessen the effect and as indicated previously,

helicopter sound energy is basically subsumed by higher emitting jet operations. However, the primary benefit of the measure would be to minimize the nuisance effect on the residents located between Bull Creek and airport.

FAA Action: Disapproved. The NCP recommends additional study to determine whether this measure is feasible. The 1991 Helicopter Study suggests the Bull Creek area is noise sensitive, but indicates a shift to Balboa Boulevard would require helicopters to fly over more residential areas and a school, and that more testing is needed to determine whether it is feasible (p 17). The NCP should provide more information on the noise benefits or disbenefits of shifting operations to this proposed route. Also, without more current land use information, it is not possible to tell whether new noncompatible land uses would be impacted or benefitted should the route be shifted.

6. [Altitude of] Public Service [Helicopter] Fleets. [Measure #10]

Description: This measure recommends that LAWA work toward enactment of an ordinance that would require City-owned helicopters to maintain specific altitudes (depending on fixed wing conflicts), except when a mission requires a lower altitude or an orbiting maneuver. Under FAA regulations, helicopters must now be at 500 feet altitude within the Van Nuys Airport Air Traffic Area (ATA), which extends five miles in all directions from the airport. The ordinance would require helicopters within and outside the Van Nuys ATA to maintain sufficient altitude so as not to be a nuisance to local residents, particularly when they are transiting an area. The sufficient altitude would be determined during development of the ordinance but, at a minimum, would maintain the 500 feet already currently flown in the ATA. (NCP Pages 65-66 and NCP Page 85; Volume 1 of 3, Helicopter Study, November 1991).

The objective is to accomplish one of the elements of the overriding helicopter policy described previously (see Noise Abatement Element 1, above). This measure differs from other measures by the recommendation that an ordinance be developed which would mandate compliance with prescribed altitudes.

Initially, a study would need to be done to identify the most appropriate altitude, or if necessary multiple altitudes, at which public service helicopters can safely and efficiently operate. One of the issues to be addressed is the practice of police helicopters flying low while traveling from one point to another. They engage in this practice to maintain observations on the ground of criminal activity or related problems to which they might need to respond or alert patrols on the ground. The study would need to confirm whether this practice needs to be done all of the time or if it could be limited to specified conditions.

Other such practices for all public service helicopters would need to be evaluated to determine if there are optional practices that cause noise impacts but can be adjusted to raise altitudes. The conditions necessary to enable altitude changes would be articulated within the context of the ordinance. The level of reduction of noise impacts would depend on the establishment of the specific conditions when helicopters would operate at the prescribed altitudes. From these factors a determination can be made as to how many operations would be affected and how this would translate into a measurable reduction in nuisance from helicopter noise.

FAA Action: Disapproved. This measure recommends a local ordinance to enforce study-recommended altitudes. Aircraft altitudes may not be established by local ordinance.

Any study of possible changes to the airspace in the vicinity of VNY must be conducted in consultation with the FAA's Air Traffic Organization because of the potential impacts on airspace safety and efficiency. Should a study recommend changes in altitude that are demonstrated to

be safe, they may be submitted for approval under 14 CFR Part 150. These changes must include a quantified noise benefit to demonstrate the measure meets part 150 approval criteria.

7. Establish Noise Abatement and Departure Techniques for all Aircraft Departing VNY. [Measure #12]

Description: This measure recommends modified or reduced noise takeoff that would vary according to aircraft type, size, and weight. Some aircraft might be required to fly a steeper takeoff profile while others would find it necessary to use a more shallow profile. The takeoff parameters for aircraft would be established through continuous measurement of individual aircraft noise levels using approved manufacturers or NBAA procedures. (NCP Pages 66-67 and NCP Pages 86-87).

This measure, in concert with [Measure #13] is the heart of the NCP. The purpose of the measures is to establish flight procedures that will significantly reduce noise impacts from aircraft departures. Initially, approved manufacturers or NBAA noise abatement procedures would be used and these would be evaluated and where necessary modified to improve their effectiveness. Data on noise levels is constantly recorded by LAWA's monitoring system, which surrounds VNY with seven noise monitors that are routinely calibrated. In conjunction with FAA ARTS data, the noise level of operations can be determined and used to analyze whether modified procedures are working or should be adjusted.

Modifications were made to arrival profiles in the INM for certain aircraft types. The user defined profiles were adjusted to reflect typical operational characteristics for ILS landings. These are elevated at VNY because of surrounding terrain. Normally arrivals land at 3.9 degrees. This parameter was incorporated into the INM for the study.

Departure profile modifications for certain aircraft types represent the mitigated noise levels that result from complying with the Fly Friendly procedures tailored for applicable aircraft. The modified profiles were developed by the consulting firm and approved by the FAA. A full description of the methodology is in Volume 3 of 3 of the Appendices to the study. The modified departure profiles were done for the noisiest jets, including the Falcon 20, G11B, and Lear 25.

FAA Action: Approved as voluntary. Exhibits 2 and 3 provide benefits information of implementing the Fly Friendly Program. That program could benefit several thousand people within the CNEL 65 dB noise contour.

8. Establish Noise Abatement and Departure Procedures. [Measure #13]

Description: This measure recommends the adoption of Scenario 9 of the Part 150 scenarios as the NCP, based on reduced take-off thrust power settings within safety levels for all jet departures and prohibit aircraft having Part 36 takeoff noise levels in excess of 74 dBA (excluding emergency flights), between the hours of 10:00 p.m. and 7:00 a.m. (These procedures are commonly referred to as the Fly Friendly Program) (NCP Pages 19-20, NCP Page 67, NCP Pages 87-88; Exhibits 2 and 3 of the NCP report comparing forecast conditions with and without mitigation measures).

The purpose of this measure is to implement the intent of noise abatement flight departure procedures for jets identified as a result of [Measure #12]. Since the mid 1990's, a voluntary program has been in place to fulfill the noise mitigation objectives of the measures. As a result of voluntary compliance with the fly friendly procedures, there has been a significant decrease in the size of the CNEL 65 dB noise contour, and a more than 28 percent reduction in the number of residential units impacted within the forecast noise contour (excluding the 1160 residential units

expected to be insulated during the period). Reference should be made to Exhibits 2 and 3 for a comparative analysis of the CNEL 65 dB contour with and without the Fly Friendly program.

The majority of jet operators comply with the procedures that have been established for their aircraft type and reach the noise level threshold reductions targeted. Pilots who do not meet the threshold are sent a letter requesting voluntary compliance. With the formal adoption of this important measure, the favorable responses with requests to comply should continue to be strengthened. Consideration should be given to accelerating or intensifying the current follow up to violators. The objective should be to evaluate alternative means to achieve optimal compliance and implement those most effective. The thresholds should be periodically reviewed to make adjustments, minimizing noise impacts within bounds of pilot safety and considering undue burden on operators.

