



**County of Orange**

# MEMO

**DATE:** October 15, 2001

**TO:** Members, Board of Supervisors

**FROM:** Gary Simon, Executive Director  
MCAS El Toro Local Redevelopment Authority

**SUBJECT:** El Toro Local Redevelopment Authority

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## I. INTRODUCTION

This memorandum is in response to requests we received earlier today to respond to some of the recent information released by other parties regarding the planned reuse for MCAS El Toro (OCX) (the Proposed Project). We have responded herewith to: the FAA (FAA) Airspace Determination (AD); criticism of our wind condition analysis; the two airspace PowerPoint presentations; and the numerous letters received late today from Mr. Richard Jacobs (ETRPA's counsel). LRA staff does not believe that any of the information recently released warrants additional environmental studies. Hopefully, the information below is helpful to the Board in consideration tomorrow of Environmental Impact Report 573 and the Airport System Master Plan.

This Memorandum is intended to complement the Agenda Item Transmittal (AIT), staff report and attachments, and the previously released documents provided to the Orange County Board of Supervisors, acting as the MCAS El Toro Local Redevelopment Authority (Board), in connection with its September 17, 2001, meeting regarding certification of proposed Final EIR 573, approval of the ASMP, ALPs, and BTP and implementation of the ASMP and BTP.

## II. RECENT CRITICISM REGARDING WIND CONDITION ANALYSIS

On September 25, 2001, Mr. Charles Griffin provided certain written materials to the Orange County Board of Supervisors (the Board) intended to suggest that the analysis of wind conditions provided in connection with Final Environmental Impact Report 573 (FEIR 573) and its related technical documents is somehow flawed or inaccurate. Mr. Bob McGowan also recently issued a widely distributed e-mail on the same topic that I understand has also been provided to the Board. In addition, Mr. Richard Jacobs submitted a letter to the Board on behalf of the El Toro Reuse Planning Authority (ETRPA) regarding the wind data on October 15, 2001. This material has been carefully reviewed by County staff as well as the County's technical experts in the field including Mr. Steve Allison, Mr. Warren Sprague, and Mr. Doug Sachman of P&D Consultants and Mr. William Brown, a research meteorologist at the National Climatic Data Center (NCDC). Based upon this review, and as discussed in detail below, the County and its technical experts have determined that the criticism of the wind analysis provided in connection with FEIR 573 and its related technical documents is without merit as follows.<sup>1</sup>

The wind analysis utilized in connection with FEIR 573 was prepared consistent with recommended standards and practices of the Federal Aviation Administration ("FAA") and the airport planning profession. Specifically, the extensive wind data used for the analysis was obtained from the United States National Climatic Data Center ("NCDC") through the Center's database. NCDC is the world's largest active archive of weather data and the source identified by the FAA as the best source for wind information. *See*, FAA Advisory Circular 150/5300-13, *Airport Design*. The data used is site specific based on hourly observations taken at the MCAS El Toro site over a twenty-four(24) year period of time (1964-1971 and 1981-1996).<sup>2</sup> Data is included for both all-weather and instrument flight rules ("IFR") conditions. Over the twenty-four (24) year period for which data are included, a total of 209,963 observations of wind speed, wind direction and meteorological conditions are included in the data-base. *See*, *Airport System Master Plan, Technical Report 5, Facility Requirements*, December 8, 1998, revised November 5, 1999. This same NCDC data source has been used, and relied upon, by the United States Marine Corps for their operations of aircraft at the former MCAS El Toro.

Both Mr. Griffin's material and Mr. McGowan's e-mail distribution cites to the Federal Standard for Siting Meteorological Sensors at Airports ("Standards") dated August, 1994, in support of the contention that the wind sensors at MCAS El Toro are sited at an incorrect height

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<sup>1</sup> This memorandum is intended to summarize and supplement the following materials previously prepared by LRA staff and distributed with respect to this issue: (i) the e-mail from Mr. Gary Simon, LRA Executive Director, to the Orange County Board of Supervisors dated October 2, 2001; and (ii) correspondence from Mr. Simon to the Honorable Gary Proctor dated October 4, 2001.

<sup>2</sup> The period from 1972 to 1980 was not included because observations for that period were made every three hours and are inconsistent with the hourly observations.

above ground level. Contrary to this position, the Federal Standards simply "... define and establish ... guidelines, . . . [and] the document is not of itself regulatory in nature, ...Likewise, th[e] standard may be modified or enhanced by agency directives." Furthermore, the Standards only apply to *new* sensor installations established post-1994 and, expressly state that agencies are *not* required to change *existing* sensor installations to comply with the standards provided -- "This document does not require agencies to change existing sensor installations solely to comply with this standard. It will be applied as new stations are established."

