No. 14-72991

UNITED STATES COURT OF APPEALS

FOR THE NINTH CIRCUIT

JAMES E. LYONS, TINA NGUYEN, MARY JANE McCARTHY

AND A. FRANK ROTHSCHILD

Petitioners

v.

UNITED STATES FEDERAL AVIATION

ADMINISTRATION, *et. al.*,

Respondents

Petition for Review of Finding of No Significant Impact and Record of Decision For the Northern California Optimization of the Airspace and Procedures in the Metroplex by Federal Aviation Administration dated July 31, 2014

(49 U.S.C. Section 46110)

PETITIONERS' OPENING BRIEF

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I. INTRODUCTION

Petitioners James E. Lyons, Tina Nguyen, Mary Jane McCarthy, and A. Frank Rothschild ("Petitioners") are residents of the communities of Woodside and Portola Valley, California. Petitioners have experienced a dramatic and unreasonable increase in the amount of aircraft noise in their communities as a result of Respondent the Federal Aviation Administration's recent changes to the flight paths followed by aircraft flying into San Francisco International Airport ("SFO") under a project the FAA calls the Northern California Optimization of Airspace and Procedures in the Metroplex ("NorCal OAPM"). NorCal OAPM is part of the FAA's planned transition to the Next Generation Air Transportation System ("NextGen"), which standardizes arrival and departure routes involving the four major airports in Northern California through the use of GPS-based technologies to permit aircraft to fly routes that are more predictable and efficient.

On July 31, 2014, the FAA issued a Finding of No Significant Impact ("FONSI") that NorCal OAPM would not have any significant noise impact on Petitioners' communities and the surrounding areas. The FONSI thus excused the FAA from analyzing and documenting the actual noise impacts of NorCal OAPM in an Environmental Impact Statement ("EIS"), which would otherwise be required by the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321 et seq. In issuing its FONSI, the FAA violated the technical and scientific advice of its own

technical consultant on the NorCal OAPM project, ATAC Corporation ("ATAC"), which stated in its report to the FAA on the project that "*[t]o determine projected noise levels on the ground, it is necessary to determine not only how many aircraft are present, but where they fly*." (ER at 652; emphasis added.) In concluding that NorCal OAPM had no significant noise impact on Petitioners' communities, the FAA flouted both of these criteria – it did not determine how many aircraft would use the new routes and it did not determine over which communities the additional aircraft would fly.

The FAA's FONSI was thus arbitrary and capricious and resulted from a flawed and unlawful process. This Court should set it aside for the following four reasons. First, the entire process by which the FAA purported to measure the anticipated noise impacts of NorCal OAPM was tainted from the outset because the FAA unlawfully predetermined that no significant noise impacts would occur before the FAA performed its analysis of the anticipated noise impacts, and then committed itself to an implementation timeline for NorCal OAPM that required it to later confirm this preordained conclusion. Second, the record indicates that at the time ATAC measured the anticipated noise effects on the ground of NorCal OAPM, ATAC did not actually know where aircraft were expected to fly after the implementation of NorCal OAPM. ATAC's noise calculations were therefore based on unreliable data and guesswork as to where planes would actually fly

under NorCal OAPM. Third, in measuring the anticipated noise impacts of NorCal OAPM, the FAA improperly inflated the amount of noise that would be anticipated if NorCal OAPM were not implemented, and then used this inflated noise baseline when measuring the relative amount of additional noise that would be created by implementation of NorCal OAPM. This use of an inflated noise baseline for comparison purposes artificially understated the impact of noise caused by NorCal OAPM, thus rendering the FAA's conclusions regarding the amount of additional noise created by NorCal OAPM unreliable. Finally, the FAA failed to analyze and consider the cumulative noise impacts of NorCal OAPM when considered in conjunction with other activities outside of NorCal OAPM that are expected independently to increase aircraft noise around SFO over the next several years, despite express authority from this Circuit requiring the FAA to do so.

Each of these reasons is discussed in further detail below, and each is sufficient for this Court to hold that the FAA's conclusion that implementation of NorCal OAPM would not have any significant noise impact on any affected community was arbitrary and capricious and should be set aside.

A. The FAA Improperly Prejudged the Issue of Whether NorCal OAPM Would Have a Significant Noise Impact.

The process followed by the FAA in measuring the potential noise impacts of implementing NorCal OAPM and the associated changes to flights paths into

SFO was tainted from the outset because the FAA predetermined that no such noise impacts would occur before it performed its analysis of those noise impacts. The FAA then committed itself to an implementation schedule for NorCal OAPM that required it to later avoid at all costs any finding that NorCal OAPM would in fact cause significant noise impacts, as any such finding would have prevented the FAA from meeting its self-imposed implementation timeline by requiring the preparation of an EIS.

It was unlawful for the FAA to put the cart before the horse in this manner and then work backward to arrive at a preordained outcome. NEPA requires federal agencies to thoroughly analyze and take a "hard look" at the potential environmental consequences of their proposed actions, including effects on noise pollution levels. To ensure that federal agencies in fact take the "hard look" required by NEPA, the law generally requires those agencies to prepare and make public an EIS thoroughly documenting all the potential environmental impacts of their conduct.

Congress however recognized that preparation of an EIS is time consuming and expensive, and permitted agencies to prepare a preliminary analysis, known as an environmental assessment, for the purpose of assessing whether or not a full blown EIS is necessary. If an agency's environmental assessment demonstrates

that no significant environmental or noise impacts are likely to result from the agency's proposed course of action, then the agency need not prepare an EIS.

An important caveat to this exception permitting an agency to avoid preparation of an EIS, violated by the FAA here, is that a federal agency must not predetermine, prior to the completion of its environmental assessment, that preparation of an EIS is unwarranted. Davis v. Mineta, 302 F.3d 1104, 1112 (10th Cir. 2002) (holding that an agency must perform an environmental assessment for the purpose of determining whether an EIS is necessary "and not the other way around"). Despite this prohibition, the record here demonstrates that the FAA concluded that an EIS was unnecessary well before it even completed its draft environmental assessment (the "Draft EA") in April 2014, and its final environmental assessment (the "Final EA") in July 2014.

The FAA's prejudgment of the issue is confirmed in correspondence between the FAA and the National Park Service. In that correspondence, Elizabeth Ray of the FAA responded to a letter from the National Park Service expressing concerns about anticipated heightened noise levels of NorCal OAPM, in which Ms. Ray noted that "[NorCal OAPM] is being implemented on an expedited timeline of 36 months from time of design to implementation . . .. The Norcal Metroplex does not seek to implement procedures which result in significant noise or other environmental impacts that would necessitate preparation of an Environmental

Impact Statement (EIS). Preparation of an EIS is a process that typically requires more than 3 years." (ER at 980.)

This letter demonstrates that the FAA had no choice but to later conclude in its Draft EA and Final EA that NorCal OAPM would not result in significant noise impacts because the FAA was insistent that the project be completed in less than three years, which the FAA recognized would not be possible if it later found that an EIS was necessary. Petitioners respectfully submit that the FAA's predetermination that an EIS was unnecessary unfairly prejudiced the process whereby the FAA then purported to measure the anticipated noise impacts of NorCal OAPM, and also helps explain the existence of the methodological flaws in the FAA's analysis discussed below. It also explains why the FAA, in its haste to implement NorCal OAPM, brushed aside numerous requests from Petitioners, other citizens, and Congresswomen Eshoo and Speier for more information about NorCal OAPM and greater community engagement by the FAA to ensure a fair process.

B. **The Finding of No Significant Impact Was Based On Guesswork As To Where Planes Would Actually Fly.**

The FAA's conclusion in the Final EA that NorCal OAPM would not have any significant noise impacts was arbitrary and capricious because, although it was based on a report by the FAA's consultant ATAC, the record indicates that at the

time ATAC conducted its noise measurements, neither the FAA nor anyone else actually knew where planes would fly under the proposed new procedures, and how frequently they would do so.

As part of NorCal OAPM, the FAA proposed making changes to the flight paths of aircraft landing at SFO approaching the airport from the South. These flights from the South historically followed an air route denominated BIG SUR TWO, which was then used by about 29% of all flights arriving at SFO. The FAA proposed as part of NorCal OAPM to keep the BIG SUR TWO air route, and to add an additional flight path for aircraft arriving from the South, denominated SERFR ONE. These two routes are of greatest concern to Petitioners because aircraft following these routes have the greatest effect on noise levels in their communities.

