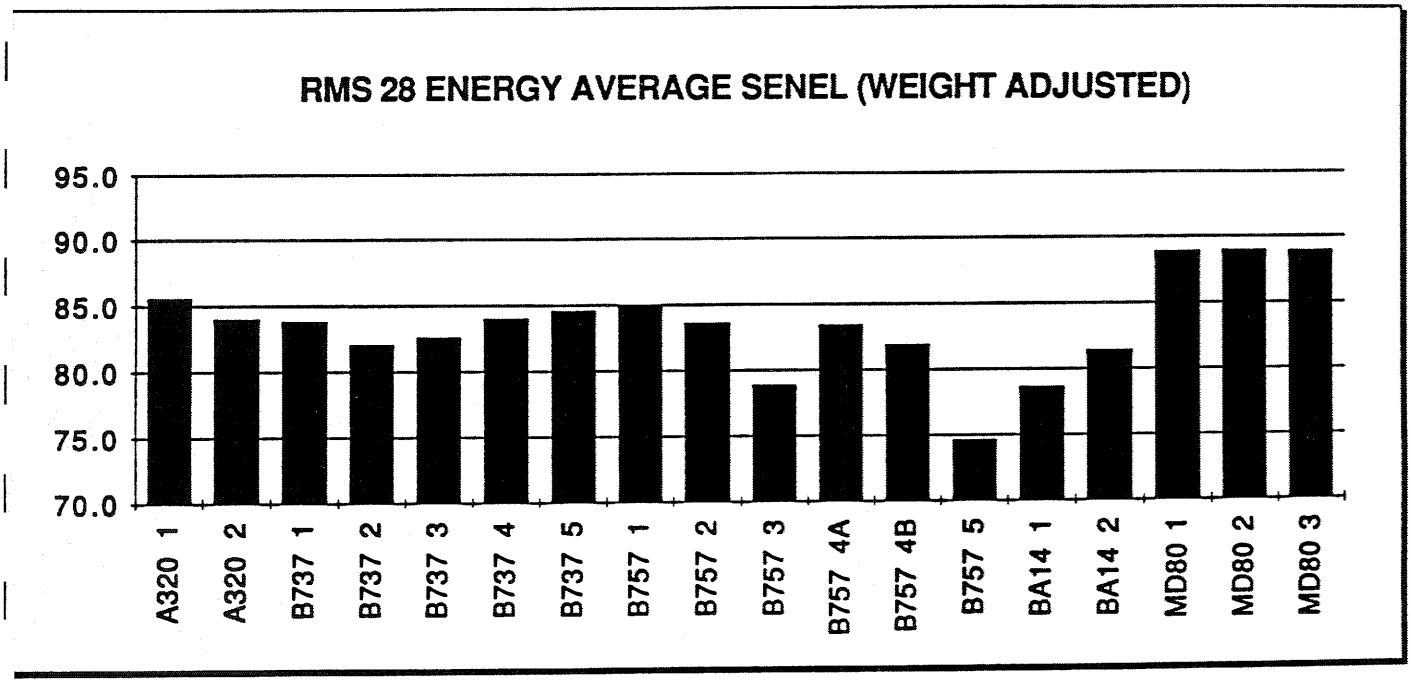
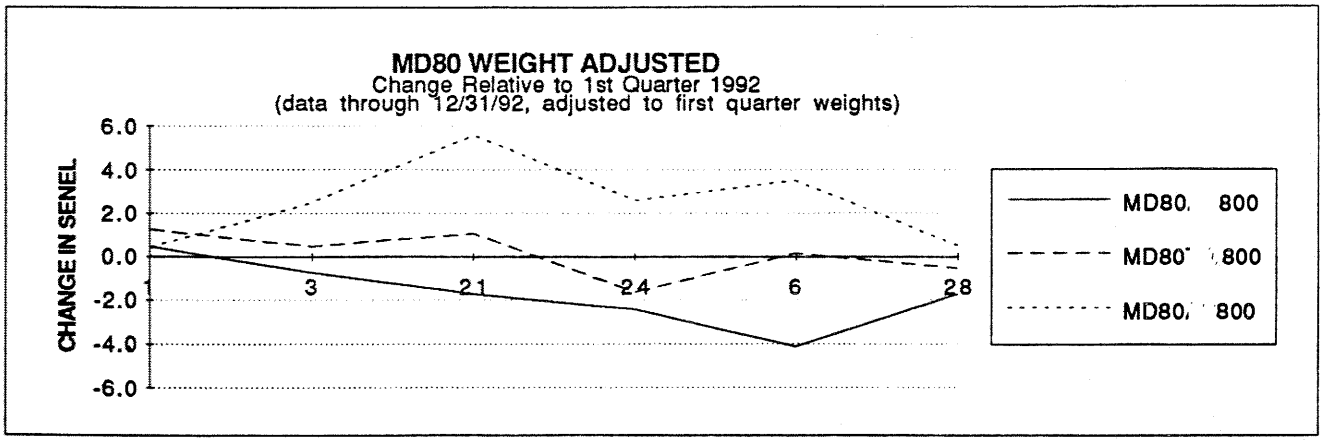
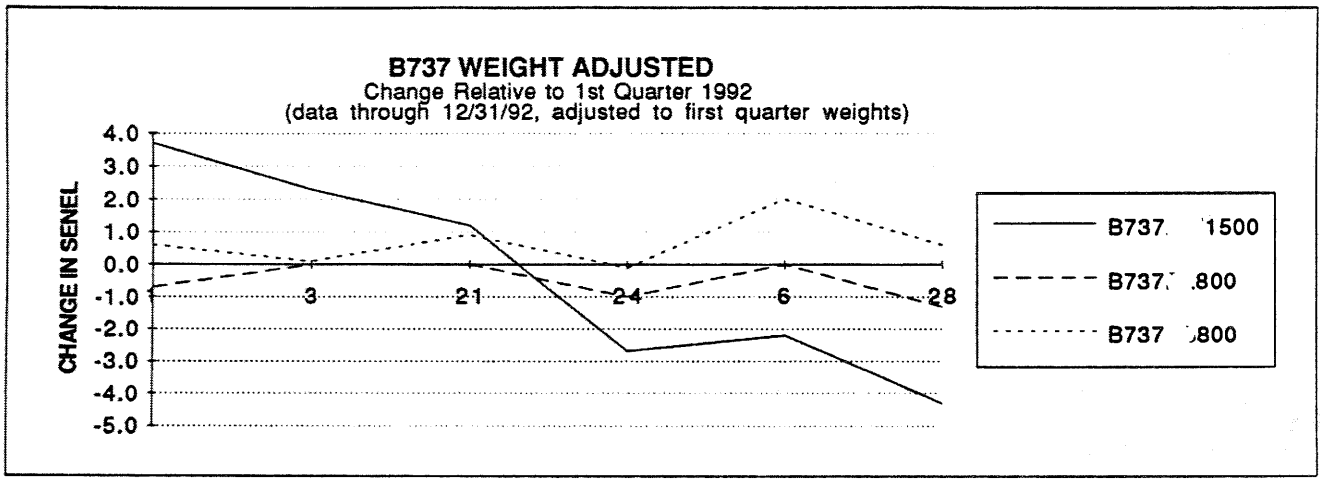