Accordingly, the wind observation data utilized in connection with FEIR 573 complies fully with applicable federal standards. Even if the NCDC had established new sensor installations in 1994, it would have been impossible to compile wind data for the time period recommended by the FAA for wind observations -- a period covering at least ten (10) consecutive years. In addition, the FAA has made no recommendations regarding adjusting or modifying meteorological data for a specific recording station in order to account for the height of wind instruments. In fact, and importantly, Mr. William Brown, a research meteorologist at NCDC, has confirmed that the difference in wind speed between nine (9) feet and thirty (30) feet would be negligible.

In short, the County used the most reliable and extensive site specific wind data available consistent with federal requirements. Nothing in the material provided by Mr. Griffin or Mr. McGowan establish that the wind information gathered at MCAS El Toro is incorrect or inaccurate. Based on the expertise of the County and its consultants, in addition to calling upon the expertise of others, including the FAA and the NCDC, the County has determined that the wind data used in connection with FEIR 573 complies fully with the recommended standards and practices of the FAA and the airport planning profession.

### **III. FEDERAL AVIATION AIRSPACE DETERMINATION**

On Tuesday, October 9, 2001, the United States Department of Transportation Federal Aviation Administration Western-Pacific Region released its Airspace Determination for the proposed civil aviation reuse of Marine Corps Air Station El Toro, Orange County, California dated August 29, 2001 (Airspace Determination). This Airspace Determination has been carefully reviewed by County staff as well as experts in the field of airspace safety and efficiency including, but not limited to, Mr. Steve Allison and Mr. Doug Sachman of P& D Consultants. Based upon this analysis, this memorandum provides a discussion of FAA's the analysis and conclusions provided in this recently released Airspace Determination.

#### **A. FAA GUIDANCE**

The FAA Airspace Determination provides the following important guidance with respect to the context within which the Determination should be read:

“The FAA has a statutory responsibility to ensure that the proposed civilian aviation reuse would be conducted in a safe and efficient manner. FAA reviews the airport design and runway configuration with respect to its safety, efficiency, and utility within the national airspace system. FAA has airport design standards that airport sponsors must meet to qualify for financial assistance. *The FAA, however, does not dictate to an airport sponsor how an airport is to be designed and operated within acceptable parameters. Decisions regarding the establishment and development of an airport are the responsibilities of state and local governments (i.e., Orange County) acting as the potential airport owners and operators of the facility.*” Emphasis added.

Within these parameters, the FAA’s process for evaluating the proposed ASMP and ALP for a civilian airport at MCAS El Toro involved “. . . first, determining if the proposed civilian airport itself can be accomplished in a safe manner by civilian aircraft operators. This involves evaluating the various features of existing and proposed facilities, such as length and width of the runways, heading of the runways, number of runways, runway separation, the parallel and connecting taxiway system, proposed navigation aides, etc. and other pertinent features such as off-airport obstructions to air navigation.” A discussion of FAA’s conclusions regarding each of these important safety considerations is provided below. In summary, FAA has concluded that each of the major safety attacks that have been made over the past several years regarding the proposed ASMP and ALP are not supportable and specifically concludes that “the reuse of the former MCAS El Toro as proposed by the LRA can be conducted in a safe manner.”

After the FAA has concluded that the facility can be used safely, the FAA evaluates effects that the existing and proposed facility will have on the efficiency of the local airspace system surrounding the airport and the national Airspace System in general. A discussion of FAA’s conclusions regarding the efficiency issues is provided below. It is important to emphasize, however that FAA’s determination regarding airspace efficiency issues is limited to the northbound departures as follows: “. . . FAA has determined that the limited northbound departures from MCAS El Toro are not the most efficient use of airspace theoretically possible.” In addition, it is important to emphasize that the FAA has committed to “. . . continue to take the appropriate steps to ensure that *any* approach and departure procedures developed for the proposed reuse of MCAS El Toro . . . do not unnecessarily degrade the efficiency of the National Airspace System.” In addition, the FAA’s Airspace Determination does not disapprove the proposed ASMP and ALP, indicate that the proposed approach and departure procedures are inadequate, or condition BRAC conveyance on modifications to the proposed procedures as provided in the ASMP and ALP.