Documents in the record indicate that, unlike BIG SUR TWO, which consisted of a single approach procedure from the South, the proposed SERFR ONE route at the time ATAC conducted its noise analysis consisted of two possible alternative approach procedures that could be used by planes coming from the South. No indication is given in the record as to which of these alternative procedures will actually be used by aircraft arriving from the South, or, if both are to be used, how frequently planes will fly on each of these alternative procedures. In addition, the record indicates that NorCal OAPM contemplates keeping the old

BIG SUR TWO air route, but does not provide data indicating how frequently aircraft will continue to use the old BIG SUR TWO instead of the newly-implemented SERFR ONE. The record therefore is devoid of facts indicating where aircraft approaching SFO from the South will actually fly, and how frequently they will do so, as a result of the implementation of NorCal OAPM.

The dearth of facts in the record indicating where and with what *frequency* aircraft approaching SFO from the South will fly is a critical omission because the *frequency* of overhead flights is a primary driver of the methodology the FAA uses in calculating noise impacts from altered flight procedures. The FAA, using what is known as a Day Night Average Sound Level ("DNL"), is required to measure anticipated noise changes not merely in terms of the absolute volume of the noise created by any particular overflight. Rather, the DNL metric takes into account the frequency with which a person on the ground would be exposed to noise from aircraft overflights during a 24 hour period. Thus, all things being equal, more flights equal more noise under the DNL metric, even if individual overflights do not get any louder. The DNL reflects the common sense proposition that an increase in the raw number of overhead flights, even if all of the same decibel level, can be just as or more annoying as an increase in the decibel level of an individual overflight created by other changes to air routes, such as reductions in altitude.

Since the record indicates that, at the time ATAC made its noise measurements, it could not have known where and how frequently aircraft would fly over specific ground points post implementation of NorCal OAPM, the FAA has effectively conceded that reliable data was not used to perform the necessary noise measurements. The FAA's conclusion of no significant noise impact was therefore arbitrary and capricious, and based on speculation as to where aircraft might fly, rather than where and how frequently they would fly.

C. **The Finding of No Significant Noise Impact Was Arbitrary and Capricious Because the Noise Baseline Used For Computing The Amount of Additional Noise Under NorCal OAPM Was Inflated.**

The FAA's conclusion that NorCal OAPM would not have any significant noise impacts was also arbitrary and capricious because it rested on the unwarranted assumption that the total number of flights into SFO would increase *at an identical rate* over the next several years regardless of whether NorCal OAPM was implemented. This assumption by the FAA is devoid of support in the record, completely illogical, inconsistent with other FAA studies, and caused an artificial inflation in the noise baseline used to measure the relative expected increase in noise caused by NorCal OAPM.

In comparing the relative expected increase in noise to be caused by NorCal OAPM, ATAC had to first create a baseline of expected noise levels assuming

NorCal OAPM were not implemented. This "no action" baseline was then compared with noise levels to be expected under NorCal OAPM to determine whether NorCal OAPM will cause any significant noise impacts. In computing the no action noise baseline, ATAC had to determine the amount of flights expected at SFO if NorCal OAPM were not implemented because, as noted above, the raw number of flights is a critical data point for measuring noise under the DNL metric. The record reveals that the FAA had ATAC just assume that an identical number of flights, and thus, arrivals, would occur if NorCal OAPM were not implemented. This is problematic because ATAC's analysis therefore ignored the substantial possibility, acknowledged in other FAA studies, that without the increases in operational efficiency created under NorCal OAPM, it would not be logistically possible for total flight volume to increase at the same rate it would if NorCal OAPM were implemented.

The only reference the FAA cites in support of its conclusion that the total number of flights will increase at an identical rate in the coming years with or without NorCal OAPM is a 2012 Terminal Area Forecast prepared by the FAA, *but that document explicitly states that it conducted no analysis of whether the anticipated increase in consumer demand for flights into SFO was logistically possible to accommodate*. (ER at 931; Terminal Area Forecast at 3) ("an airport's forecast is developed independent of the ability of the airport . . . to furnish the

capacity to meet demand.") Nonetheless, ATAC assumed in making its noise measurements that an identical number of flights (826,187 in 2014, and 900,324 in 2019) would occur whether or not NorCal OAPM were implemented. This assumption makes no sense. The FAA touts NorCal OAPM as a way to increase operational efficiency by allowing planes to fly closer together and along more narrow corridors. (ER at 52-65.) If, as common sense suggests, the increased operational efficiency that the FAA touts under NorCal OAPM with respect to arrival and departure procedures could result in increased capacity, it was improper for the FAA to just assume, without any analysis or supporting evidence in the record, that the increase in flight volume will be identical regardless of whether NorCal OAPM is implemented.

Moreover, a recent FAA study demonstrates that without the implementation of NorCal OAPM, SFO will lack the logistical capacity to handle the increased volume of traffic that the FAA contends will occur if NorCal OAPM is implemented. In other words, implementation of NorCal OAPM will mean there will be more flights into SFO in the coming years than could occur without NorCal OAPM. This study, referred to by the FAA as FACT3, unlike the Terminal Area Forecast relied on by the FAA, actually examined the ability of airports such as SFO to handle the expected increases in demand for air travel in the next several years. The FAA concluded in the FACT3 study that the increase in demand at

SFO could be accommodated if NorCal OAPM were implemented, but that accommodation of the increased demand might not be possible if it were not. Thus, it was improper for the FAA to just assume that the total flight volume into SFO would increase at an identical rate regardless of whether NorCal OAPM were implemented. It was also improper for the FAA to conceal the information revealed for the first time in FACT3 when all the data points used in the report were available at the time the FAA issued its Final EA and FONSI. [1]

ATAC's reliance on this unwarranted assumption biased its results and rendered them unreliable. As noted above, ATAC's report measured the expected increase in noise levels under NorCal OAPM by comparing them with a baseline of expected noise levels if NorCal OAPM were not implemented. If ATAC used an incorrect input regarding the number of flights that would occur at SFO without NorCal OAPM, then its baseline for comparing expected noise increases under NorCal OAPM was inflated under the DNL metric. Without an accurate baseline for comparative measurement, ATAC's conclusions regarding the relative expected increase in noise under NorCal OAPM were arbitrary, capricious and totally unreliable.

[1] Petitioners recognize that the FAA did not submit the FACT3 study as part of the Certified List of Record for this proceeding. Petitioners intend to file a motion to have this document, which is authored by the FAA and of unquestionable authenticity, added to the administrative record for this proceeding.

D. The Finding Of No Significant Impact Was Arbitrary and Capricious Because the FAA Failed To Conduct The Required "Cumulative Impacts" Analysis.

The FAA's analysis of the potential noise impacts created by NorCal OAPM was also arbitrary and capricious because the FAA failed to analyze not just the noise impacts of NorCal OAPM, but also the "cumulative" noise impact of NorCal OAPM when added to any past, present or foreseeable actions taken by any other person or entity. This is what is commonly known as a "cumulative impacts" analysis, and it is required under both NEPA, the FAA's own regulations and caselaw in this Circuit. Te-Moak Tribe of Western Nevada v. United States Dept. of the Interior, 608 F.3d 592, 602-03 (9th Cir. 2010) (agencies are required to take a "hard look" at the potential "cumulative impacts" of their actions, and "cumulative impact is the impact on the environment which results from the incremental impact of the action when other past, present, and reasonably foreseeable actions" are considered).

The requirement of a cumulative impacts analysis is to prevent the government from ignoring the fact that that its actions do not take place in a vacuum, but may occur at a time when other actions by other governmental agencies or non-governmental actors are doing things that might, when considered jointly and in conjunction with the proposed agency action, have a significant negative effect on environmental noise levels.

No such analysis was conducted here with respect to the anticipated noise impacts of NorCal OAPM, perhaps because the record appears to indicate that the FAA is under a misunderstanding about the requirement and purpose of a cumulative noise impacts analysis. The Final EA declares summarily that no analysis of the cumulative impacts was necessary because NorCal OAPM allegedly would not cause a significant increase in noise. (ER at 144; Final EA at 5-17.) That argument misses the point of a *cumulative* impacts analysis. Such analysis assumes that the proposed agency action in question does not, by itself, have a significant environmental or noise impact, but seeks to determine whether such an impact will occur when the proposed agency action is combined with actions that have or will be taken by other government agencies or non-governmental actors.