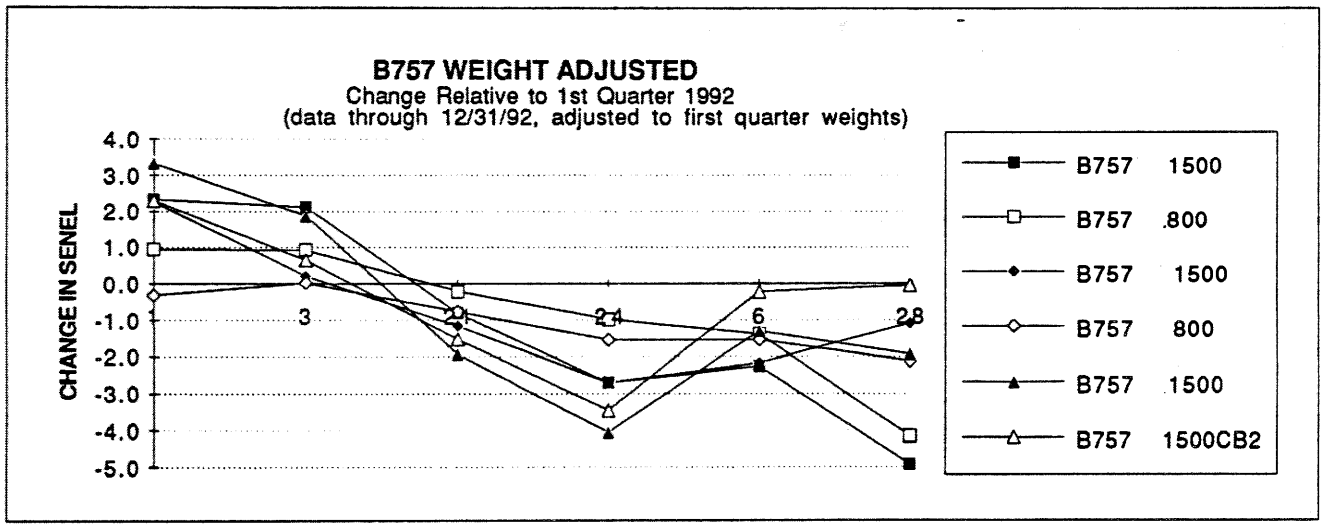
MESTRE GREVE ASSOCIATES

Exhibit 8-h

Normalized SENEL Third Quarter







NOTE: 757 data are based on about 30 flights for each procedure, a very small sample.