## **B. AIRFIELD SAFETY**

### **1. Runway Gradient**

The FAA Determination analyzed the existing effective longitudinal gradient for the runways at former MCAS El Toro and determined that aircraft can safely operate using the existing runways. The FAA Determination indicates that the effect runway gradient (or slope of the runway) has on aircraft performance, when all other parameters are equal, is the amount of payload (passengers and/or cargo) that can be loaded on board the aircraft. The proposed ALP runway gradients would meet FAA design standards. In addition, consistent with the ASMP, there would be no need for aircraft to depart at less than optimal or maximum gross takeoff weight due to payload restrictions on Runways 8R/26L and 8L/26R. Aircraft that would have payload limitations associated with Runways 8 can depart on Runways 35/17, which would not have the limitations associated with Runways 8. Therefore, Runway 8 would not affect the capability of an airline to provide the desired air service and to provide it in an economically viable manner. The analysis of allowable takeoff weights in the ASMP is based upon data provided by Jeppesen-Sanderson in accordance with FAR Part 121. This information was shared with the air carriers during the ASMP and ALP planning processes and no concern was voiced concerning the data.

### **2. Runway Configuration**

In connection with the Airspace Determination, the FAA considered the basic configuration of the proposed airport and has concluded “. . . that there is no inherent design flaw in the crossing runway pattern at the former MCAS El Toro.” As indicated by FAA, the airfield configuration at MCAS El Toro is similar to that provided at San Francisco International Airport, which has been operated safely for many years. According the FAA Determination, “[i]ntersecting runways are also common at many other airports in Southern California and are not, in and of themselves, the primary contribution to runway incursions or other safety problems.” Further, “[s]ince the proposed civilian airport at MCAS El Toro would have an Airport Traffic Control Tower, the FAA will exercise positive ground and air traffic control to ensure the safety of aircraft operations with this airfield configuration.”

### **3. Separation Distance Between Runway Center lines**

Another safety factor that the FAA considered during the evaluation of the ASMP and ALP for former MCAS El Toro was the separation distance between each pair of runway center lines. The existing runway centerline spacing between each pair of runways is 500 feet. FAA’s minimum standard for runway centerline spacing for simultaneous VFR operations for large aircraft is 700 feet. Although the existing runway center lines are 500 feet, which is less than the FAA standard for simultaneous VFR operations, only one runway in each pair would be operational until a new parallel runway is constructed with a centerline separation

that meets FAA standards for simultaneous VFR operations. Essentially then, consistent with the proposed ASMP, only one north-south runway would be operational until Phase 2 of project implementation, when a new north-south runway would provide 800 feet of separation and only one east-west runway would be operational until Phase 4 of project implementation, when a new east-west runway would provide 700 feet of separation.

#### **4. *Instrument Approach and Departure Procedures***

The FAA took into consideration the flight procedures requested by the LRA and included in the Final EIR 573 during preparation of the procedures used for purposes of the airspace safety determination. As indicated in the proposed CEQA Findings, Facts in Support of Findings and Statement of Overriding Considerations for Final EIR 573 previously provided to the Board, Board approval of the Proposed Project will incorporate into the project a preferential runway use program (“PRUP”) based upon wind and operational criteria specified in the adopted ASMP and related technical reports. *See*, Mitigation Measure N-10. This mitigation measure and its incorporation as an element of, and prerequisite to, the construction and operation of the adopted ASMP project for El Toro (OCX), is essential to the development and operation of OCX as a facility which is environmentally acceptable to the Board of Supervisors and the Orange County public. The Board declared in Resolution LRA 96-02 (December 1996) that it would not allow or approve any airport project at El Toro which would permit aircraft departures on Runways 25(26). That continues to be County policy, and that limitation is assumed to be implemented through Mitigation Measure N-10.

The Board further declared, and the ASMP and Final EIR 573 reconfirm, that an important feature of any commercial airport at El Toro is the opportunity to take advantage of the corridors at El Toro historically protected against the development of incompatible land uses. In order to accomplish these objectives, the Proposed Project contemplates that aircraft arrivals to OCX will occur preferentially from the south to the north on the Runway 34(35) complex; and that departures will occur preferentially to the east on Runway 7 (8) and, when aircraft loads and operational parameters require, to the north on Runways 34 (35). Only infrequently, and only when specific and specified wind and meteorological conditions require, (as described in the ASMP and EIR 573), would arrivals and departures occur on Runways 16 (17), or arrivals occur on Runways 7 (8); and no departures would ever be permitted on Runways 25 (26). The PRUP would allow the adopted project to be implemented in a manner which will result in zero residential homes and public schools being located inside the 65 dB CNEL contour of the proposed civilian airport.

According to the Airspace Determination, in January 2001, the FAA performed flight inspections of each of the preliminary procedures to provide real-time data to ensure that the aircraft operations using the facility can be conducted in a safe manner as proposed by the County. According to the FAA Determination, “[t]he result of the flight inspections revealed that the procedures were safe to use during the day and night.” Therefore,

the FAA concluded that the proposed operation of aircraft at the former MCAS El Toro can be conducted in a safe manner.