The other component of the measure proposes to expand the curfew hours. Resolution 12655 was adopted in 1981 established a noise regulation for VNY. An element of the ordinance is a nighttime curfew between 11 pm and 7am for all jets exceeding 74 dBA on departure. In 1997, an amendment was adopted, extending the curfew to 10 pm – 7 am. The purpose of this NCP measure is to emphasize and reinforce the intent of that amending ordinance.

FAA Action: Approved in part, as voluntary; disapproved in part pending compliance with 14 CFR Part 161. Scenario 9 consists of several measures submitted as a “package” and includes procedures subject to 14 CFR Part 161.

The measure related to existing flight procedures continuing at the airport on a voluntary basis is approved as voluntary. The NCP narrative indicates this measure is effective and provides a quantifiable noise benefit.

Any changes to the voluntary nature of the Fly Friendly program or adjustments to flight profiles is disapproved. Such changes would need to be separately reviewed, for reasons of aviation safety and efficiency, by the FAA. Part 161 applies to measures that would reduce the total number or hours of Stage 2 or Stage 3 aircraft operations at the airport. Extending the curfew hours would require compliance with 14 CFR Part 161 and the Airport Noise and Capacity Act of 1990 (ANCA), 49 U.S.C. 47524(b).

9. Runway Policy – Full Length Departure. [Measure #15]

Description: This measure recommends that a “top of the runway” departure policy, (taking off at the furthest end of the runway), is part of this NCP as a reiteration of existing policy for jet aircraft. (NCP Page 68, NCP Page 89-90).

It has long been a policy at VNY that intersection departures are not permitted for jet aircraft. Only small piston and turbo prop aircraft use intersection departures. All jets use the full runway length. The primary intent of this measure is to reiterate and confirm existing airport policy. The purpose of the measure is to ensure that all jet aircraft have the fullest possible opportunity to gain as much altitude as possible before flying over residential areas. With respect to southerly departures from runway 16R, aircraft that depart from the north will be higher when flying over the south. This is further mitigated because there is a golf course and the Flood Control basin further south, allowing aircraft to reach even greater heights before beginning their turn. As indicated in the technical analysis, about 80 percent of the departures are made to the south.

Conversely, northern departures from runway 34L would provide a similar advantage for residents north. Although northerly departures do not have open space, most departures are to the south and therefore the greater benefit is achieved. It would be difficult to quantify the mitigating effect this action would have on the CNEL contour because of the variability of each

departure profile. This measure would effectively continue a practice that has already been in place for jet aircraft. Implementation should maintain a considerable reduction to ground level noise impacts in comparison to allowing intersection departures.

FAA Action: Disapproved. There is no analysis to demonstrate the measure's noise benefits and the FAA cannot determine how the measure contributes to improving the noise environment around the Airport. This disapproval does not prohibit or discourage continuation of existing practices to use the full runway length outside the part 150 program.

10. Raising Burbank (Bob Hope Airport) Glideslope. [Measure #25]

Description: This measure recommends continued coordinated research with the FAA to investigate the feasibility of raising the approach glideslope to Bob Hope (BUR) to allow an increase in operating altitude for helicopter and fixed wing operations. If feasible, practical, and safe, this could raise air space over VNY by as much as 1,500 to 2,000 feet. LAWA shall request the FAA to conduct a study resulting in increasing the glideslope angle for Bob Hope Airport's Runway 8 ILS approach to the maximum practicable so that operational altitudes at VNY can be raised without conflict with Bob Hope Airport Traffic. A 1,500 to 2,000 foot AGL maximum altitude would be required for helicopters. (NCP pages 72-73, 96-97, and Volume 1 of 3 Background, Helicopter Study dated November 1991)

NCP [Measure #6] recommends coordination with the FAA to investigate the feasibility of raising the glide slope to BUR to allow an increase of approximately 300 feet for helicopter operations in the vicinity of VNY. Reference was made to a similar measure being approved in the BUR 150 study. In their approval statement, the FAA indicated that ATCT at BUR currently assign higher altitudes to helicopters to the extent feasible considering weather and traffic flow.

This measure calls for further cooperation between FAA and the airport to study implementation of minimum operating altitudes. Any final determination will be subject to FAA approval and implementation.

It seems appropriate to refer this measure to the LAWA Helicopter Task Force. Some of the items to be addressed would be the fact that current data is probably insufficient to enforce the proposal and that there are safety issues regarding airspace. One of the questions to be considered would be where the altitude restrictions would be placed. All of these factors need to be addressed and resolved before determining noise reduction impacts. Any increase in altitude will contribute to less helicopter noise nuisance around VNY.

FAA Action: Disapproved. While this measure proposes only to maintain communication between the FAA for both BUR and VNY on this issue, the FAA has already examined the feasibility of the proposal. The FAA has concerns regarding the "ripple" effect the change to glideslope would cause within the Southern California Terminal Radar Control (TRACON) airspace around VNY. Traffic is already constrained by multiple regulated airspace areas and high terrain nearby. Raising the glideslope at BUR would require additional changes to vertical altitude for separation purposes. This will create the loss of significant designated altitude when there is an aircraft executing the Instrument Landing System (ILS) to BUR. Loss of any altitude will be detrimental to air traffic operations in the vicinity.

THE FOLLOWING MEASURES, AND THOSE IDENTIFIED AS PROGRAM MANAGEMENT ELEMENTS 14, 15, AND 16, ARE IDENTIFIED IN THE NCP AS MEASURES SUBJECT TO 14 CFR PART 161.

11. Maximum Daytime Noise Limits. [Measure #32]

Description: Subject to a Part 161 Study, maximum daytime noise limits for aircraft operating at the airport could be established. Subject to findings and conclusions of the Part 161 Study, an ordinance would be developed to establish a daytime maximum noise limit of 77 dBA for aircraft operating at the airport. (NCP Page 76, NCP Page 104)

The purpose of this measure is to reduce noise by prohibiting the operation of aircraft that are demonstrably above a prescribed noise level. When the measure was originally proposed, the 77 dBA limit was established to distinguish between Stage 2 and Stage 3 aircraft operating at VNY at the time. All aircraft under 77 dBA should by definition be Stage 3. To the extent new Stage 3 fly at VNY are above 77 dBA, the application of this measure to Stage 3 would require a Part 161 analysis. It would therefore be prudent to include this in the overall context of a comprehensive evaluation. One issue is clarification as to why the measure would establish a daytime limit as opposed to all non-curfew hours. This measure may be one of the most onerous proposals in the NCP in terms of cost on the existing aircraft operators. Alternatives should be considered.