MESTRE GREVE ASSOCIATES

Exhibit 8i

Demo Data Compared to First Quarter Data at First Quarter Weights

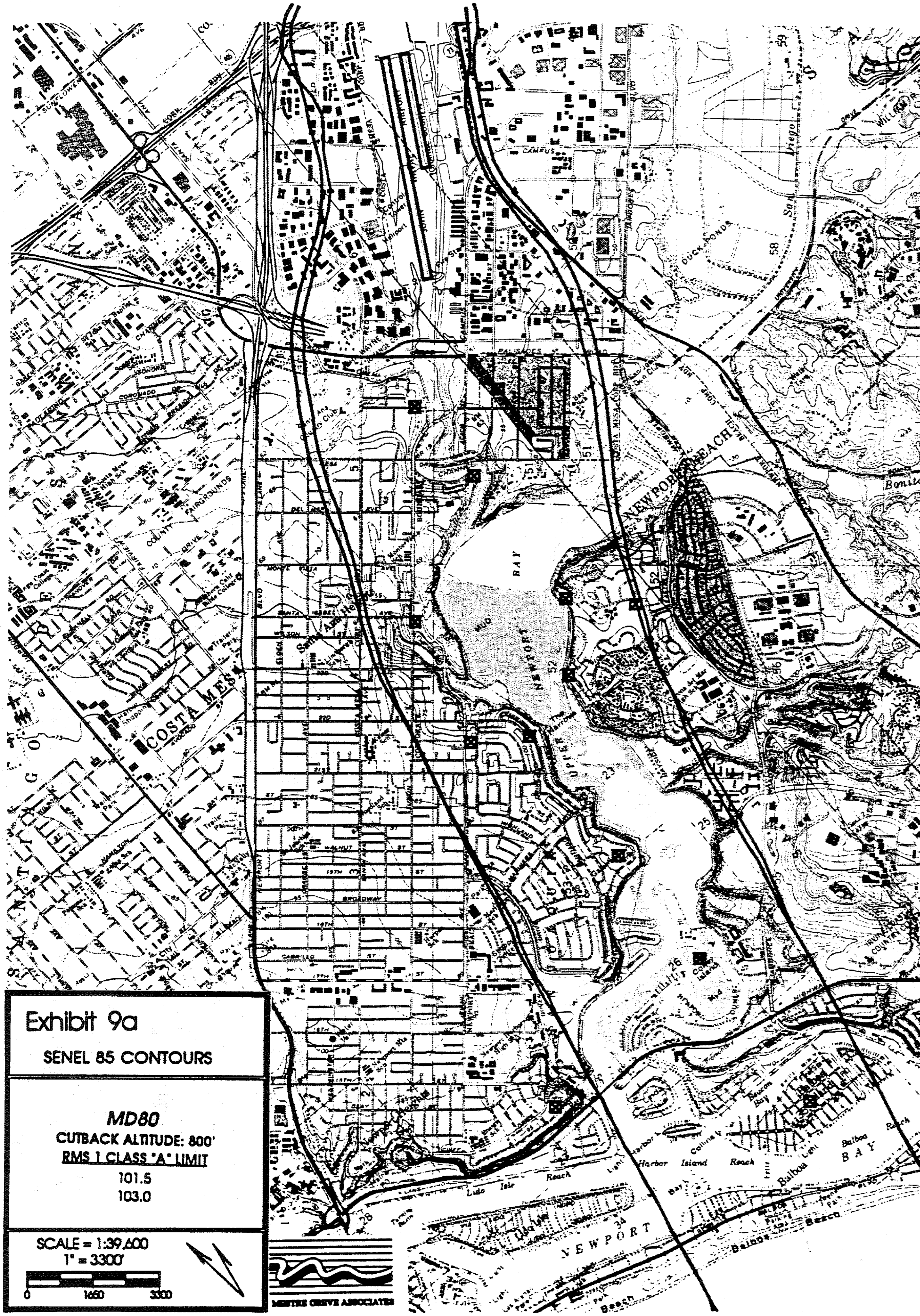


Exhibit 9a

SENEL 85 CONTOURS

MD80

CUTBACK ALTITUDE: 800'