## **5. *Loma Ridge Air Force Accident***

The FAA report discusses briefly the United States Air Force accident that occurred on Loma Ridge on June 25, 1965. The complete accident report for the crash of the Air Force C-135A military transport plane on Loma Ridge on June 25, 1965, was analyzed during the preparation of EIR 573 in order to identify the reasons for the accident. The accident report indicates that the aircraft departed on Runway 34 (to the north) and was operating normally prior to the crash and that the pilot of the aircraft failed to execute a left-turn departure procedure which was issued to him by air traffic control. At that time, there was no straight out departure procedure for takeoffs on Runway 35 at MCAS El Toro, which was the departure path followed by the aircraft. The military procedure for departures to the north was to turn left two nautical miles after departing Runway 34. Therefore, it appears that the primary cause of the crash was pilot error. No physical features of the airport or its relationship with surrounding terrain were identified as a cause of the accident.

### **C. AIRSPACE EFFICIENCY**

The second major part of FAA's analysis consisted of determining if the proposed ASMP and ALP would result in the efficient use of navigable airspace. The analysis considered the potential impact on air traffic of the proposed civilian airport at MCAS El Toro as a public use airport. A discussion of the FAA's analysis is provided below. In general, however, it is important to emphasize, as FAA has recognized, MCAS El Toro is located in a very complex and dynamic airspace structure. The analysis of regional airspace considerations provided in the ASMP and EIR 573 not only recognized this complex structure, but also recognized that management of potential airspace interactions may necessitate changes in the regional airspace structure and procedures. This is logical given the significant new capacity that would be added to an already complex airspace structure with implementation of a new commercial airport at MCAS El Toro. This would be expected for any similar project in any major metropolitan area

#### **1. *Proposed Departures on Runway 8 (to the east)***

FAA has determined that the proposed departures on Runway 8 (to the east) would, in general, not closely interact with other traffic managed by the FAA's Southern California Terminal Radar Control (SCT) facility, located in San Diego, California. This means that aircraft departing on Runway 8 would be blended into a stream with aircraft that depart from other airports in the area such as Los Angeles International, John Wayne Airport, Orange County, and Long Beach.

FAA has determined that proposed departures on Runway 17 would be in a similar direction to the Runway 19R departures at JWA. Therefore, these departures would need to be efficiently sequenced over exist fixes with departures from JWA. Both FAA and the ASMP recognize that it will not be possible to conduct simultaneous parallel departures using course divergence as referenced in FAA Order 7110.65. Also, it is important to recognize that Runway 17 is required for departures approximately 2 percent (2%) of the time.

With respect to Runway 35, the FAA discusses opposite direction operations. Opposite direction operations were not proposed in the ASMP. Runway 35 would be used for arrivals when Runways 8 and 35 are used for departures (98 percent of the time). Runway 35 was not proposed to be used for arrivals if Runway 17 is used for departures. In addition, the proposed use of Runway 35 for arrivals does not interact with other traffic managed by the TRACON and would be manageable by air traffic control.

### **III. AIRPORT SAFETY AND AIRSPACE INTERACTION ISSUES**

On October 9, 2001, the FAA released its “Airspace Determination” (AD) and review of the safety of the County’s proposed development and operation of a commercial airport at El Toro based upon the County’s Airport System Master Plan (ASMP) and the accompanying Airport Layout Plan (ALP) provided to FAA more than two years ago. In fact, the AD is the product of a process begun by FAA in the summer of 1999 to review claims made by airport opponents that the proposed airport at El Toro would be “unsafe” for a variety of reasons.

As a result of the release of FAA’s AD for El Toro, the “debate” over the airport initiated by the project opponents has shifted ground substantially in the past few days. For years, ETRPA (and other project opponents) have been claiming that the County’s proposed airport at El Toro would be “unsafe” because of a variety of physical and operational conditions. The FAA AD literally repudiates and rejects each and every claim which ETRPA has been making to the public on this issue for many years. The FAA AD confirms - as the County has been saying for years - that the runway configuration, orientation, and gradients, as well as the County’s noise control operational program proposed for El Toro, all meet FAA safety standards and the airport, as proposed by the County, would be operated in a safe manner.

This confirmation of the safety of the County’s proposal for El Toro is a tremendous result for the County. It exposes the long-standing and persistent attacks by ETRPA on the “safety” of the County’s proposed ASMP (including broadly-mailed brochures by ETRPA, one of which was titled: *Flying in the Face of Safety - El Toro Airport: A Dangerous Plan*) for what it has always been: a manufactured public relations assault notable principally for its deliberate hysteria, and unsupported by anything other than a desire to distort any available facts (or a willingness to make them up, if necessary) in order to defeat County approval and adoption of the proposed ASMP.