The FAA should have conducted such an analysis, especially when *its own assumptions* (discussed above) indicated that other actors would be taking actions that could also independently cause an increase in noise as measured under the DNL metric (*e.g.*, the airlines increasing the number of flights into SFO). If the FAA's assumption that the airlines and SFO will increase traffic into SFO in the coming years, then the FAA should have measured any cumulative impacts created by an increase in air traffic when combined with noise increases created by the flight path alterations made by NorCal OAPM.

For all of these reasons, the Court should grant the Petition for Review. The Court should set aside the FAA's conclusion that NorCal OAPM would not have any significant noise impact and direct the FAA to prepare an EIS and permit the type of meaningful community input of the potential environmental and noise impacts of NorCal OAPM required for an EIS.

II. STATEMENT OF JURISDICTION

This Court has jurisdiction over the Petition for Review under 49 U.S.C. Section 46110, which provides: "Except for an order related to a foreign air carrier subject to disapproval by the President under section 41307 or 41509 (f) of this title, a person disclosing a substantial interest in an order issued by the Secretary of Transportation (or the Under Secretary of Transportation for Security with respect to security duties and powers designated to be carried out by the Under Secretary or the Administrator of the Federal Aviation Administration with respect to aviation duties and powers designated to be carried out by the Administrator) in whole or in part under this part, part B, or subsection (l) or (s) of Section 114 may apply for review of the order by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit or in the Court of Appeals of the United States for the circuit in which the person resides or has its principal place of business." See 49 U.S.C. Section 46110.

The FAA's FONSI was dated July 31, 2014, and this Petition for Review was filed on September 26, 2014. (ER at 13.) It is therefore timely under the 60 day limit provided for in 49 U.S.C. Section 46110(a). The FONSI states that it constitutes a final, appealable order. (Id.)

III. ISSUES TO BE DECIDED

1. Whether the FAA's finding that implementation of NorCal OAPM would not have a significant noise impact on any affected community was arbitrary and capricious where the FAA predetermined, before even completing its Draft EA, that an EIS was unnecessary and then proceeded to implement a timeframe for implementing NorCal OAPM that made preparation of an EIS impossible?

2. Whether the FAA's finding that implementation of NorCal OAPM would not have a significant noise impact on any affected community was arbitrary and capricious where the FAA relied in reaching this conclusion on a noise analysis conducted by its third-party consultant that was not based on actual knowledge of where aircraft would fly after implementation of NorCal OAPM?

3. Whether the FAA's finding that implementation of NorCal OAPM would not have a significant noise impact on any affected community was arbitrary and capricious where, in comparing the anticipated noise impacts of implementing NorCal OAPM or taking no action, the FAA used a no action noise baseline that was improperly inflated?

4. Whether the FAA's finding that implementation of NorCal OAPM would not have a significant noise impact on any affected community was arbitrary and capricious where the FAA failed to conduct a mandatory analysis of the cumulative impacts on noise levels by aggregating the increased noise anticipated

under NorCal OAPM with other changes outside of NorCal OAPM that are reasonably likely to affect noise levels?

IV. PRIMARY AUTHORITY (CIRCUIT RULE 28-2.7)

42 U.S.C. § 4332. Cooperation of agencies; reports; availability of information; recommendations; international and national coordination of efforts

The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter, and (2) all agencies of the Federal Government shall--

(A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on man's environment;

(B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by subchapter II of this chapter, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision making along with economic and technical considerations;

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on--

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of Title 5, and shall accompany the proposal through the existing agency review processes;

40 C.F.R. § 1501.4 - Whether to prepare an environmental impact statement.

In determining whether to prepare an environmental impact statement the Federal agency shall:

(a) Determine under its procedures supplementing these regulations (described in § 1507.3) whether the proposal is one which:

(1) Normally requires an environmental impact statement, or

(2) Normally does not require either an environmental impact statement or an environmental assessment (categorical exclusion).

(b) If the proposed action is not covered by paragraph (a) of this section, prepare an environmental assessment (§1508.9). The agency shall involve environmental agencies, applicants, and the public, to the extent practicable, in preparing assessments required by § 1508.9(a)(1).

(c) Based on the environmental assessment make its determination whether to prepare an environmental impact statement.

(d) Commence the scoping process (§ 1501.7), if the agency will prepare an environmental impact statement.

(e) Prepare a finding of no significant impact (§ 1508.13), if the agency determines on the basis of the environmental assessment not to prepare a statement.

(1) The agency shall make the finding of no significant impact available to the affected public as specified in §1506.6.

(2) In certain limited circumstances, which the agency may cover in its procedures under § 1507.3, the agency shall make the finding of no significant impact available for public review (including State and area wide clearinghouses) for 30 days before the agency makes its final determination whether to prepare an environmental impact statement and before the action may begin. The circumstances are:

(i) The proposed action is, or is closely similar to, one which normally requires the preparation of an environmental impact statement under the procedures adopted by the agency pursuant to § 1507.3, or

(ii) The nature of the proposed action is one without precedent.

40 C.F.R. § 1508.7 Cumulative impact.

Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. § 1508.9 Environmental assessment.

Environmental assessment:

(a) Means a concise public document for which a Federal agency is responsible that serves to:

(1) Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.

(2) Aid an agency's compliance with the Act when no environmental impact statement is necessary.

(3) Facilitate preparation of a statement when one is necessary.

(b) Shall include brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.

40 C.F.R. § 1508.13 Finding of no significant impact.

Finding of no significant impact means a document by a Federal agency briefly presenting the reasons why an action, not otherwise excluded (§ 1508.4), will not have a significant effect on the human environment and for which an environmental impact statement therefore will not be prepared. It shall include the environmental assessment or a summary of it and shall note any other environmental documents related to it (§ 1501.7(a)(5)). If the assessment is

included, the finding need not repeat any of the discussion in the assessment but may incorporate it by reference.

V. STATEMENT OF FACTS

A. The Parties

Petitioners are residents of the communities of Woodside and Portola Valley, California, and certain of them are members of a group known as The Ad Hoc Committee for Noise Abatement in the South Bay. (ER at 367; Final EA Appx. F at 190.) The Federal Aviation Administration is the national aviation authority of the United States, and Michael Huerta is the current Administrator of the FAA. Petitioners have suffered a direct injury as a result of the Respondents' actions challenged in this Petition in that implementation of NorCal OAPM has caused a substantial increase in the amount of noise created by aircraft flying over their homes and communities. (ER at 367-376; Final EA Appx. F at 190-99.)

B. Background on NextGen and NorCal OAPM

The FAA is currently implementing what it refers to as the next generation air transportation system ("NextGen"), which the FAA characterizes "as a plan to modernize the national airspace system through 2025." (ER at 2; FONSI at 2.) According to the FAA, "NextGen represents an evolution from an air traffic control system that is a primarily ground-based system to a system that is satellite-

based." (Id.) A stated purpose of the NextGen system is to "allow the FAA to guide and track air traffic more precisely and efficiently." (Id.)

As a midterm incremental step in implementing NextGen, the FAA is carrying out a project known as the Northern California Optimization of Airspace Procedures in the Metroplex ("NorCal OAPM"). (ER at 2; FONSI at 2.) The NorCal OAPM project is considered a "mid-term implementation step in the overall process of transitioning to the NextGen system." (Id.) The NorCal OAPM project "is intended to address specific issues related to the efficient flow of traffic into and out of the Northern California Metroplex" - - a geographic area including SFO. (ER at 2; FONSI at 2.) Among other things, the NorCal OAPM project "consists of procedural changes intended to improve operational efficiency, increase flightpath predictability, and reduce required controller-pilot voice communication." (ER at 3; FONSI at 3.) It accomplishes these goals in part by allowing aircraft to fly closer together and along more narrow flight corridors. (ER at 52-65.) As a result, and as detailed below in Section V.C, implementation of NorCal OAPM requires significant modifications to the flight paths that aircraft will take flying into and out of SFO.

C. The FAA's Draft Environmental Assessment of NorCal OAPM

The FAA in conjunction with considering NorCal OAPM recognized that NEPA requires federal agencies to disclose to the public a clear and accurate

description of the potential environmental consequences, including noise impacts, of proposed federal actions and "to consider environmental factors in their decision making processes," including noise impacts on affected communities. (ER at 494; Draft EA at 1-1.) In March 2014, the Seattle division of the FAA issued a Draft EA for the NorCal OAPM project concluding that implementation of NorCal OAPM would not result in any significant noise impact on any affected community.