FAA Action: Disapproved pending compliance with Part 161. The NCP does not quantify noise benefits derived from implementing this measure. As recognized in the NCP the proposed measure constitutes an airport noise and access restriction that could only be adopted after full compliance with the Airport Noise and Capacity Act of 1990 (ANCA), and 14 CFR Part 161. ANCA and Part 161 apply to restrictions affecting Stage 2 and Stage 3 aircraft operations. The completed Part 161 analysis may be submitted for FAA reconsideration of this measure under Part 150 if an FAA determination under part 150 is being sought. Other issues also must be addressed under part 150 including the measure's impacts on aircraft that are not Stage 2 or Stage 3.

12. Limit on Stage 3 Jets. [Measure #33]

Description: This measure recommends that a cap on the number of Stage 3 jets that may be based at VNY be established. (NCP Page 76, NCP Pages 105-106).

The purpose of this measure is to reduce noise by limiting the number of Stage 3 aircraft that operate at VNY. It has been suggested that without a cap on growth of Stage 3 jets, there will be an increase in the noise contour, which could overshadow all other noise control measures. This assertion would need to be verified by quantified analysis.

FAA Action: Disapproved pending compliance with Part 161. The NCP does not quantify the noise benefits. The measure proposes to examine this recommendation in detail in a part 161 study. As recognized in the NCP the proposed measure constitutes an airport noise and access restriction that could only be adopted after full compliance with the Airport Noise and Capacity Act of 1990 (ANCA), and 14 CFR Part 161. ANCA and Part 161 apply to restrictions affecting Stage 2 and Stage 3 aircraft operations. The completed Part 161 analysis may be submitted for FAA reconsideration of this measure under Part 150 if an FAA determination under part 150 is being sought. Other issues also must be addressed under part 150 including the measure's impacts on aircraft that are not Stage 2 or Stage 3.

13. Expansion of Curfew. [Measure #34]

Description: Subject to a part 161 study, curfew provisions currently contained in the Van Nuys Noise Abatement and Curfew Regulation could be expanded.

(A) The existing 10 pm to 7 am curfew would be expanded to include all non-emergency jets.

(B) The existing 10 pm to 7 am curfew on all non-emergency jets would be expanded to include non-emergency helicopter operations. This proposed measure would be subject to further evaluation within the context of the part 161 study. (NCP Page 76, NCP Pages 106-107).

The purpose of this measure would be to expand the existing curfew to reduce noise impacts. A nighttime curfew has been in effect at VNY for over 20 years. The curfew hours were recently extended from 11 pm to 7 am, to 10 pm to 7 am. All non-emergency aircraft with a departure noise level of 74 dBA are prohibited from taking off during those curfew hours. This measure would extend the curfew to all jet operations, including the quietest ones at 74 dBA and below.

It would probably take a substantial number of aircraft operations below 74 dBA to make a measurable difference in the contour size or number of impacted uses. The actual contours and level of impact area would have to be demonstrated through a comparison of scenarios. The results could be used to make an initial determination as to whether the proposal appeared to be warranted. With respect to the helicopter curfew, several factors would need to be considered, as noted on page 107 of the NCP.

FAA Action: Disapproved pending compliance with Part 161. The NCP does not quantify the noise benefits. As recognized in the NCP the proposed measure constitutes an airport noise and access restriction that could only be adopted after full compliance with the Airport Noise and Capacity Act of 1990 (ANCA), and 14 CFR Part 161. ANCA and Part 161 apply to restrictions affecting Stage 2 and Stage 3 aircraft operations. A clarifying point – the extension of the curfew hours to 10 pm is grandfathered under ANCA only as it applies to Stage 2 aircraft. Applicability of the expanded curfew hours to Stage 3 aircraft would be subject to Part 161. The completed Part 161 analysis may be submitted for FAA reconsideration of this measure under Part 150 if an FAA determination under part 150 is being sought. Other issues also must be addressed under part 150 including the measure's impacts on aircraft that are not Stage 2 or Stage 3.

14. Cap/Phase-Out of Helicopters. [Measure#35]

Description: Subject to a part 161 study, a cap or phase-out of the current fleet of helicopters would be investigated. This measure also would be forwarded to the Helicopter Task Force, as an item that should be considered. Pending the outcome of the investigation into the feasibility and desirability of the measure by the Task Force, the proposed measure would be subject to further evaluation within the context of the part 150 study. (NCP Pages 77 and NCP Pages 107-108).

The objective of this measure is to evaluate whether to place a limit on the number of helicopters that can operate at VNY or consider phasing out all helicopter operations. The intent is to reduce the noise impact associated with those operations. As reflected throughout the NCP, helicopter noise is a nuisance factor. The evaluation of placing a cap on the number of helicopters that operate, or eliminating them, should be compared to other proposed measures, such as raising operational altitudes or adjusting tracks to determine whether other steps can be taken that are less draconian to achieve reductions in noise impacts.

FAA Action: Disapproved pending compliance with Part 161. The NCP does not quantify the noise benefits. As recognized in the NCP the proposed measure constitutes an airport noise and access restriction that could only be adopted after full compliance with the Airport Noise and Capacity Act of 1990 (ANCA), and 14 CFR Part 161. ANCA and Part 161 apply to restrictions affecting Stage 2 and Stage 3 aircraft operations, including helicopters. The completed Part 161 analysis may be submitted for FAA reconsideration of this measure under Part 150 if an FAA determination under part 150 is being sought. Other issues also must be addressed under part 150 including the measure's potential discriminatory effect against a class of aircraft.

NOISE MITIGATION ELEMENTS

1. Insulation. [Measure #2]

Description: This measure recommends installation of sound attenuation in three stages: (A) – undertake and validate an acoustical insulation program and estimate representative housing types within the 70 CNEL contour. (B) Establish eligibility for residential acoustical insulation in greater VNY areas subject to impacts of CNEL 65 or greater. Initial target will be households within the 70 CNEL; (C) Expand eligibility to include the 65 CNEL contour. If any portion of a lot lies within the 65 CNEL then it should be included. Continue acoustical insulation until all houses or apartment units impacted are insulated. (NCP Pages 62 and 79 and Exhibit # 3).

FAA Action: Approved for homes constructed before October 1, 1998. The FAA's policy published in the Federal Register April 3, 1998 (Volume 63, Number 64), states that the FAA will not approve Federal funding to mitigate noise-sensitive land uses constructed after October 1, 1998. This element would improve land use compatibility in the vicinity of the airport. The NEM/NCP updated information states approximately 232 homes per year are being insulated (page 47). Since the time the NCP was completed, it is estimated that somewhere near 900 homes remain to be insulated. Structures recommended for inclusion in the program and the scope of the program will be required prior to approval for federal funding.

In order to be eligible for federal funding, the project is subject to compliance with FAA Order 5100.38C. Homes that have already been acoustically treated by the City of Los Angeles prior to approval of the Part 150 study cannot be made eligible for federal AIP or PFC funding.