Almost as if they had never told the public and the Board for years that El Toro was “unsafe,” airport opponents and attorneys for ETRPA now claim that the issue is all about “airspace efficiency,” not “safety,” and that information summarized in the FAA AD now requires EIR 573 to be substantially revised, recirculated for public comment, and reconsidered at some future, indeterminate, date before the Board can take action to certify EIR 573 as adequate under CEQA and approve the ASMP. This is, of course, simply part of an ongoing strategy by ETRPA to delay action by the County and the Board on a project which they oppose, regardless of the facts and despite the undeniable need for an El Toro airport in Orange County.

The most recent expression of this sudden shift in strategy is reflected in a letter dated October 15, 2001, from Mr. Richard Jacobs to the Board and the LRA Executive Director. Mr. Jacobs is the attorney who represented ETRPA in its litigation against the County challenging EIR 563 and who has occasionally communicated with the County on ETRPA’s behalf on EIR 573 related issues. ETRPA’s attorney’s letter of October 12, 2001, was delivered to the Board offices and the LRA office this morning, Monday, October 15, 2001. Although dated October 15, the letter was, apparently, sent by Federal Express on Friday, October 12, but copies were not provided to either the Board or the LRA office on Friday by fax or other means.

In addition, as this memorandum was being prepared, Mr. Jacobs delivered a second letter dated October 15, 2001, enclosing what is, supposedly, “additional information” from the FAA on these issues, apparently provided through Congressman Cox’ office. This “information” appears to be in the form of slides typically used to accompany an oral presentation. It has never been delivered to the County by FAA, officially or otherwise, and, in fact, the FAA Regional Administrator confirmed on Friday that no modifications or supplemental reports to the AD are being prepared or are anticipated by FAA. The source, purpose or methodology of this “additional information” remains unknown to us.

As part of this revised strategy, ETRPA, through Mr. Jacobs, now claims that this is all significant new information which, under CEQA, requires that the County conduct a wholesale revision of EIR 573 and major portions of the ASMP (including the economic and financial analyses), recirculate the EIR for additional public review and comment, and consider the “new” information and comments *before* certifying EIR 573 as adequate and complete under CEQA, and before adopting the ASMP and Base Transition Plan (BTP), which are the “project” for which EIR 573 was prepared. Obviously, ETRPA’s goals are to delay consideration and adoption of the project as long as possible or, if that should prove to be impossible, to create a record which will support their anticipated litigation challenging EIR 573.

However, we believe that this assault on the County’s process and studies is unwarranted and based upon either a misreading, or a deliberate mischaracterization, of the FAA’s airspace determination for a number of reasons: First, the only official document of the various materials which have been circulating this past week is the actual airspace determination itself, and that document does not support the characterization that ETRPA, Mr. Jacobs and other project

opponents have been giving to it. Second, the only thinly identified “secondary” materials, including the Mitre “report” and two sets of presentation slides remain shrouded in substantial mystery, not only as to who prepared them, but the assumptions and methodology used in whatever study effort lies underneath the slides. We have had our aviation consultants review these materials, and it seems clear that any “analysis” performed in connection with preparation of these materials reflects a crude methodology much less precise and detailed than the studies done by the County, and that any such analysis appears to have been based upon incorrect information or simplifying assumptions regarding the relevant operational environment. We continue to believe, based upon all of this “information,” that there is, in fact, no basis reflected in the materials to question the analysis and conclusions regarding airspace interactions and operational “delays” performed and reached by P&D, and which are reflected in the ASMP, ASMP Technical Report 10, and EIR 573.

ETRPA attacks the ASMP and EIR 573 on these issues on a number of fronts, and by making a number of different claims based upon what appears to us to be substantially misleading interpretations and characterizations of the materials. Some of the more significant points regarding the AD and related materials which is either overlooked or mischaracterized by ETRPA, include the following:

1. The methodology employed in making the calculations which appear in the various secondary materials is not disclosed either in the AD or in the Mitre “report” which is “Attachment 1” to the AD. However, the materials themselves do disclose that the analysis was performed on a very limited basis using a methodology substantially less sophisticated than the FAA’s own SIMMOD computer model or other available airspace interaction models. Indeed, the secondary materials disclaim any attempt to calculate “average delay” - which is the industry standard for reporting delay consequences based upon airfield and airspace modeling.