Section 3 of the Draft EA, titled "Alternatives," explained that, as part of NorCal OAPM, the FAA was proposing certain changes to the flight paths that aircraft will take going into and out of SFO. (ER at 546-51; Draft EA at 3-17-22.) This is consistent with the goal of NorCal OAPM, which implements "procedural changes intended to improve operational efficiency, *increase flightpath predictability*, and reduce required controller-pilot voice communication." (ER at 3; FONSI at 3 (emphasis added).)

The changes highlighted in the Draft EA that are of greatest concern to Petitioners are changes proposed to the BIG SUR TWO flight path for arrivals into SFO. Prior to NorCal OAPM, aircraft approaching SFO from the South used BIG SUR TWO as the primary flight path, and BIG SUR TWO accounted for 29 percent of all arrivals into SFO. (ER at 1060; OAPM Study Report at 29.) The attached screenshot, shows the flight path of planes following BIG SUR TWO.

(ER at 181; Final EA Appx. F at 4.) Petitioners' communities of Woodside and Portola Valley are located within the blue shaded area in San Mateo County, just south of Interstate 280.

NorCal OAPM maintains BIG SUR TWO as an available arrival flight path option, but adds a new flight path for aircraft approaching from the South - - SERFR ONE. As demonstrated in the attached screenshot, the new SERFR ONE route actually consists of two alternative air routes into SFO, both of which terminate well before the airport and then rely on real time tower control to then route planes the rest of the way into SFO.

Figure 3 – Proposed SERFR1 STAR

(ER at 182; Final EA Appx. at 5.) Below is a screenshot of the two layered on top of one another for comparison purposes:

(Id.) Importantly, the Draft EA provided no detail as to how frequently planes following SERFR ONE will fly over each of the alternative legs of new SERFR ONE, or how frequently planes will continue to follow the BIG SUR TWO arrival route. Nonetheless, the Draft EA concluded that NorCal OAPM would not have a substantial noise impact on any affected Bay Area community, including the Petitioners' communities of Woodside and Portola Valley. (ER at 594; Draft EA at 5-3.)

D. Petitioners And Their Elected Representatives Formally Comment on the Draft Environmental Assessment and Proposed Changes to Flight Paths.

After reviewing the Draft EA, and frustrated by the rise in aircraft noise they were then experiencing over their homes and in their communities, Petitioners formally submitted written comments on the Draft EA to the FAA. The comments were primarily drafted by Petitioner James E. Lyons, a resident of Woodside, California, and were submitted on behalf of an Ad Hoc Committee For Noise Abatement in the South Bay on April 28, 2014. (ER at 367.)

The Petitioners' comments pointed out that the FAA had not clearly identified where planes would actually fly if NorCal OAPM were implemented, and thus the FAA's conclusion that NorCal OAPM would not have a significant noise impact on any community was irrational. (ER at 370-73; Final EA Appx. F at 193-96.) Petitioners noted that it appeared that the changes would cause increased overflights over their communities, but that they were not able to determine based on the information provided by the FAA where exactly the planes would fly. (Id.) They also expressed their understandable frustration at being unable, despite repeated efforts, to compel a response from the FAA indicating exact flight path locations. (ER at 376; Final EA Appx. F at 199.)

Petitioners' elected representatives also struggled in vain to obtain more information about NorCal OAPM's changes to flight paths and greater community

involvement from the FAA. In a letter dated April 24, 2014, the Honorable Anna Eshoo and the Honorable Jackie Speier, Members of Congress representing Petitioners and their neighboring constituents adversely affected by NorCal OAPM, jointly wrote a letter to the Administrator of the FAA noting that "Regional agencies, cities and constituents who have reviewed the draft report are still waiting for critically important information from your agency including the altitude of aircraft." (ER at 970.) The Representatives' letter further noted that

> It is difficult for a layperson or even an expert outside of the FAA to determine where a plane will be along a proposed route . . . based upon information in the current draft report. This jeopardizes the informative value of the document and makes it difficult to comment upon the possible noise impacts of the proposal on our communities.

(Id.)

E. The FAA Disregards Petitioners' Comments and the Concerns Of Their Elected Representatives And Issues a Final Environmental Assessment.

Ignoring the concerns raised by Petitioners and their elected representatives, and after granting only a 10 day extension of time to respond to the Draft EA, on July 31, 2014, the FAA issued a Final EA regarding the predicted environmental effects of NorCal OAPM. (ER at 14.) The Final EA acknowledged that "aircraft noise is often the most noticeable environmental effect associated with any aviation project." (ER at 103; Final EA at 4-6.) However, the Final EA, like the Draft EA, concluded that NorCal OAPM would not have any significant noise

impact on any affected communities. (ER at 130; Final EA at 5-3.) This finding was incorporated into the FAA's July 31, 2014 FONSI. (ER at 7; FONSI at 7.)

In reaching the conclusion that NorCal OAPM would not have any significant noise impact on any affected community, the FAA did not conduct its own analysis on the expected noise impacts created by NorCal OAPM. Instead, the FAA relied on a report prepared by its third party consultant, ATAC. (ER at 612-924.) According to the Final EA, ATAC measured anticipated noise levels under five different scenarios, including:

- Actual Noise Levels existing during the year 2011
- Anticipated noise levels for the no action alternative in 2014
- Anticipated noise levels in 2014 if NorCal OAPM is implemented
- Anticipated noise levels for the no action alternative in 2019
- Anticipated noise levels in 2019 if NorCal OAPM is implemented.

(ER at 664; ATAC Report at 5-1.) The purpose of the noise analysis was to determine whether, if adopted, NorCal OAPM would result in any adverse, significant noise impacts on any affected community during the years 2014 or 2019 as a result of the proposed new flight paths being implemented. (ER at 130; Final EA at 5-3 ("The noise analysis reflects the change in noise exposure resulting

from the proposed changes in aircraft routes (i.e., flight tracks) under the Proposed Action compared to the No Action Alternative").)

The ATAC report made the commonsense observation that: "To determine projected noise levels on the ground, it is necessary to determine not only how many aircraft are present, but where they fly. (ER at 652; ATAC Report at 3-29.) However, as noted above, the record does not provide any information regarding the number of flights expected to take each of the alternative routes on the new SERFR ONE air route, nor does it indicate how many planes will continue to take the BIG SUR TWO route.

This is a critical omission because of the manner in which noise must be measured under FAA regulations. The FAA's own preferred method for calculating aircraft noise on the ground is known in the industry as the Day Night Average Sound Level. (ER at 155-56; Final EA Appx. E at E-4-5.) Importantly, the DNL metric does not merely measure how loud an individual aircraft flying overhead is to an observer on the ground. (Id.) Instead, the DNL metric takes account of the total number of overflights an observer on the ground would hear on average over a 24 hour weighted period and considers the cumulative amount of all noise made by all of those aircraft. (ER at 103; Final EA at 4-6. "The DNL metric is a single value representing aircraft sound level over a 24 hour period and includes all of the sound energy generated within that period.")

The ATAC report also assumed that the increase in the raw number of flights flying into SFO would be identical regardless of whether NorCal OAPM were implemented. (ER at 131; Final EA at 5-4.) However, no evidence is cited in the Final EA indicating that the increase in volume into SFO will be identical regardless of whether NorCal OAPM is implemented. The FAA's only support for this assumption is a citation to a 2012 Terminal Area Forecast prepared by the FAA. (ER at 131; Final EA 5-4 at n. 31.) But that document states that it served only to measure expected demand from consumers, but was not in any way measuring whether airports could actually handle any volume increases. (ER at 931.)

The Final EA also declined to conduct any analysis of the "cumulative impacts" of increased noise from NorCal OAPM when combined with other actions that might also result in noise increases. (ER at 144; Final EA at 5-17.) ATAC's report indicates that ATAC did not conduct such an analysis because it believed the FAA was doing so. (ER at 664; ATAC Report at 5-1.) However, Section 5.10 of the Final EA contains no such analysis. (ER at 144; Final EA at 5-17) ("[e]nvironmental resource categories not further evaluated for cumulative impacts include noise.")

The Final EA was published in connection with the FAA issuing responses to the various comments that had been made to the FAA regarding the Draft EA.

One such comment took the form of a December 18, 2013, letter from a representative of the National Park Service. (ER at 982.) In this letter a representative of the National Park Service wrote to Michael Huerta of the FAA expressing his concern regarding the possibility that newly-establish flight routes might have an adverse noise impact on national park space in the Bay Area. (Id.)