RMS 1 CLASS 'A' LIMIT

101.5

103.0

SCALE = 1:39,600
1" = 3300'

0 1650 3300

MESTRE GREVE ASSOCIATES

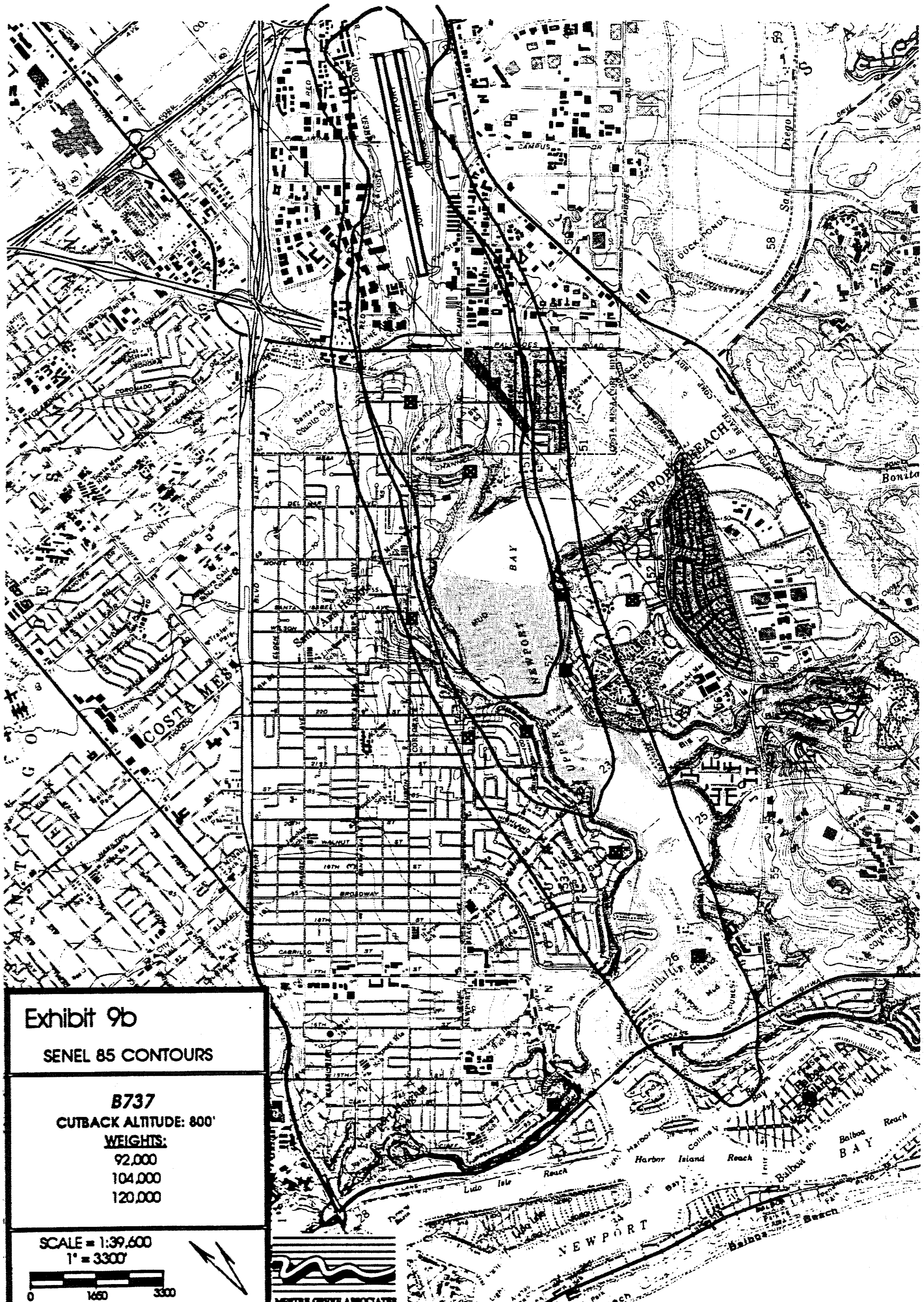


Exhibit 9b

SENEL 85 CONTOURS

B737

CUTBACK ALTITUDE: 800'