2. Construction and Capital Improvement. [Measure #4]

Description: This measure recommends three elements: (A) construction of airfield improvements shown on the current Airport Layout Plan. (B) Provide the means to develop neighborhood enhancement projects with a focus on noise mitigation (i.e., sound walls, landscaping). (C) Construct a hush house on the airfield to suppress jet engine maintenance noise, with the location to be determined after further study. (NCP Pages 63 and 81)

Part A would pertain to measures intended to improve safety and convenience. This would include signage, even transitions between taxiways/runways, and other construction or development to enhance smooth operation on the airfield. This should help alleviate the noise impacts associated with delays, idling, and possibly overflights.

Parts B and C are directed toward enhancement projects that abate ground noise level sources. These would include sound walls and landscaping between residences and primary hot spots on the airfield such as maintenance areas and runway ends where runups occur.

Part C specifically refers to the construction of a hush house which would be used to muffle the sound of aircraft during engine runups during maintenance. This would pertain in those situations where it is practical to take an aircraft to such a facility. A program would be undertaken to evaluate the location and scope of these improvements. It is possible to quantify the noise reduction of facilities such as sound walls and a hush house. However, without specific design parameters, it would be speculative as to what extent the mitigation would result. In particular, the length, height and width of a sound wall would be important determinants of the program to be developed before realistic noise reduction quantification could be generated.

FAA Action: Disapproved. Part A - The NCP indicates this measure is to improve airfield efficiency, and not to improve noise although it states there may be secondary noise benefits that are not quantified. Parts B and C - The NCP appears to present these as potential noise

mitigation concepts, but does not include any quantitative analysis regarding the expected decibel/CNEL reduction in noise. The NCP also does not indicate where these types of ground noise mitigating barriers should be located to improve the noise environment to residences near the airport, nor the number of residences or residents expected to benefit. The FAA cannot determine how the measure contributes to improving the noise environment around the Airport.

3. Financial Assistance. [Measure #22]

Description: This measure recommends the development of a program to provide financial assistance to residents who are interested in moving out of the noise impact area. (NCP Pages 71 and 94).

Several levels of financial assistance could be evaluated within the context of this measure to determine what is most cost effective in helping to achieve the goal of reducing noncompatible land uses. Recommendations in the measure include property acquisition, loan guarantees and purchase assurance for residential property located in the 65 dB CNEL contour. Loan guarantees might be provided to residents who wish to purchase outside the impacted area, but have trouble securing a loan. Voluntary purchase assurance within the impact area could be established with relocation assistance to find new residences outside the impact area. The specific elements of how much is provided and what period of time would be determined during the development of the program, subject to revisions as the program evolved.

The purchase assurance program would be voluntary and not involve eminent domain. A revolving fund could be established for ongoing resources by redeveloping noncompatible uses to compatible, selling them, and putting proceeds into the fund. Residences that have a commercial and industrial use adjacent to them and not readily a part of an established neighborhood could have higher priority, to be most effective.

The primary benefit is to reduce noncompatible housing units in the CNEL 65 dB. It is conceivable that a significant portion of the housing units within the CNEL 65 dB could be removed over an extended period of time. It should be recognized that many of the homes within the CNEL 65 dB are part of established neighborhoods and would more appropriately be addressed within the context of the insulation program outlined in [Measure #2] of this NCP.

FAA Action: Approved for noncompatible development that existed as of October 1, 1998. Some proposed elements of this measure may not be eligible for financial assistance. Federal participation is based on the FAA's mitigation policy, published in the Federal Register April 1998. It states that beginning October 1, 1998, the FAA will approve remedial noise mitigation measures (sound insulation, acquisition, purchase assurance, etc.) under Part 150 only for noncompatible development that exists as of that date.

Noncompatible development that occurred after October 1, 1998, may only be addressed in Part 150 programs with preventive noise mitigation measures (land use controls, comprehensive plan, zoning regulations, subdivision regulations, building code, etc.) . In order for the land acquisition, purchase assurance, sales assurance or transaction assurance to be eligible for federal funding, the project is subject to compliance with FAA Order 5100.38C, paragraph 811. The Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act also must be followed.

LAND USE PLANNING ELEMENTS

1. ALUC [Measure #1]

Description: This measure recommends that Los Angeles County adopt an Airport Land Use Commission (ALUC) Airport Comprehensive Land Use Plan (CLUP) for VNY and environs reflecting the provisions of the VNY Part 150 Study. (NCP Pages 62 and 79).

The purpose of this measure is to emphasize that all of the applicable measures in the NCP are fully considered when revisions are made to the CLUP for VNY. These include changes in local land use plans, zone changes, purchase assurance programs, and other financial incentives that will contribute to the objective of the Plan.

FAA Action: Approved. Amending the various comprehensive plans is within the authority of the land use planning departments. The Federal Government has no control over local land use planning.

2. Additional Development Within Impact Area [Measure #3]

Description: This measure recommends that Los Angeles City Planning Department adopt measures to restrict the introduction of new housing within the projected 65 dB CNEL contour, unless the property is soundproofed and an avigation easement granted in favor of the airport. Maintain and monitor the General Plan over time to assure airport/community compatibility; and encourage owners of undeveloped land to voluntarily develop property consistent with State Noise Standards. (NCP Pages 63 and 80).

This measure feeds into the scope of the ALUC plan and establishes an objective that is independent of the plan to minimize noncompatible land uses within the impacted area. It is preferable to remove and/or prevent noncompatible land uses but decisions of this sort are primarily at the discretion of the City Planning Department. It is important that in order for this measure to reach its objective every effort be made to maintain communication with the City Planning Department and any other applicable planning agencies and individual property owners.

FAA Action: Approved with respect to preventing the introduction of new housing.

The portion of this measure that permits new noncompatible development within the DNL 65 dB, even with sound attenuation and/or easement, is inconsistent with the FAA's guidelines and 1998 policy and is disapproved for the purposes of Part 150. This decision relates to the measure's consistency with the purposes of Part 150. This measure is within the authority of the LAWA and local planning jurisdiction. The Federal Government has no control over local land use planning.

PROGRAM MANAGEMENT ELEMENTS

1. Improved Communications [Helicopter Operations]. [Measure #11]

Description: This measure recommends that LAWA initiate a program between VNY, the FAA, helicopter operators, and residents in an effort to reduce the impact and negative perception of helicopter operations. Residents would be encouraged to provide as much information as possible regarding helicopter infringements, to increase follow-up by the airport and improve self-policing by helicopter operators and individual pilots. (NCP Page 66 and NCP Pages 85-86; Volume 1 of 3, Helicopter Study dated November 1991).