The County performed a detailed SIMMOD analysis of both airfield operations and airspace effects (Technical Report 10). Attachment 1 to the AD claims, incorrectly, that the County’s SIMMOD analysis was limited to airfield effects, and implies that the County did not analyze airspace effects of the proposed El Toro operations. This is not only incorrect, but the County’s SIMMOD modeling is substantially more detailed and sophisticated than the limited non-quantitative analysis prepared by Mitre Corp focusing on single airport interactions. In fact, the single most significant conclusion we have reached regarding some of the secondary materials circulated with or about the FAA AD is that whoever prepared these materials clearly has not carefully reviewed the information developed by the County and provided to FAA regarding proposed operations and airspace interaction issues north of El Toro.

These factors, combined with ETRPA's willingness to engage in hyperbole, results in ETRPA making the claim in Mr. Jacobs first letter of October 15 that the "report" prepared by Mitre "concluded that normal delays will be 'between 8 and 60 minutes' per flight." (Jacobs letter, p.3). In fact, even Mitre makes no such claim. Mitre's conclusion, which itself is, the County believes, materially inaccurate, is that *individual* flights performing a northbound departure out of El Toro might, under some circumstances, experience a delay between 8 minutes and one hour. Even Mitre does not claim (and indeed, since it did not perform the analysis, it would have no credible basis for doing so) that the "average" or, as Mr. Jacobs characterizes it, "normal" delay "per flight" from El Toro would result in any delay in the range extrapolated by ETRPA.

2. The FAA AD concludes that the ***large majority of arrivals and departures*** at El Toro would have ***no significant effect on existing airspace activity*** in the basin. The County's operational proposal for El Toro contemplates that nearly 96% of the arrivals to the airport would be from the south on Runways 35. As the FAA AD itself concludes that these arrivals, *48% of the total operations*, do not closely interact with other ... TRACON managed traffic flows ...." The only exception is the need to "protect" the missed-approach procedure for approaches to Runway 35 which might require coordination with JWA arrival traffic, *but only during IFR conditions* (FAA AD, p.17). IFR conditions exist at El Toro only 8 percent (8%) of the time based upon historical records.

Similarly, FAA concluded that the County proposed departures to the east, accounting for more than 62% of all departures (*31% of all operations*) "would not closely interact with other traffic ..." (FAA AD, p. 15).

In fact, it is only the proposed north-bound departures, accounting for less than 36% of total departures and less than 18% of total operations, which raise any airspace management issues for the FAA. Even those limited number of operations seem to be assigned an effect on southern California airspace which is being seriously overstated by airport opponents and which even is being overstated by Mitre's limited "non-quantitative" analysis. The lack of any meaningful discussion in the Mitre "report" ("Attachment 1" to the FAA AD) of the methodology employed by Mitre makes it difficult to respond in detail on this issue, but the other secondary materials make clear that Mitre (or whoever prepared the slides) appears to be using inflated numbers and unmodeled "worst case" assumptions regarding traffic flow both out of El Toro and into Long Beach and John

Wayne Airport. In fact, JWA *currently* has less than 70 air carrier arrivals daily from the east, and Long Beach probably less than 10 air carrier arrivals daily from the east, or an average of approximately 5 such operations during the operational hours for landings at those two airports (7:00 a.m. to 11:00 p.m.). As noted below, Mitre also overlooked the fact that the JWA level of air carrier activity *would decrease significantly* if El Toro is built and operated, making the effects of interactions from north-bound El Toro departures with JWA arrivals from the east on existing airways even less significant in any of the four future years analyzed for the proposed El Toro project.

The ASMP, and particularly ASMP Technical Report 10 make clear that there would be some interaction between north-bound departures out of El Toro and arrivals to JWA from the east on existing flyways during *some* (but certainly not all) operational hours of the day, and that some delay effects could be anticipated as a result. Those effects have been modeled at a more refined and sophisticated level than any modeling performed by Mitre, and they have been factored into all of the relevant environmental analyses in EIR 573. There is nothing in the FAA's AD which raises any substantial question regarding the modeling conclusions reached by the County in its ASMP and EIR 573 analysis.

Even so, all of this assumes that existing airspace patterns and practices are used in the southern California basin indefinitely. The County understands that airspace review and modifications are made by FAA on a continuing basis, and as the County has previously offered, it would be more than happy to continue to work with FAA to address constructively any airspace issues as El Toro is brought into the national airport system.

3. The FAA's airspace determination, summarizing the Mitre "report," says that an "important" fact it considered in evaluating the airspace effects of El Toro was that JWA would continue to serve general aviation and commercial flights "*at its current activity level*" (p.14). This is incorrect. In fact, all of the FAA approved forecasts performed for the project and EIR indicate that when El Toro commences operations, the commercial activity level at JWA will drop by nearly 50%, and, even by 2020, would return only to 5.4 MAP, well below JWA's recent peak activity levels (approximately 7.8 MAP) or JWA's current 8.4 MAP authorized service level. For this reason, as well as others noted here, the Mitre "report" substantially overstates the airspace interactions which would result from the limited number of northbound departures at El Toro. Indeed, with the *actual* average air carrier arrival activity levels for LGB and JWA noted

above, an average of just over 3 arrivals per hour on the flyway from the east, there would obviously be enough time available to sequence in the forecast north-bound El Toro departures with even less delay than was forecast by the County's own modeling.