Elizabeth Ray of the FAA responded on April 2, 2014, noting that "[NorCal OAPM] is being implemented on an expedited timeline of 36 months from time of design to implementation . . .. The Norcal Metroplex does not seek to implement procedures which result in significant noise or other environmental impacts that would necessitate preparation of an Environmental Impact Statement (EIS). Preparation of an EIS is a process that typically requires more than 3 years." (ER at 980.) Ms. Ray's letter admits that the FAA was operating under a 36 month deadline and therefore the FAA had no intention of creating an EIS, which would cause the FAA to miss its target date. The record therefore demonstrates that the FAA had prejudged the issue of whether an EIS was necessary and pre-committed itself to an implementation schedule that would make preparation of an EIS impossible before even completing its Draft EA.

F. The FAA Issues a Report Demonstrating That Certain Of Its Assumptions Regarding The Anticipated Noise Impacts of NorCal OAPM Might Be Unwarranted.

Although not included by the FAA as part of the Certified List of Record provided in this case, at the time the FAA filed the Certified List of Record it had published a report entitled Future Airport Capacity Task 3: Airport Capacity Needs in the National Airspace System ("FACT3"). (ER at 984.) In FACT3, the FAA purported to analyze the capacity of major hub airports to handle the anticipated increase in consumer demand for flights over the next 5 years. (ER at 990; FACT3 at 1.)

In this document the FAA concluded that if NorCal OAPM is not implemented, SFO will need additional capacity to meet expected demand sometime in the next 5 years, but that such capacity limits will not be reached if NorCal OAPM is implemented. (ER at 992; FACT3 at 3.) In other words, more flights will occur into SFO under NorCal OAPM than would occur without NorCal OAPM. Nonetheless, the FAA's consultant ATAC assumed in conducting its analysis of the potential noise impacts of NorCal OAPM that the volume of increase of flights into SFO would increase at an identical rate regardless of whether NorCal OAPM were implemented. (ER at 131; Final EA at 5-4.)

VI. STATEMENT OF THE CASE/SUMMARY OF ARGUMENT

This is a challenge under 49 U.S.C Section 46110 by various petitioners that have been adversely affected by the FAA's July 31, 2014, finding that implementation of NorCal OAPM would not have a significant noise impact on any affected community. Petitioners are residents of the Bay Area communities of Woodside and Portola Valley, California, and have experienced a dramatic and unreasonable increase in the amount of aircraft noise in their communities as a result of the FAA's implementation of NorCal OAPM. Petitioners assert that the FAA's finding that NorCal OAPM would not have any significant noise impacts on their community was arbitrary and capricious and should be set aside by the Court for at least the following reasons.

First, the FAA improperly prejudged the issue of whether NorCal OAPM would have a significant noise impact on any affected community, and therefore that it was not required to prepare an EIS analyzing that impact, and then committed itself to an implementation schedule for NorCal OAPM that would have made preparation of an EIS impossible. This prejudgment by the FAA was unlawful and tainted the entire process by which it subsequently purported to actually measure those noise increases. Second, the record indicates that at the time the FAA's technical consultant ATAC measured the anticipated noise effects on the ground of NorCal OAPM, that consultant did not actually know where

aircraft were expected to fly after the implementation of NorCal OAPM. ATAC's noise calculations were therefore based on unreliable data. Third, in measuring the anticipated noise impacts of NorCal OAPM in comparison with expected noise levels if NorCal OAPM were not implemented, the FAA improperly inflated the measurement of expected noise if NorCal OAPM were not implemented by assuming that a greater number of flights would occur at SFO without NorCal OAPM than was reasonable. Fourth, the FAA failed to analyze and consider the cumulative noise impacts of NorCal OAPM when considered in conjunction with other activities outside of NorCal OAPM that are expected to increase aircraft noise around SFO over the next several years.

For all of these reasons, Petitioners respectfully request that the Court set aside the FAA's conclusion that NorCal OAPM would not have a significant noise impact on any affected community and direct the FAA to prepare an EIS analyzing the real environmental and noise impacts expected under implementation of NorCal OAPM.

VII. ARGUMENT

A. The National Environmental Policy Act Requires the FAA to Consider, Disclose and Take a Hard Look At the Potential Noise Impacts of NorCal OAPM.

The National Environmental Policy Act of 1969 ("NEPA") is "our basic national charter for protection of the environment." Barnes v. United States Dept.

of Transportation, 655 F.3d 1124, 1131 (9th Cir. 2011). NEPA requires the FAA to prepare an EIS for every "major Federal action[] significantly affecting the quality of the human environment.'" Id.; Grand Canyon Trust v. Federal Aviation Administration, 290 F.3d 339, 340 (D.C. Cir. 2002). In order to meet the requirements of NEPA, the agency must perform a comparative analysis of the environmental impacts of the different alternatives before the agency, including the impact of taking no action. Center for Biological Diversity v. United States Department of the Interior, 623 F.3d 633, 644 (9th Cir. 2010) ("It is black letter law that NEPA requires a comparative analysis of the environmental consequences of the alternatives before the agency.")

Federal agencies are required to take a "hard look" at the potential environmental and noise impacts of their actions. Te-Moak Tribe of Western Nevada v. United States Dept. of the Interior, 608 F.3d 592, 602-03 (9th Cir. 2010) (federal agencies are required to take a "hard look" and consider all potential environmental effects that might be caused by their actions). The "hard look" requirement is not satisfied by conclusory statements by the agency about anticipated environmental effects. Oregon Natural Resources Council v. United States Bureau of Land Management, 470 F.3d 818, 823 (9th Cir. 2006) (rejecting EA that analyzed cumulative impacts in a "conclusory" manner using "general statements about possible effects.")

Under the Council on Environmental Quality regulations implementing NEPA, "an agency prepares an EA [Environmental Assessment] in order to determine whether to prepare an EIS or issue a FONSI [Finding Of No Significant Impact], the latter of which excuses the agency from its obligation to prepare an EIS." Barnes, 655 F.3d at 1131; Grand Canyon Trust, 290 F.3d at 340 ("An environmental assessment is made for the purpose of determining whether an EIS is required.") However "if *any* 'significant' environmental impacts might result from the proposed agency action then an EIS must be prepared *before* agency action is taken." Id. Of course, an agency is prohibited from prejudging the issue of whether an EIS must be prepared and must conduct a good faith environmental assessment to answer that question. Davis, 302 F.3d at 1112 (holding that federal agencies may not prejudge the issue of whether an EIS is necessary prior to conducting an environmental assessment.)

B. This Court Has the Statutory Authority to Review the FAA's Determination that NorCal OAPM Would Not Have a Significant Noise Impact and Set That Decision Aside If It Was Arbitrary or Capricious.

This Court has authority to review the FAA's actions for compliance with NEPA under the Administrative Procedures Act, 5 U.S.C. Section 701. Barnes, 655 F.3d at 1132. Although Petitioners recognize that "a reviewing court may set aside an agency action only if it is 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law'" Barnes, 655 F.2d at 1132, caselaw

interpreting the manner in which this standard is applied where, as here, *an agency has declined to prepare an EIS*, indicates that the FAA has the burden of providing a "convincing statement of reasons" explaining why an EIS was unnecessary. Id. at 1132. As explained by the Ninth Circuit panel in Barnes in rejecting the FAA's decision not to prepare an EIS in that case:

> In reviewing an agency's decision not to prepare an EIS, the arbitrary and capricious standard under the APA requires this Court [₱] to determine whether the agency has taken a 'hard look' at the consequences of its actions, based [its decision] on a consideration of the relevant factors, *and provided a convincing statement of reasons to explain why a project's impacts are insignificant*.

Id. at 1132 (emphasis added).

The FAA therefore has the burden of providing the Court with "a *convincing* statement of reasons" establishing that it correctly concluded that NorCal OAPM would not have a significant noise impact on any affected community and therefore preparation of an EIS was unnecessary. As demonstrated below, the FAA will be unable to do so because its analysis of the potential noise impacts of NorCal OAPM was arbitrary and capricious for several reasons.

C. The FAA Improperly Prejudged The Issue Of Whether Preparation of An EIS Was Necessary.

As noted above, Federal law under NEPA requires federal agencies to carefully consider the potential environmental and noise impacts of their actions.

Barnes, 655 F.3d at 1131 (NEPA requires federal agencies to prepare an EIS for every "major Federal action[] significantly affecting the quality of the human environment.'") This generally requires the preparation of an EIS, but an agency can shortcut the process by preparing an EA demonstrating that a full blown EIS is not necessary because it is readily apparent that the proposed action will not have any significant environmental impacts. However, a federal agency is not permitted to prejudge the issue of whether an EIS is necessary but must wait until after it has conducted its environmental assessment. Davis, 302 F.3d at 1112 (holding that federal agencies may not prejudge the issue of whether an EIS is necessary prior to conducting an environmental assessment.)