This measure would establish procedures and guidelines for helicopter operators to minimize their noise impact on the community. There would be three phases: First – initiate an open forum where all of the parties involved can meet and share ideas on how to balance each of their respective needs. The parties would include residents who are impacted, operators causing the impacts, and those who have varying levels of responsibility in controlling the noise impacts. The

Helicopter Task Force for VNY in conjunction with the Citizens Advisory Committee would likely be the best vehicles for this. Second – identify and document all the conditions and procedures agreed upon in the form of a guidebook for helicopter operations. The guidebook would build on existing policies and expand upon them to include the objectives outlined in other NCP measures and others that evolve from the Task Force. Particularly this measure would be developed in conjunction with [Measure #5] which concerns operating procedures of helicopter operators. The guidebook would be a dynamic document subject to adjustments as practical applications and effectiveness are determined. Third – improved communications goal would be to continue to have ongoing feedback from all participants on the efficacy and applicability of the guidebook. Periodic open forums would continue to allow exchange. Communication also would be maintained through individual comments and complaints made to the noise abatement officer [Measure #23]. The Officer could also coordinate the comments and use them to recommend potential procedure changes to be considered in open forum.

FAA Action: Establishing means for improved communication is approved.

Any recommended change to existing flight procedures not approved in this NCP and any flight procedures or flight tracks not already in place at VNY are disapproved for inclusion in the guidebook. Such changes would need to be separately reviewed, for reasons of aviation safety and efficiency, by the FAA. Noise mitigation measures must be accompanied by an analysis demonstrating their noise benefits. Changes in flight procedures normally also need an appropriate environmental analysis.

2. Signage. [Measure #14]

Description: Re-sign the airport at every departure point/intersection of both runways with signs that can be read both day and night that provide the following: A) Please Fly Quietly; B) Departing South: No Turns Before the Flood Basin; C) Departing North; No Turns Before 1,800 MSL. On intersection signs only, the following words should be included: Intersection Departures Are Not Allowed Between 10:00 p.m. and 7:00 a.m. Implement immediately with larger, clearer signs being posted at every run-up area describing recommended noise abatement procedures, including altitudes and locations at which turns should be initiated after departure, and noise sensitive areas avoided. Maintain program over time. (NCP Page 67 and NCP Pages 88-89).

Benefits depend on compliance with [Measures #12 and #13]. The purpose is to facilitate the intent of other measures with the overriding objective to reduce noise impacts. An important element of this measure should be to continuously evaluate the effectiveness of the signs by interviewing pilots as to their interpretation of the signs and how they can be made more concise and communicate the intended message. The evaluation also should include observing the correlation between pilot awareness and their actual behavior patterns. It should be determined whether the signage is positively affecting the pilots' achieving the intended goals. The content may be adjusted periodically to reflect the conclusions of the ongoing evaluations.

The signs should strive to achieve two distinct objectives – the first is to provide messages that are concise and specifically reinforce complying with known guidelines and procedures to minimize noise. The second would be to provide sufficient information to pilots to ensure they are aware of the procedures.

FAA Action: Approved for procedures already in effect at the airport.

Placement (location) and the number of signs, to ensure airfield safety, and final wording on signage must be separately approved as part of implementing the measure and may make voluntary procedures mandatory. This measure would remind pilots of the noise abatement

procedures in place and is considered a program management tool. It is intended to improve compliance with voluntary noise abatement procedures already in place.

3. Noise Roundtable. [Measure #16]

Description: This measure recommends that a Noise Roundtable be established to review progress on the implementation of the Part 150 Program. In an effort to reduce noise impacts, the Roundtable could make adjustments to allow for the implementation of additional noise measures which might be recommended over time, if they become technically and economically feasible. (NCP Pages 68-69 and NCP Page 90)

The Noise Roundtable will act as a review board for at least two years after recommendations of various scenarios identified in the NCP are fully implemented, with the understanding that the part 150 study would be continued. The roundtable would be charged with holding annual community meetings, or more frequently as warranted, to discuss the status of the part 150 program and recommended adjustments. LAWA should annually monitor aircraft noise levels and the level of activity at the airport to determine if significant and unexpected changes have occurred to the base year NEM and to determine if the part 150 program is being successfully implemented.

The results of noise monitoring should be provided at annual public meetings to discuss progress of the part 150 plan and to educate and inform users and the affected communities. Discussion with users regarding community complaints associated with operations should also be included. Recommendations for updating the NEMs and part 150 program should be provided if unexpected changes occur before the 5-year period and significantly affect the land use compatibility situation around the airport, and/or the noise abatement cost assumptions used to develop the current plan.

Personnel from LAWA currently monitor noise levels and the level of operations through a permanent monitoring system. The results are manifested in quarterly reports submitted to the Los Angeles County Aviation Division and State DOT. The data maintained in that program can be utilized in upgrades to the INM, which is the proper modeling vehicle within the context of part 150, to demonstrate changes in noise levels. Significant deviations from NEM assumptions can be evaluated from this process.

This measure relates to several other NCP measures, which would support the objectives of those measures. NCP [Measure #18] establishes an automatic feedback system for the communities. NCP [Measure #19] establishes a formalized tenant associated willing to communicate with pilots that don't voluntarily comply with the Fly Neighborly program and procedures established at VNY. This measure [Measure #16] should contribute to the optimal effectiveness of all of the other active measures to mitigate noise impacts by providing oversight and suggested means of improving the intent of those measures.

FAA Action: Approved. The Noise Roundtable can act as a forum for discussion of noise issues, and assist in tracking NCP progress. The Noise Roundtable has no authority to make adjustment to NCP measures. It may make recommendations to the airport operator for changes to VNY's existing NCP.

4. Noise Management Monitoring System. [Measure #17]

Description: This measure recommends that VNY establish a noise monitoring and flight track system with software and database that feature the ability to positively identify all aircraft. Establish, maintain and update over time an automated data system that will provide the following information for turbojet and turbofan operations (arrivals and departures)

- Aircraft N number sorting by aircraft type
- Aircraft type, owner, and pilot
- Part 36-3F listed noise departure level (most current version)
- NBAA or manufacturer's noise abatement operational level, and
- Actual operational noise level recorded by VNY monitors.

LAWA should contract with an acoustic consultant to calibrate VNY microphones to permit accurate and consistent real time monitoring of noise abatement procedures for jet departures. LAWA should install, with FAA permission, a radio receiver with dictaphone capabilities that will identify airport tower clearance "N" numbers and real time operation information. At the steering committee meeting, it was emphasized to investigate the ability to obtain such equipment, and to not use the equipment for enforcement of any pre-set noise thresholds. (NCP page 69 and NCP Pages 91-92).

The purpose of this measure is to establish a system that provides immediate feedback to pilots when they exceed established noise standards. [Measure #18] of the NCP (Automatic Feedback System) refers to ANOMS type monitoring with the capability to interface with FAA's ARTS data. Currently, the noise monitoring system at VNY must rely on ARTS data to fully identify aircraft. The FAA requires ARTS data can be provided only after a delay of several days. Faster response time, ideally real time, should enhance pilot direct awareness of the noise problem being created by violation of the noise regulation, which hopefully would bring about a more positive reaction to mitigate that noise. Reference can be made to other measures in the NCP, including [Measures #12 and #13], for additional related comments.