4. The study is not, in any respect, an attempt to provide a comparative analysis of future alternative basin airport development. In other words, if El Toro were not operated as a future commercial airport, would there be increased delay at other existing air carrier facilities in the basin? Obviously, airports such as LAX which already experience substantial operational and airspace delays would experience proportionately more if required to accommodate the passenger and cargo air traffic presently proposed for El Toro, in addition to the air service growth which will occur naturally at those airports, even if El Toro is built.
5. Mr. Jacobs letter devotes substantial resources to the argument that the FAA AD makes "absolutely clear that the use of Runway 25 for takeoffs is in fact reasonably foreseeable and will inevitably occur" (p. 2). To the contrary, the AD makes it "absolutely clear" that the opposite is true. FAA itself notes that the County does not intend for Runway 25 to be an operational runway, and for that reason did not request that FAA develop and publish the requisite departure procedure for that runway. As a result, FAA *did not* publish or prepare any such procedure, nor does its airspace analysis assume any such runway use. (Parenthetically, the suggestion that Runway 25 departures are "consistent" with traffic flows at surrounding airports is obviously not true. Runway 25 departures would be aimed directly at the JWA arrival stream and would undoubtedly require that a left turn or unusual climb rate be incorporated into the procedure to avoid that traffic.)

This is consistent with basic FAA and federal policy regarding the ultimate decision regarding the development of an operational pattern at an airport. As the FAA itself stated it on page 2 of the AD:

"The FAA, however, *does not dictate to an airport sponsor how an airport is to be designed and operated* within acceptable parameters. Decisions regarding the establishment and development of an airport are the responsibilities of state and local governments (*i.e.*, Orange County) acting as the potential airport owners and operators of the facility."

The FAA also acknowledges at page 8 of the AD that FAA's own adopted orders recognize that in making those decisions, optimum airspace

efficiency is not always the controlling factor, and that “noise abatement and other factors may require aircraft operations to be conducted on runways not directly aligned into the wind.” As the County has always said during this process, and as FAA separately acknowledges in the AD, the County has developed and proposes that El Toro operate in part in a manner which avoids unnecessarily imposing aircraft noise or other impacts on the surrounding community. By taking these people into consideration in the planning, the County has been willing to state that their interests must be balanced against those who would prefer to operate El Toro with optimal airspace efficiency as the only design parameter for the airport. That is the County’s choice, and FAA’s AD makes clear that FAA airspace management branch - which has no responsibility to protect the local population from the environmental effects of aircraft operations - does not get to make the final call on how the airport will be operated. The decision of FAA not to publish a Runway 25 departure procedure is itself an acknowledgment of the County’s prerogatives on this issue, and that FAA recognizes the importance of the County’s concerns and intends to cooperate.

6. Mr. Jacobs’ letter of October 15 makes the same argument regarding instrument approaches to Runway 8, and merits the same response. In addition, the County’s proposed operations pattern at El Toro contemplates that circling approaches to Runway 8 (always made under VFR conditions) would occur only .3% of the time (most of which is general aviation - only 24 air carrier arrivals *per year* would be affected). 99.7% of the arrivals would be either on Runway 35 or Runway 17. Even if some airlines decline to make any “circling approach” to any Runway at El Toro (and some airlines clearly would use the procedure on those rare occasions when winds dictate that procedure), this means only that the aircraft would divert to another airport or that the aircraft would circle until a Runway 35 or Runway 17 arrival was feasible. Three-tenths of one percent of the forecast traffic certainly does not justify creating an instrument approach to Runway 8, nor would such a procedure be consistent with the County’s noise control and environmental goals, policies and objectives. An instrument approach to Runway 8 is certainly not necessary for the airport at El Toro to operate in a reasonable, responsible and financially feasible manner.
7. As a result, Mr. Jacobs’ contention that the FAA AD calls into question both the County’s conclusions that El Toro would provide benefits by reducing congestion that otherwise would have to occur at other airports, and in existing and future airways in the southern California basin; and

that the County's calculations of "taxi time" for purposes of the analysis in EIR 573 are therefore erroneous, is simply not correct. Nothing in the AD or the secondary materials credibly questions the County's SIMMOD analysis. Indeed, the only thing that is clear is that Mitre misunderstood (and apparently did not attempt to gain a better understanding of) the scope of the County's analysis and modeling. Indeed, it is clear that both FAA and Mitre did not even perform a comparable detailed analysis, and the methodology apparently used by them provides an "apples-to-oranges" comparison, at best. Further, the methodology used by Mitre is not reasonably, scientifically or professionally capable of providing quantifiable information of system airspace effects, but focuses, instead, largely on a theoretical interaction of one theoretical flight under theoretical conditions with assumed airspace and airport activity which do not appear to match known values or activity levels.