The record in this case reveals that the FAA's failure to prepare an EIS was a forgone conclusion from the start, because the FAA pre-committed itself to an implementation timeline for NorCal OAPM that would prohibit the preparation of an EIS. As noted above, NorCal OAPM is a mid-term project that is part of NextGen, the FAA's plan to modernize the national airspace system by 2025. (ER at 1-2; FONSI at 1-2.) Documents in the record indicate that in its haste to implement this mid-term step, the FAA committed to a timeframe that made preparation of an EIS impossible.

On December 18, 2013, long before the publication of either the Draft EA or the Final EA, a representative of the National Park Service wrote to Michael

Huerta of the FAA expressing his concern regarding the possibility that newly-establish flight routes might have an adverse noise impact on national park space in the Bay Area. (ER at 982.) Elizabeth Ray of the FAA responded on April 2, 2014, noting that "[NorCal OAPM] is being implemented on an expedited timeline of 36 months from time of design to implementation . . .. The Norcal Metroplex does not seek to implement procedures which result in significant noise or other environmental impacts that would necessitate preparation of an Environmental Impact Statement (EIS). Preparation of an EIS is a process that typically requires more than 3 years." (ER at 980.)

Thus, given the FAA's own expedited timeline, it had no choice from the beginning but to conclude in the Final EA that NorCal OAPM would not cause any significant noise impacts. This was unlawful. The very purpose of an environmental assessment is to determine whether preparation of an EIS is necessary. Grand Canyon Trust, 290 F.3d at 340 ("An environmental assessment is made for the purpose of determining whether an EIS is required.") It is therefore completely improper for the FAA, as it did here, to have concluded that no EIS was necessary before completing its environmental assessment. Citizen Advocates For Responsible Expansion, Inc. (I-Care) v. Dole, 770 F.2d 423, 434 (5th Cir. 1985) ("government agencies must prepare the required meaningful environmental

assessment and reviewable administrative record *before* reaching a decision on whether an EIS is necessary") (emphasis added).

Caselaw holds that where, as here, the record indicates that a government agency has prejudged the issue of whether an EIS need be prepared, courts do not owe the same deference to the agency's decision that an EIS is unnecessary. Davis, 302 F.3d at 1112 (finding the decision not to prepare an EIS arbitrary and capricious and noting that "the record establishes here that the defendants prejudged the NEPA issues. This prejudgment diminishes the deference owed to the federal defendants in our review of their decision to issue a FONSI rather than an EIS.") The Davis court went on to observe that "the decision whether to prepare a FONSI should be based on the EA of course, not the other way around." Id.

Here, the record indicates that the FAA pre-determined that an EIS was not necessary before it even published its Draft EA, or heard and considered any comments from affected constituents, including Petitioners. This was improper, and Petitioners respectfully submit that they deserve more from the federal government. Scherr v. Volpe, 466 F.2d 1027, 1030 (7th Cir. 1972) ("Congress expressed [with NEPA] its basic goal that the federal government should strive for the protection of environmental values.") Here, the record indicates that the FAA was striving for expediency, not environmental values, and set itself on a schedule

that precluded it from fairly determining whether or not an EIS was necessary. Petitioners deserve more from a government agency given the great responsibility of protecting our environment. The FAA's conclusion that NorCal OAPM would not cause any significant noise increases was therefore arbitrary and capricious and should be set aside by the Court.

D. The FAA's Conclusion that NorCal OAPM Would Not Have a Significant Noise Impact Was Arbitrary and Capricious Because It Was Based On Guesswork Regarding Where Planes Would Actually Fly And How Frequently.

In concluding that NorCal OAPM would not have a significant noise impact on any affected community, the FAA relied on a noise analysis conducted by ATAC. (ER at 612.) However, as ATAC astutely observed in its report, "To determine projected noise levels on the ground, it is necessary to determine not only how many aircraft are present, but where they fly." (ER at 652.) The problem for the FAA here is that the record is devoid of evidence establishing that ATAC (or the FAA) actually knew where planes would be flying if NorCal OAPM were implemented, and how frequently, at the time ATAC conducted its noise analysis.

The change in air routes implemented by NorCal OAPM that is of primary concern to Petitioners is that affecting an air route that is currently known as BIG SUR TWO. BIG SUR TWO is an arrival procedure into SFO that is used by

planes approaching from the South, and prior to NorCal OAPM accounted for about 29% of arrivals from the South into SFO. (ER at 1060; OAPM Study Report at 29.) Under NorCal OAPM, flights arriving from the South into SFO will now, in addition to using BIG SUR TWO, have another arrival procedure available denominated SERFR ONE. The administrative record however demonstrates that SERFR ONE consists of two alternative procedures that cross the San Francisco Peninsula and South Bay at different locations, but stop well clear of SFO and then rely on in flight instructions from tower personnel regarding how the aircraft will actually approach SFO for landing. (ER at 182; Final EA Appx. F at 51.) Notably, the record is devoid of evidence indicating:

- Which of the two alternative legs of the procedure is the correct one, or, are they both going to be implemented?;
- If both of the alternative legs are to be implemented, how frequently will planes use each of the alternatives?;
- How frequently will planes continue to use the old BIG SUR TWO procedure that is being kept under NorCal OAPM?;
- Where will aircraft actually fly once the procedures terminate well short of SFO?

The lack of data regarding the new flight approach procedure is alarming to Petitioners, because it is these Southerly arrivals following BIG SUR TWO or

SERFR ONE that most impact their communities. Moreover, the lack of data in the record regarding how *frequently* planes will use the new procedure, and how frequently they will use which leg of the procedure when they do so, makes measuring the future noise impacts of these changes on the ground impossible. This is the case because the FAA is required to measure noise impacts using a methodology that measures not just how loud any individual overflight is on the ground, but the total number of times during an average day a person on the ground would be exposed to overflight noise. (ER at 103; Final EA at 4-6.)

This methodology of measuring aircraft noise is called the Day Night Average Sound Level. (ER at 103.) Importantly, the DNL metric does not merely measure the decibel level on the ground of an aircraft flying overhead. Instead, the DNL recognizes the common sense proposition that an increase in *the number of times per day* that a person on the ground is exposed to noise from an aircraft overflight can be just as disturbing as an increase in the total decibel level emitted by an aircraft flying overhead. The DNL metric is therefore a measure of the cumulative amount of aviation noise that a person on the ground would be exposed to throughout a 24 hour period. (Id.) Under the DNL metric, a location that receives many aircraft overflights per day with minimal noise intrusion might actually be deemed "noisier" than a location with just a few window shattering, booming overflights per day.

It is for this reason that no accurate prediction of DNL levels could ever occur without knowing not only where aircraft will fly, but how frequently they will do so. As explained above, the record indicates that at the time the FAA concluded that NorCal OAPM would not have any significant noise impacts on the ground, many unanswered questions existed about where and how frequently planes would actually fly once it was implemented. The record also demonstrates that the FAA ignored pleas from Petitioners and their elected representatives to get more specific information regarding where planes would fly post NorCal OAPM, as the administrative record does not provide comprehensible information on this critical point. (ER at 970.)

The FAA's conclusion of no significant noise impact was therefore arbitrary and capricious and should be set aside the Court. Federal agencies are simply not permitted to satisfy their obligations under NEPA without a record demonstrating that the agency knew how and where environmental impacts would occur at the time it reached the conclusion that a significant environmental impact would not exist. See Advocates for Responsible Expansion, Inc. v. Dole, 770 F.2d 423, (5thCir. 1985) (government agency violated NEPA by concluding that freeway

expansion project would not have a significant environmental effect before decision was finalized regarding construction and location of freeway overpass.)[2]

E. The FAA's Conclusion That NorCal OAPM Would Not Have a Significant Noise Impact On Any Affected Community Was Arbitrary and Capricious Because It Relied On Inaccurate Baseline Noise Data.