The FAA has advised this measure involves the acquisition of a noise monitoring system and that consideration of such is appropriate pursuant to B150.7(b). Implementation would not be subject to the requirements of part 161 so long as the use of the equipment is for monitoring only and does not extend to enforcement.

FAA Action: Approved for purposes of Part 150. This measure would provide data to the airport on existing noise and flight procedures and flight track adherence and implementation, and enable LAWA to improve its ability to monitor the effectiveness of its Part 150 Program. Approval of this measure does not obligate the FAA to participate in funding the acquisition or installation of the permanent noise monitors and associated equipment. Note, for the purpose of aviation safety, this approval does not extend to the use of monitoring equipment for enforcement purposes by in-situ measurement of any pre-set noise thresholds.

5. Automated Feedback System. [Measure #18]

Description: This measure recommends that VNY establish an automated feedback system to those in the community such that residents are assured that data kept on a daily basis is accurate and reliable. Acquire ANOMS, or similar system that has the capability to interface with ARTS 3 data, track aircraft by altitude, provide a hard copy of individual flight information characteristics, and provide automated noise monitoring correspondence capabilities. LAWA should maintain and upgrade over time. (NCP Page 70 and NCP Pages 92-93).

This will reiterate and expand upon the existing system that provides information to interested citizens. The measure is tied directly to the preceding [Measure #17] dealing with the noise management monitoring system as well as other measures that are intended to facilitate open and clear communication with those affected by noise. The more quickly and accurately information can be relayed, the greater the sense of reliability that can be conveyed.

Reliance must be placed on the FAA's ARTS data. LAWA operates a PASSUR system that can describe an aircraft's trajectory, altitude, and correlate to monitored noise levels. However, to

determine ownership of the specific aircraft, LAWA must obtain this information through ARTS data. The FAA has a policy to not release the ARTS data until three days after an event occurs to allow them to protect sensitive information. The information cannot be fully relayed to interested citizens until after the FAA releases it. However, obtaining the data within three days should be timely and enable relatively quick responses to noise violations and by doing so help facilitate the objectives of [Measure #13] and other measures.

FAA Action: Approved. This measure would provide data to the airport and enable LAWA to improve its ability to monitor the effectiveness of its Part 150 Program and to address citizen noise queries. Approval of this measure does not obligate the FAA to participate in funding the acquisition or installation of the permanent noise monitors and associated equipment. Note, for the purpose of aviation safety, this approval does not extend to the use of monitoring equipment for enforcement purposes by in-situ measurement of any pre-set noise thresholds.

6. Tenant Association. [Measure #19]

Description: This measure recommends that VNY establish a more formalized tenant association willing to communicate with violating pilots, to voluntarily comply with the "Fly Neighborly" programs and procedures established at Van Nuys Airport. (NCP Page 70 and NCP Pages 92-93).

This measure continues with another aspect of optimizing communication between affected parties to achieve the most effective results from each of the NCP measures. A tenant association has existed for many years at VNY. The intent is to seek ways to enhance the relationship between tenants and community members. It would add another dimension to the functions of this association by formerly (sic) establishing procedures that will foster compliance with the Fly Neighborly program.

The tenant association is probably in the best position to effectively communicate with its pilot members the need to follow the objectives of the Fly Neighborly program. The association, in conjunction with other affected parties, can develop and adopt policies and guidelines to formerly (sic) advise pilots on the most appropriate operational procedures to use to mitigate noise while still fulfilling their individual objectives. After such policies and guidelines are established, it can become a routine matter of advising pilots and thereby contribute to the reduction in noise impacts. The quantification of those noise reductions would be manifested in the specific measures for the Fly Friendly program.

FAA Action: Approved in part. The measure intends to use the tenant association to provide reminders to pilots of noise abatement measures already in place at the airport and to improve communications between member tenants and the community. [Measure #16] also is a means to communicate between parties.

This approval does not extend to solutions the tenant association may recommend via formal policies, or any proposal to change existing operational procedures. These must be vetted through the FAA to determine their impacts on aviation safety and efficiency.

7. ATIS Message. [Measure #20]

Description: This measure recommends that the FAA, a partner in this project, change its regional policy to allow local control towers to add a brief "Fly Quietly" message to its Automatic Terminal Information System (ATIS). Provide a message on the ATIS system that states: "Due to excessive aircraft noise levels, aircraft operating at VNY should fly in a friendly manner, utilizing NBAA or manufacturer's noise abatement procedures. The program should be maintained over time. (NCP Pages 70 and 93).

The purpose of this measure is to reinforce the comprehensive concept of communicating to pilots in a variety of ways the importance of making every effort to Fly Quietly over noise sensitive areas. The measure is intended to work in concert with the measures that would promote open communication, broaden the function of the tenant association, expand the messages of signage on the airfield, and provide feedback to pilots with the overriding objective to adhere to noise abatement procedures whenever possible. Collectively, these efforts help support Fly Friendly. Noise reduction is dependent on the level of compliance.

FAA Action: Disapproved. Revised Order 7110.65, Air Traffic Control, no longer provides for noise abatement advisories. Noise abatement advisories may be published in the Airport Facilities Directory and pilot handouts. Other measures recommended in the NCP for communication with pilots also could achieve the same goal.

8. Marketing Policy. [Measure #21]

Description: This measure recommends that airport management develop and adopt a noise sensitive marketing policy for VNY that will encourage the voluntary introduction of quieter aircraft into VNY operations and discourage the use of noisier aircraft. (NCP Page 71 and NCP 93-94).

This measure was suggested during public discussions held by the Steering Committee. Based on the assumption the measure does not contemplate mandatory enforcement of policies to prohibit noisy aircraft, this measure is desirable for the NCP. The LAWA has programs that reach out to desired types of industries and market its airports. Ideally, these could be adapted to incorporate policies and approaches that would encourage quieter aircraft at VNY. If the proposed measure anticipates marketing to mandate rather than encourage quieter aircraft, it would most likely require part 161, which would be handled separately. Quantification of noise benefits would be predicted on types and levels of aircraft targeted in the policy.

FAA Action: Approved as voluntary. Approved for voluntary marketing approaches, as contemplated in this measure. Implementation of this measure is considered to be within the authority of LAWA. Marketing expenses are not eligible for Federal funding assistance. Any mandatory enforcement of this policy would constitute an airport noise and access restriction that may only be adopted after full compliance with the Airport Noise and Capacity Act of 1990 (ANCA), 49 U.S.C. 47524(b), and 14 CFR Part 161.