WEIGHTS:

92,000

104,000

120,000

SCALE = 1:39,600

1" = 3300'

0 1650 3300

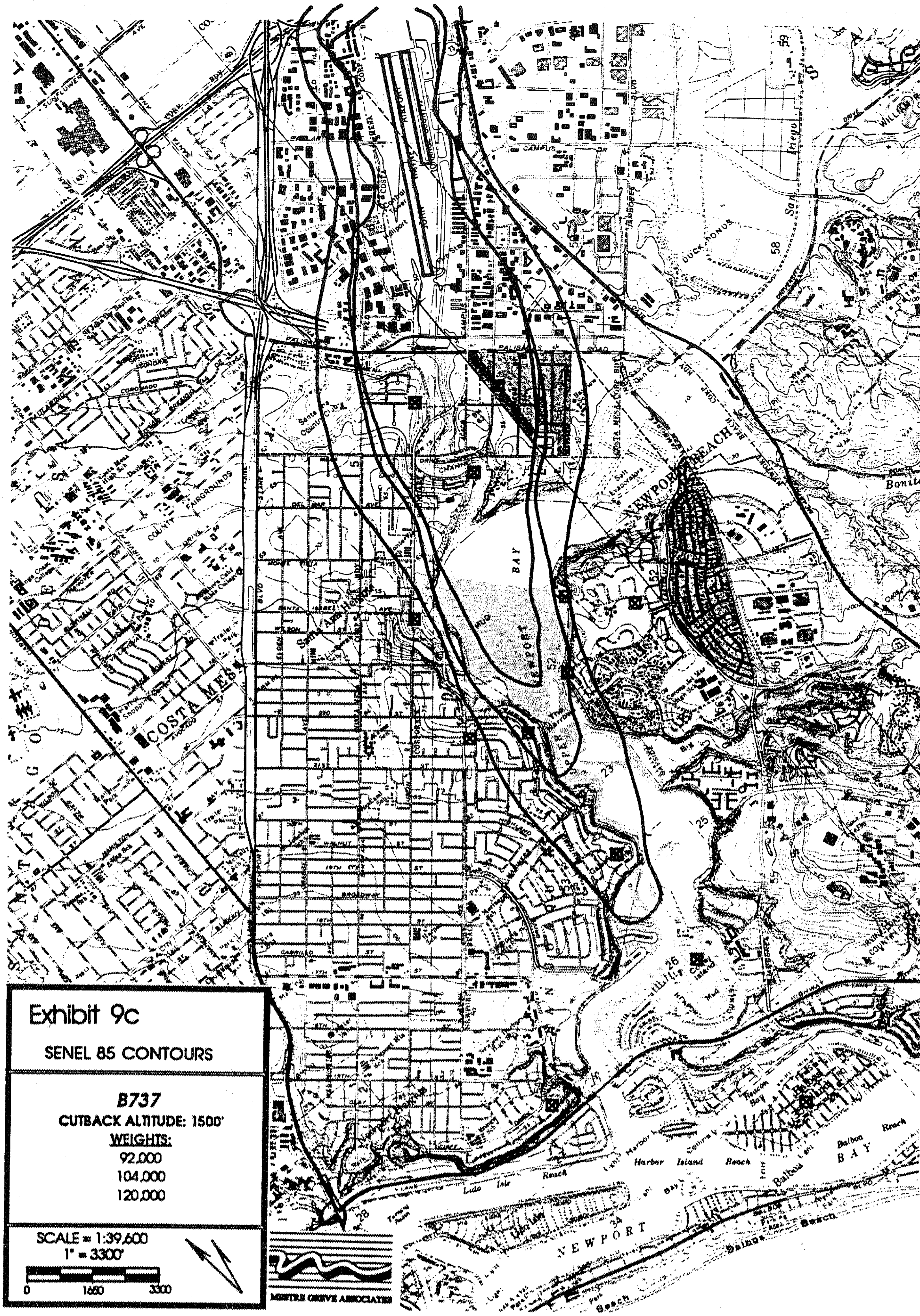


Exhibit 9c

SENEL 85 CONTOURS

B737

CUTBACK ALTITUDE: 1500'