The FAA's conclusion that NorCal OAPM would not have any significant noise impacts was also arbitrary and capricious because it relied on a critical assumption that is not supported by the record and which the FAA knows may be unwarranted. Specifically, the FAA's third party consultant that analyzed the expected noise increases to be caused by NorCal OAPM assumed that the number of aircraft flying into SFO would increase at an identical rate over the next several years regardless of whether NorCal OAPM were implemented. As explained below, nothing in the record supports this assumption, certain documents authored by the FAA actually contradict this assumption, and the assumption caused an

[2] Petitioners further note that both procedures of the new SERFR ONE route terminate well short of SFO and then rely on radar vectors to route planes the rest of the way to the airport. (ER at 182.) This also makes accurate measurements of noise by aircraft using the new SERFR ONE impossible because the FAA admits that flight paths using radar vectors cannot be reliably predicted beforehand. (ER at 230; Final EA Appx. F at 53.) ("There is a distinct difference between published routes and radar vectors. Published routes are predictable and repeatable. Radar vectors are applied when the expected path of the aircraft needs to be adjusted for many different reasons, such as conflicts with other traffic, weather, aircraft spacing, equipment outages, law enforcement/military operations, lifeguard flights, etc. Because of the unpredictable nature of the conditions which may warrant issuance of vectors, forecasting their frequency of use is very difficult.")

artificial increase in the noise level baseline that ATAC used for measuring the anticipated noise increases caused by NorCal OAPM.

The Final EA indicates that ATAC measured and compared anticipated noise levels under five different scenarios, including:

- Actual Noise Levels existing during the year 2011
- Anticipated noise levels for the No Action alternative in 2014
- Anticipated noise levels in 2014 if NorCal OAPM is implemented
- Anticipated noise levels for the No Action alternative in 2019
- Anticipated noise levels in 2019 if NorCal OAPM is implemented.

(ER at 664; ATAC Report at 5-1.) The purpose of the noise analysis conducted by ATAC was to determine whether, if adopted, NorCal OAPM would result in any significant noise impacts on any affected community during the year 2014, or 2019 when compared with expected noise levels if NorCal OAPM were not implemented (the "no action" baseline). (ER at 130; Final EA at 5-3 ("The noise analysis reflects the change in noise exposure resulting from the proposed changes in aircraft routes (i.e., flight tracks) under the Proposed Action compared to the No Action Alternative.")).

In calculating the no action noise baseline, ATAC's calculations assumed, without any supporting evidence, that the number of flights, and thus, arrivals into

SFO, would increase by an identical amount regardless of whether NorCal OAPM were implemented. This is a critical assumption upon which ATAC's final noise calculations rely, because, as noted above, the raw number of overhead flights is an critical metric for determining noise levels under the DNL standard. Thus, an incorrect assumption regarding the number of flights that would occur if NorCal OAPM were not implemented would improperly inflate the no action noise baseline level. If the baseline noise level were improperly inflated, then any conclusion regarding the relative noise increases caused by NorCal OAPM would be unreliable.

Despite the critical nature of the assumption that the number of flights into SFO would increase at an identical rate regardless of whether NorCal OAPM were implemented, the FAA did not provide any data or analysis in the record supporting this critical assumption. The law requires it to do so. Davis, 302 F.3d at 1122-23 ("A conclusory statement that growth will increase with or without the project, or that development is inevitable, is insufficient; the agency must provide an adequate discussion of growth-inducing impacts"); Northern Plains Resource Council v. The Surface Transportation Board, 668 F.3d 1067, 1083 (9th Cir. 2012) ("NEPA requires that the agency provide the data on which it bases its environmental analysis . . . [s]uch analysis must occur before the proposed action is approved, not afterward.")

The only reference the FAA cites in support of this critical assumption in its Final EA is a 2012 Terminal Area Forecast prepared by the FAA, *but that document explicitly states that it conducted no analysis of whether the anticipated increase in flight volume was logistically feasible*. (ER at 931) ("an airport's forecast is developed independent of the ability of the airport . . . to furnish the capacity to meet demand.") Nonetheless, ATAC assumed in making its noise measurements that the exact same number of flights (826,187 in 2014, and 900,324 in 2019) would occur under the no action alternative as would if NorCal OAPM were implemented. (ER at 131; Final EA at 5-4.)

Other FAA documents demonstrate that this assumption was plain wrong, and that more flights will occur at SFO in the coming years under NorCal OAPM than could occur if NorCal OAPM were not implemented. Specifically, the FAA authored a document entitled Future Airport Capacity Task 3: Airport Capacity Needs in the National Airspace System ("FACT3") in which it purported to analyze the capacity of major hub airports to handle the anticipated increase in consumer demand for flights over the next 5 years. (ER at 990; FACT3 at 1.) In this document the FAA concluded that if NorCal OAPM is not implemented, SFO may not be able to handle the expected increase in air traffic sometime in the next 5 years, and that such capacity limits will not be reached if NorCal OAPM is

implemented. (ER at 992; FACT3 at 3.) In other words, NorCal OAPM means more flight traffic at SFO in the coming years and associated noise increases.

The FAA therefore knows that a critical assumption underlying ATAC's noise analysis may be unwarranted, and concealed this fact in the Final EA, even though all the data inputs in FACT3 were available at the time the FAA issued the Final EA. The FAA knows that without NorCal OAPM, less flights will occur into SFO than will occur in the coming years under NorCal OAPM. The FAA knows this may be the case because it has acknowledged in FACT3 that without NorCal OAPM, SFO may simply lack the capacity to handle the expected increase in demand for flights into SFO.[3] It was therefore completely inappropriate for ATAC to simply assume in its noise measurements that there will be exactly the same number of flights into SFO in 2019 in their "no action" noise scenario as there would be if NorCal OAPM is implemented. The FAA's conclusion that no

[3] The FAA notes in FACT3 that SFO might not be able to handle the demand for future air traffic by 2020 without implementation of midterm NextGen. (ER at 992; FACT 3 at 3.) In an addendum to the report, the FAA notes that SFO may not be capacity constrained by 2020 based on a sensitivity analysis of recent data. (ER at 1026; FACT3 at D-4.) Nonetheless, this shows at the very least the FAA knows that its assumptions about the number of flights going into SFO are subject to considerable doubt.

significant noise increase will occur if NorCal OAPM were implemented was therefore arbitrary and capricious and should be set aside by this Court. [4]

F. The FAA's Conclusion That NorCal OAPM Would Not Have a Significant Noise Impact on Any Affected Community Was Arbitrary and Capricious Because The FAA Failed to Conduct The Required "Cumulative Impacts" Analysis

NEPA requires Federal Agencies to not only measure the potential environmental and noise impacts of a proposed action as compared to a no action alternative, it also requires the agency to examine the "cumulative impacts" of the proposed action when considered in conjunction with other actions taken by the government or private individuals in the foreseeable future to determine if, *taken together*, the proposed action and the other actions would jointly have a significant negative effect on the environment. Te-Moak Tribe of Western Nevada v. United States Dept. of the Interior, 608 F.3d at 602-03 ("Cumulative impact is the impact

[4] In opposing this Petition, we anticipate that the FAA will attempt to rely on the case of Seattle Community Council Federation v. FAA , 961 F.2d 829 (9th Cir. 1992), for the proposition that the FAA is permitted to disregard the possibility that air traffic might not increase at the same rate as a result implementation of NorCal OAPM. Seattle Community Council Federation, is however distinguishable. In that case, the Court relied on the fact that the FAA in its final environmental assessment had affirmatively determined that Sea-Tac airport had the ability to handle the increase in capacity even if the proposed action were not implemented. Id. at 836. By contrast, the FAA made no such finding here and admitted in the Terminal Area Forecast that it based its projections of increased traffic solely on consumer demand without analysis of whether SFO could actually accommodate that traffic. (ER at 931.) Moreover, here, there is evidence that the FAA knew that air traffic would increase at a greater rate if NorCal OAPM were implemented than if it were not. (ER at 992.)

on the environment which results from the incremental impact of the action when other past, present, and reasonably foreseeable actions" are considered).

Ninth Circuit caselaw requires that even if a federal agency prepares only an environmental assessment, as opposed to an EIS, the agency's EA must "fully address cumulative environmental effects or 'cumulative impacts.'" Id. citing Kern v. BLM, 284 F.3d 1062, 1076 (9th Cir. 2002) ("Given that so many more EA's are prepared than EIS's, *adequate consideration of cumulative effects requires that EA's address them fully*") (emphasis in original.) Moreover the agency's analysis in the EA cannot be conclusory or perfunctory, rather, it must be based on hard, quantifiable data:

> In a cumulative impacts analysis, an agency much take a 'hard look' at all actions. An EA's analysis of cumulative impacts must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment. [Citation] General statements about possible effects and some risk do not constitute a hard look absent justification of why more definitive information could not be provided. [Citation.] [S]ome quantified or detailed information is required. Without such information, neither the courts nor the public . . . can be assured that the [agency] provided the hard look that it is required to provide.