9. Noise Abatement Officer. [Measure #23]

Description: Continue the position of a full-time noise abatement officer as part of the Van Nuys Airport Manager's Office who working with the Airport Security, can continually monitor jet aircraft departures, report them to the Airport Manager and the community in terms of amount of noise generated on departure. The officer shall be responsible for operation of the permanent monitoring system, serve as a community liaison regarding noise issues, coordinating aircraft pilots and collection and response to noise complaints.

Develop a program to improve formal lines of communication between the FAA, the airport, and aircraft operators on noise abatement procedures. Within the context of general guidance to the noise abatement officer in communication with aircraft operators, the VNY noise complaint system should be improved to provide greater feedback to operators and link complaints to actual noise reduction measures. The function of the noise complaint system should be expanded to effectuate reductions in noise and not merely to be used for public relations purposes. (NCP Page 71 and NCP Pages 95-96).

There are two purposes for this measure: (1) establish full assurance that a noise abatement officer will continue as a permanent position at VNY. (2) provide overall guidance as to the

primary functions of the position. As indicated, the position is permanent at VNY, which receives support from LAWA's environmental management division in discharging the responsibilities suggested herein. The officer would work with airport security to continually monitor jet aircraft departures and report them to the manager and the community in terms of noise generated.

The measure also calls for establishment of a framework for development of a program to improve formal lines of communication. In addition to monitoring noise events, the officer will coordinate with pilots and citizens and provide written and verbal responses to noise complaints. Reference should be made to the comments in preceding measures with respect to improving the complaint/feedback system. In particular, the intent of dealing with improved feedback to pilots and the community and broader communication among all parties is addressed within this measure, which provides the Noise Abatement Officer as the means to carry out these objectives.

FAA Action: Approved. Implementation of this measure is considered to be within the authority of LAWA.

10. Noise Abatement Information. [Measure #24]

Description: This measure recommends that airport management compile available information on noise abatement procedures from manufacturers, pilots, and noise offices at other general aviation airports to be made available to pilots operating at VNY. (NCP Pages 72 and 96).

The intent of this measure is to establish an ongoing effort to maintain the most up to date and effective information on noise abatement procedures that might be available from a variety of sources. This information should be made available to all pilots operating out of VNY and they should be encouraged to follow the applicable procedures whenever possible. The extent to which the measure will result in a reduction in noise will depend on the availability of new procedures and would be reflected in periodic evaluations as to their effectiveness.

FAA Action: Disapproved. Noise abatement procedures are airport specific and must be evaluated for effectiveness at individual airports. Any new procedures proposed for noise mitigation at VNY may not be implemented prior to study to determine whether they can be implemented safely and efficiently, and whether they are noise beneficial.

11. Lease Policy. [Measure #26]

Description: Recommend that it be a policy of the Board of Airport Commissioners (BOAC) to add to any future new leaseholders a requirement that they only station (base) Stage 3 aircraft at Van Nuys Airport. New leaseholders are being defined as Fixed Based Operators (FBO's) who are not currently on this airport but who wish to move onto the airport in the future. The requirement would only apply to based aircraft and not to itinerant aircraft. Based aircraft are defined as any aircraft which is parked, hangared, or tied down at VNY for more than 90 days. (NCP Page 73 and NCP Page 97-98).

The objective is to address the number of Stage 2 aircraft based and operating at VNY. The intent corresponds with and supports the philosophy of the ordinance adopted by the BOAC and the city council that established the non-addition rule for Stage 2 jets. That philosophy is to allow existing Stage 2 jets to continue to operate while no new Stage 2 jets are introduced to the fleet of based jets at VNY. The lease policy would only apply to new leaseholds and therefore not cause an undue burden on existing leaseholds.

By restricting the introduction of new Stage 2 aircraft the potential growth of noise would be less. The limiting effect of the non-addition rule was incorporated into the forecast for jet operations by setting the growth of applicable aircraft to zero after the year 2002. This adjustment to the forecast kept the annual operations for Stage 2 jets for 2003-2006 the same as 2002. The

reduction in those operations that otherwise would have occurred are reflected in the smaller contours for 2006. This lease policy measure supports the non-addition rule and therefore its contribution to noise impact reduction is reflected in the forecast adjustments.

FAA Action: Disapproved for purposes of part 150. The stated intent of this measure is to enforce through leases the requirements of the non-addition rule¹.

The NCP analysis includes very little information beyond that included in this ROA. FAA's review must include a determination that the measure reduces and/or prevents the introduction of noncompatible land uses, that it does not impose an undue burden on interstate or foreign commerce (including any unjust discrimination), and that it does not affect aircraft safety or efficiency (see section 150.33 for a detailed discussion of FAA review and approval criteria).

While the non-addition rule as it applies to Stage 2 aircraft is "grandfathered" and not subject to 14 CFR Part 161, this lease requirement has not been evaluated under 14 CFR Part 150. The measure does not discuss the potential impacts on owners of non-staged, Stage 1 and other non-Stage 2 aircraft. Also, it appears to apply only to jet aircraft, which could be unjustly discriminatory.

12. Air Traffic Control Tower. [Measure #27]

Description: This measure recommends that airport management request the FAA to upgrade the VNY Airport Traffic Control Tower from a level 3 tower to Level 4 tower. An upgrade to a level 4 control tower would result in more efficient and improved operational control and could provide for increased tower personnel on duty to support the recommendation that the tower be operated 24 hours a day. (NCP Pages 73-74 and NCP Pages 98-99).

The intent of this measure is to enhance communication and oversight of VNY operations during the nighttime hours when noncompatible uses are most sensitive to aircraft operations. The hours between 10:45 pm and 5:45 am when the tower is closed are critical to noise abatement efforts. The FAA does not have responsibility to enforce LAWA or City ordinances with respect to noise, but if the tower were open the controllers would be able to communicate directly with arriving and departing pilots. This is particularly evident with itinerant operators who may not be familiar with noise abatement procedures at VNY.

As indicated previously, the VNY Noise Abatement and Curfew Regulation contains several provisions that apply when the tower is closed. These provisions are all important to pursuing control of noise during the most sensitive hours. Keeping the tower open during these hours will allow the tower personnel to communicate directly with pilots on an operating procedure that the pilot may otherwise not know about. More significantly, this communication can be delivered in real time to allow the pilot to respond during the operation and before potential violation of airport noise rules. It not only would help prevent that particular violation but would provide a more meaningful reinforcement to the noise abatement procedure than by correspondence after the fact.

FAA Action: Disapproved. Specific standards must be met prior to extending hours of operation at any ATC facility. These are based primarily on numbers of hourly operations, but may take critical safety issues into account. FAA does not enforce locally enacted noise rules. Keeping the tower open solely for the purpose of noise abatement does not meet these criteria. FAA Order JO 7232.5G, Changing Operating Hours for Terminal Facilities, describes FAA's tower requirements.

¹ The FAA determined in August 1997 that the non-addition rule is "grandfathered" under the Airport Noise and Capacity Act of 1990 (recodified at 49 U.S.C. 47521 et seq.)