WEIGHTS:

92,000
104,000
120,000

SCALE = 1:39,600
1" = 3300'

0 1650 3300

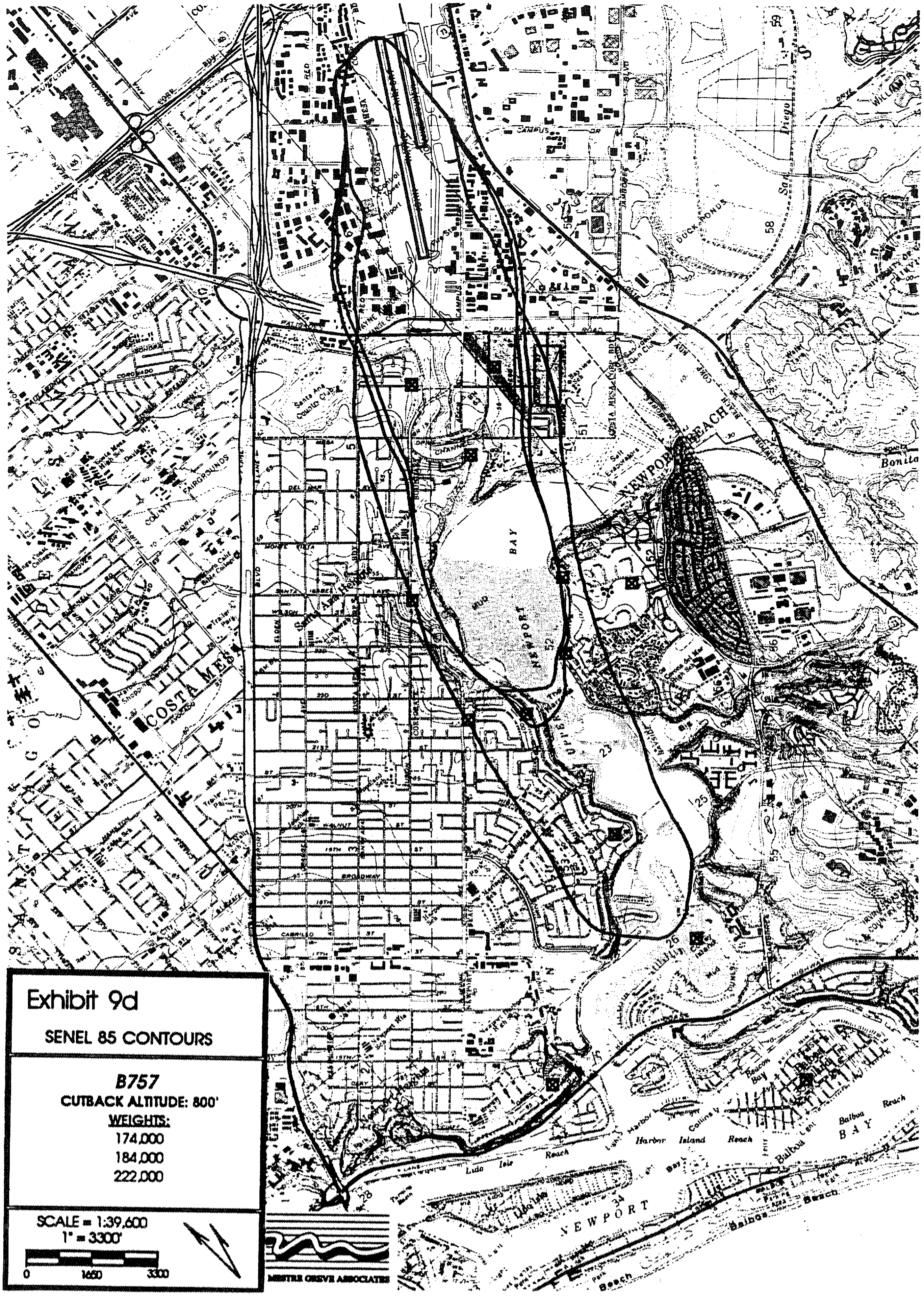


Exhibit 9d

SENEL 85 CONTOURS

B757

CUTBACK ALTITUDE: 800'