Ta-Moak Tribe of Western Shoshone of Nevada, 608 F.3d at 603 (quotations omitted); see also Oregon Natural Resources Council v. United States Bureau of Land Management, 470 F.3d 818 (9th Cir. 2006) (rejecting EA that analyzed

cumulative impacts in a "conclusory" manner using "general statements about possible effects.")

In order to ensure strict agency compliance with the requirement of a cumulative impacts analysis, the burden on a petitioner challenging an agency's failure to properly perform a cumulative impacts analysis "is not an onerous one." Te-Moak Tribe of Western Shoshone, 608 F.3d at 605. Indeed, controlling caselaw provides that a petitioner has no obligation to demonstrate that a cumulative impact might occur. Id. at 605. As the Court in Te-Moak Tribe of Weestern Shoshone explained:

> We conclude that in order for plaintiffs to demonstrate that the [government] failed to conduct a sufficient cumulative impacts analysis, they need not show that cumulative impacts would occur. To hold otherwise would require the public, rather than the agency, to ascertain the cumulative impacts of a proposed action. [citation] Such a requirement would thwart one of the 'twin aims' of NEPA-to ensure[] that the *agency* will inform the *public* that it has indeed considered environmental concerns in its decision making process.

Id. at 605.

In this case, not only did the FAA fail to conduct the kind of rigorous "hard look" at cumulative impacts required by NEPA and controlling caselaw, but also simply declined to evaluate the cumulative noise impacts that NorCal OAPM might have when combined with other factors, summarily declaring that since

NorCal OAPM would not have a significant noise impact, no cumulative analysis was necessary. (ER at 144; Final EA at 5-17).

Petitioners respectfully submit that this was improper and contrary to law. The entire point of a cumulative impacts analysis is to determine the impacts of an action, such as increased aviation noise, that might not in and of itself create a significant impact, but might cumulatively do so when viewed in conjunction with actions being taken by other governmental agencies or non-governmental actors. Grand Canyon Trust, 290 F.3d at 346 (FAA required to consider not only the noise impacts of the proposed action but also total noise impacts of the proposed action when considered with other actions not included in the proposed action); see also Natural Res. Def. Council, Inc. v. Hodel, 865 F.2d 288, 297 (D.C. Cir. 1988) (The purpose of this requirement is to prevent agencies from dividing one project into multiple individual actions "each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.")

The FAA is therefore not permitted to simply assume that because (according to the FAA) NorCal OAPM would not have a significant effect on noise, no cumulative noise impact exceeding an acceptable threshold would occur. Grand Canyon Trust, 290 F.3d at 339. In Grand Canyon Trust, the FAA approved the City of St. George Utah's plans to construct a replacement airport near Zion National Park, and issued an environmental assessment concluding that doing so

would create non-existent or negligible noise impacts. Id. at 340. That decision was challenged on the basis that the FAA's noise analysis considered only the additional noise impact created by construction of the replacement airport, but ignored the cumulative noise impacts of the project when viewed with other factors that might also contribute to increased noise. Id. Specifically, the petitioners alleged that "The FAA cannot be said to have taken a 'hard look' at the problem when it considered only the incremental impacts of the replacement airport and not the total noise impact that will result from the relocated airport." Id. at 341. The FAA contended, as it does here, that it had already found the noise impacts from the proposed action to be negligible and that it was not required to consider the total impact of noise on the Park. Id.

The Court of Appeals for the District of Columbia rejected the FAA's position, noting that "the consistent position of the caselaw is that, depending on the environmental concern at issue, the agency's EA must give a realistic evaluation of the total impacts and cannot isolate a proposed project, viewing it in a vacuum." Id. at 342. The Court then remanded the case to the FAA for further consideration of whether an EIS was necessary, stating that "NEPA regulations require that an agency consider cumulative impacts and the FAA's EA fails to address the total noise impact that will result from the replacement airport" and that "it would be difficult to understand how an agency could determine that an

EIS is not required if it had not evaluated existing noise impacts *as well as those planned impacts that will exist by the time the new facility is constructed and in operation*." Id. at 345 (emphasis added.). In Grand Canyon Trust, the FAA failed to consider that an increase in air traffic might occur as a result of changes to flight patterns and schedules at other airports, as well as an increase in activity by private aircraft tour operators that were not a part of the proposed action but also had the potential to increase aircraft noise in the affected area. Id. at 346; see also Ocean Advocates v. United States Army Corps of Engineers, 402 F.3d 846, 864 (9th Cir. 2005) (Army Corps of Engineers' conclusion that adding an addition to a dock would not have a significant environmental impact rejected as arbitrary and capricious where Corps failed to consider the possibility that project would result in additional ship traffic).

Here, Petitioners respectfully submit that the FAA should have considered the potential cumulative noise impacts of NorCal OAPM in conjunction with the potential increase of flight traffic that the FAA contends in the Final EA will occur at SFO regardless of whether the project is implemented. As noted above in Section VII.E., the FAA disregarded the potential effects of an increase in traffic by assuming the same increase would occur with or without NorCal OAPM. Even if it was fair for the FAA to assume that air traffic into SFO would increase at the same rate regardless of whether NorCal OAPM were implemented, which

Petitioners do not concede, then the FAA should have analyzed and considered the cumulative noise impacts created by NorCal OAPM when viewed in conjunction with noise increases caused by increased air traffic into SFO. Only by conducting such an analysis could the FAA have determined whether the cumulative impact of NorCal OAPM when combined with the increases in noise resulting from the increase in flight traffic would together have a significant noise impact on an affected community. The FAA's conclusory determination that no cumulative noise impacts would occur is insufficient where, as here, an agency is relying on its conclusions to avoid preparing an EIS. Ocean Advocates, 402 F.3d at 864 ("The Corps cannot avoid preparing an EIS by making conclusory assertions that an activity will have only an insignificant impact on the environment.")

The FAA's failure to conduct any type of cumulative noise analysis is especially troubling given that the FAA's consultant, ATAC, failed to conduct an analysis of certain cumulative noise impacts *because it mistakenly believed that the FAA would do so in the Final EA*. Specifically, Section 5.2 of the report prepared by ATAC corporation, entitled "Existing conditions and No Action Conditions," reveals that ATAC did not evaluate the cumulative noise impacts of certain other changes being made to aircraft flight patterns outside of NorCal OAPM, by including those changes in its no action baseline, because it wrongly believed that the FAA would discuss these cumulative impacts in its Final EA. In fact, the FAA

did not discuss the potential cumulative impacts on noise levels that would occur with implementation of both NorCal OAPM and the changes referenced above by ATAC in its report, as ATAC clearly believed it would. (ER at 144; Final EA at 5-16-18.) Instead, the FAA summarily concluded in the Final EA that no cumulative impacts analysis was necessary because no noise impacts would occur. (Id.) ("[e]nvironmental resource categories not further evaluated for cumulative impacts include noise.")

The law of this Circuit does not permit this type of conclusory analysis of cumulative impacts by the FAA. Northern Plains Resource Council, 668 F.3d at 1076 ("A cumulative impact analysis must be more than perfunctory; it must be a useful analysis of the cumulative impacts of past, present, and future projects") (quotations omitted); Oregon Natural Resources Council, 470 F.3d at 822 (rejecting an EA on the basis that it "failed to disclose and consider quantified and detailed information regarding the cumulative impact of the [] logging project combined with past, present, and reasonably foreseeable logging projects.").

The FAA's complete failure to address the potential cumulative impacts on noise levels of NorCal OAPM when viewed in conjunction with other factors that could affect noise levels was therefore arbitrary and capricious, and it should be ordered at a minimum on remand to perform the required analysis.

VIII. CONCLUSION

For the reasons stated above, the Court should grant the Petition for Review. The Court should set aside the FAA's conclusion that NorCal OAPM would not have any significant noise impact and direct the FAA to prepare an EIS and permit the type of meaningful community input of the potential environmental and noise impacts of NorCal OAPM required for an EIS.

_____/s/_____

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STATEMENT OF RELATED CASES

Petitioners are not aware of any related cases pending in this Court.

CERTIFICATE OF COMPLIANCE

This brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 32(a)(7)(B) because this brief contains 13,472 words. This certification is made in reliance on the word count feature of Microsoft Word.

_____/s/_____

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