13. Aircraft "N" Numbers. [Measure #28]

Description: This measure recommends that larger "N" numbers be required on aircraft. Larger "N" numbers on aircraft, particularly on the bottom side of the wings, would enhance a citizen's ability to identify an aircraft, thereby better enabling utilization of the noise complaint procedures. (NCP Pages 74 and 99).

This measure would provide a certain ability to enable complainants to identify aircraft that they believe are in violation of noise policies or regulations. The primary emphasis with regard to identifying errant aircraft will be the other systems that have been described, including monitoring and the connections with the FAA's radar data. However, a measure to enlarge the N numbers on aircraft may provide some assistance to those who wish to attempt to identify violating aircraft in this manner. To this extent the measure may contribute marginally to noise reduction.

FAA Action: Disapproved for purposes of part 150. There is insufficient information to demonstrate a measurable noise benefit. The requirements for N-number placement and size are contained in 14 CFR Part 45.29. That regulation indicates there is a minimum size requirement, and does not prohibit an aircraft owner increasing the size of the aircraft identifying number. The NCP discussion indicates larger N numbers are intended to help people identify aircraft that may be violating noise rules at the airport and could have a marginal contribution to noise reduction. Other noise monitoring and tracking measures in the NCP intended as Program Management measures would accomplish a similar goal.

THE FOLLOWING MEASURES, AND THOSE IDENTIFIED IN THIS ROA AS NOISE ABATEMENT MEASURES 11, 12, 13, AND 14 ARE DESCRIBED IN THE NCP AS SUBJECT TO 14 CFR PART 161.

14. Incentives and Disincentives in Rental Rates. [Measure # 29]

Description: Subject to a part 161 study, this measure recommends a system of incentives and disincentives could be established to encourage greater user of quieter aircraft and less use of noisier aircraft. Subject to the findings and conclusions of the Part 161 Study, a program would be developed to have rental rates for leases and tie downs correlated to the level of noise generated by the aircraft to encourage quieter aircraft usage. (NCP Pages 74-75 and NCP Pages 100-102).

The NCP includes a detailed discussion at pages 100-102. Briefly, the measure is intended to: Establish a financial disincentive of sufficient magnitude to discourage noisier aircraft. Approaches could include establishing a correlation between rental rates for new leases for hangar space and tie downs with the level of noise generated by aircraft using the facility. It might use AC 36 decibel levels for the aircraft. Several issues would have to be addressed under 14 CFR Part 161. For example, NCP discussion indicates the measure may be disparate because it would apply only to existing tenants and not itinerant operators. Financial impacts on operators to which it applies would have to be compared with benefits derived and the measure result in a quantifiable justification.

An alternative to the proposal would be to apply the market rental rate to the quietest aircraft and add incrementally penalties to each noise level of aircraft above it. The most probable negative effect of such a measure would be to impose financial hardships on owners with the least resources to adapt to the measure.

FAA Action: Disapproved for purposes of part 150 pending compliance with Part 161. The NCP provides discussion but no technical analysis or quantification of the expected benefits. The NCP mentions the potential for unjust discrimination and burden on commerce, which also must be analyzed under 14 CFR Part 150.

As recognized in the NCP the proposed incentives and disincentives in rental rates for based aircraft could constitute an airport noise and access restriction that may only be adopted after full compliance with the Airport Noise and Capacity Act of 1990 (ANCA), 49 U.S.C. 47521 et seq., and 14 CFR Part 161. The completed Part 161 analysis may be submitted for FAA reconsideration of this measure under Part 150. For FAA action under Part 150, additional analysis needs to be included addressing impacts of the proposal on non-Stage 2 and Stage 3 aircraft.

15. Incentives and Disincentives in Landing Fees. [Measure #30]

Description: Subject to a part 161 study, a program would be developed to establish differential landing fees with higher fees for noisier aircraft and lower fees for quieter aircraft. (NCP Page 75 and NCP Pages 102-103).

This measure is similar to that proposed under [Measure #29], above, at FAA Program Management Measure 14 in this ROA. The purpose would be to establish financial disincentives of sufficient magnitude to discourage the use of noisier aircraft. Differential landing fees could be established with higher fees for the noisier aircraft and lower fees for quieter aircraft. It should be based on the single event noise level for each aircraft as listed in the most recent FAA AC 36 to avoid discrimination.

The measure would be subject to similar considerations as the preceding measure on rent adjustments and would require a part 161 analysis. The approach to landing fees, as with the preceding one, is predicated on the concept that an airport operator and the community incurs a noise cost from the operators of noisier aircraft and it is appropriate to apportion the fees to address these costs.

It would apply to all aircraft including itinerant. The second advantage is that it has inherent flexibility that the rent restrictions would not. An owner would have the opportunity to adjust operations to reduce landings, reducing the overall financial impact, with a commensurate reduction in business revenues, without having to replace or move the aircraft.

Other approaches are discussed in the NCP at page 103.

FAA Action: Disapproved for purposes of part 150 pending compliance with Part 161. As recognized in the NCP the proposed incentives and disincentives in landing fees for aircraft could constitute an airport noise and access restriction that may only be adopted after full compliance with the Airport Noise and Capacity Act of 1990 (ANCA), and 14 CFR Part 161. The completed Part 161 analysis may be submitted for FAA reconsideration of this measure under Part 150 if an FAA determination under part 150 is being sought. Other issues also must be addressed under part 150 including the measure's impacts on aircraft that are not Stage 2 or Stage 3, and a quantification of noise benefits derived from implementing this measure.

16. Expansion of Fines. [Measure #31]

Description: Subject to a part 161 study, a system of fines would be developed to be imposed on aircraft operators who violate policies at VNY. Increased fines would have a deterrent effect on aircraft operators who violate existing ordinances at VNY. The existing voluntary Fly Friendly program would be made a mandatory program with penalties. After two violations, operators who violate the "Fly Neighborly" program would be fined \$500 for the third noisy operation. The fourth citation fine would be \$1,000, and the fifth, \$2,000. Any operator who receives a sixth citation letter would be banned from using the airport. (NCP Page 75 and NCP Pages 103-104).

FAA Action: Disapproved for purposes of part 150 pending compliance with 14 CFR Part 161. The Fly Friendly procedures currently are voluntary at the airport, and a high compliance rate has

been achieved. The pilot in command has responsibility for the safe operation of aircraft, and may not always be able to comply with the procedures. As recognized in the NCP the proposed expansion of fines to mandate compliance with a voluntary program constitutes an airport noise and access restriction that may only be adopted after full compliance with the Airport Noise and Capacity Act of 1990 (ANCA), 49 U.S.C. 47524(b), and 14 CFR Part 161. Other issues also must be addressed under part 150 including the measure's impacts on aircraft that are not Stage 2 or Stage 3, and a quantification of noise benefits derived from implementing this measure.