8. The FAA AD incorrectly implies that in some cases, there may be less than full payload capabilities for some departures from El Toro, particularly on Runway 8. This is not only incorrect, but is directly contradicted by information and materials prepared and provided to the public and FAA as part of the County's planning process. The detailed analysis of this question by the County and its outside experts, including the Jeppesen Part 121 analysis, clearly indicates that all forecast aircraft operations at El Toro could operate at maximum gross take-off weights under the County's operating proposal. Indeed, a principal point of the planning was based upon the proposal that departures would be preferred on Runway 8, but in those cases where the length of Runway 8 *might* create a payload penalty for a particular flight, that flight would depart on Runway 35. Runway 35, as proposed in the ASMP, can accommodate a full departure payload for all existing and foreseeable aircraft types in all foreseeable markets.
9. There are a number of other materially misleading assertions and characterizations offered by Mr. Jacobs in his October 12 letter. Time prevents us from responding in as much detail as possible. However, briefly:
  - (a) Mr. Jacobs "Fifth" argument on page 7 of his letter is a clear misstatement of the County's position: The County has never contemplated simultaneous IFR operations at El Toro, but by separating the parallel runways to a 700 foot separation, as is contemplated by the ASMP, simultaneous VFR operations will be

possible and, within the meaning of the FAA's use of "simultaneous," they will sometimes occur.

- (b) Mr. Jacobs "Sixth" argument (p. 7) is similarly a straw man: the County has never proposed diverging departure paths from any of the runways, and the lack of diverging paths is fully factored into the County's ASMP and the analysis in EIR 573.
- (c) The "missed approach" separation required between JWA arrivals and arrivals at El Toro on Runway 35, as the FAA AD itself states, only applies during IFR conditions, approximately 8% of the operational year. For reasons similar to some discussed above, this would be an insignificant effect on JWA operations and is fully factored into the County's environmental analysis - to the extent the issue is even relevant to any environmental issue.

The County has clearly stated for a number of years that some airspace management will be required of FAA north of El Toro to accommodate a new commercial airport in the urban area of southern California: indeed, this would be a true statement regardless of where any such airport might be sited. ASMP Technical Report 10 acknowledged this fact and observed that some limited airspace revisions north of the airport (the basin is currently overdue, in any case, for a review and redesign of the airspace environment, which occurs periodically in any large metropolitan area), or FAA airspace adjustments or initiatives might be indicated, again, as they would be for virtually any newly sited airport in a busy airspace area such as southern California. But this did not mean when Technical Report 10 was prepared, and it does not mean now, that the County's proposed airport at El Toro is unacceptable to FAA, or that this is anything other than a typical airspace management issue commonly faced whenever new runway capacity is added in a large urban area such as southern California.

On behalf of ETRPA, Mr. Jacobs argues that "El Toro will be an inefficient airport, and passengers will not use it for that reason." Neither the FAA analysis nor the AD compels this conclusion. The County's analysis in EIR 573 is reasonable. The ASMP is both reasonable and feasible. As the FAA itself made clear in the AD, the County has substantial authority and control over the general operating patterns of the airport, and the FAA will support the County's proposal. There may be some FAA airspace personnel who may find a different way of operating El Toro to be more convenient for them, even though it would adversely impact many residents in Orange County, particularly the southern portion of the County. This may not be the primary concern of the Board. We believe the primary concern of the Board may be balancing the environmental interests of all the people of Orange County with the need to provide additional airport infrastructure for the citizens of our County.



Although the FAA AD indicates that OCX may be operated more efficiently in its interactions with the existing Southern California airspace system if, instead of operating in a predominantly south-to-north and east operational pattern, the airport were “turned around” and operated in a predominantly north-to-south manner, with some departures on Runway 25 (26). Regardless of whether or not this would be a more “efficient” operational pattern for OCX in terms of existing airspace configurations and usage, this would result in an operational situation at OCX which may be environmentally unacceptable to the Board and Orange County public.

Again, we hope the information contained in this memorandum is helpful to each of you tomorrow. Please let us know if you should have any questions.

cc: Dr. Michael Schumacher, Ph.D, CEO  
Ben De Mayo, County Counsel  
Darlene Bloom, Clerk of the Board