WEIGHTS:

174,000

184,000

222,000

SCALE = 1:39,600

1" = 3300'

0 1650 3300

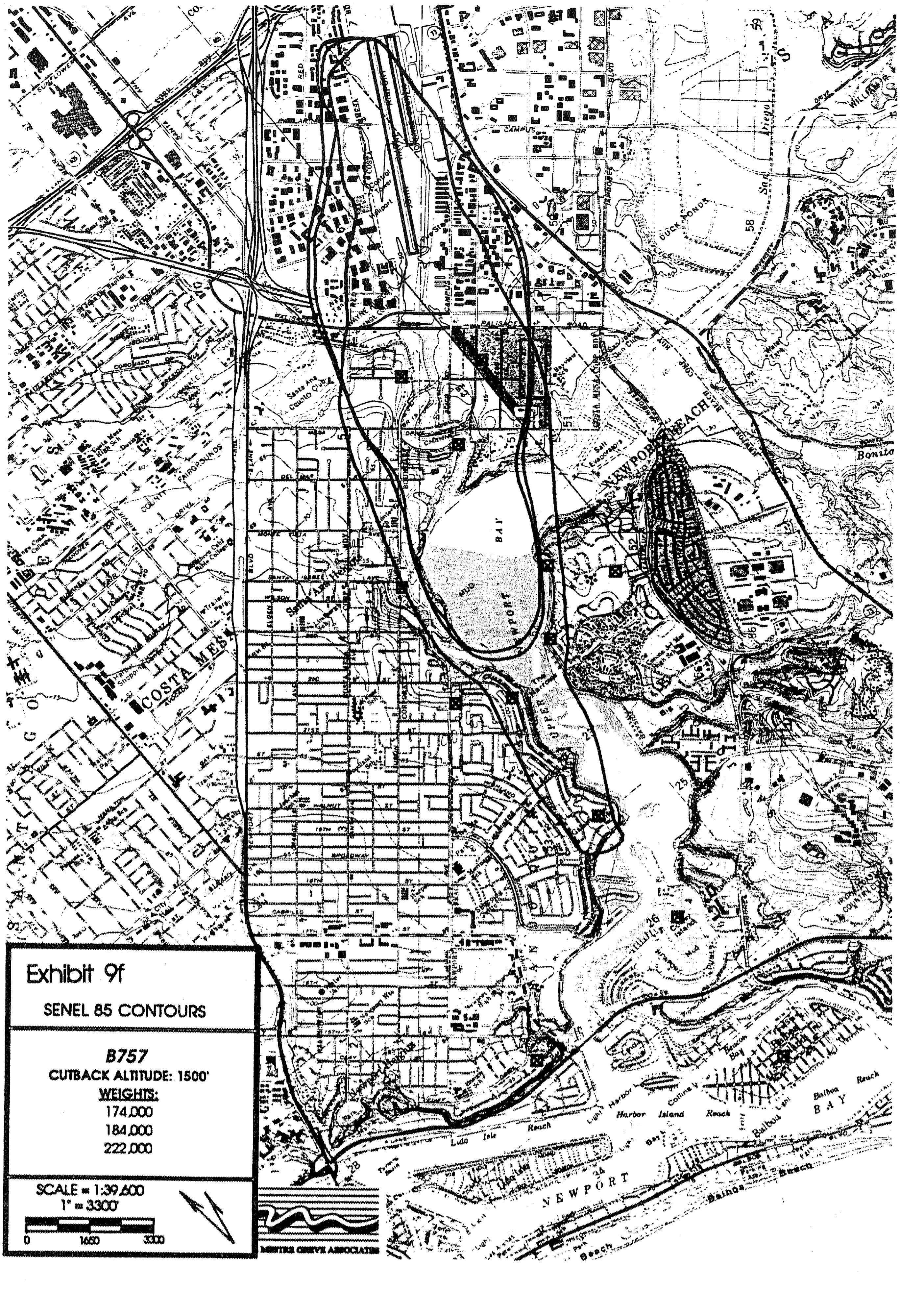


Exhibit 9f
SENEL 85 CONTOURS
B757
CUTBACK ALTITUDE: 1500'
WEIGHTS:
174,000
184,000
222,000
SCALE = 1:39,600
1" = 3300'
0
1650
3300
MESTRE GREVE ASSOCIATES
COSTA MESA
NEWPORT BEACH
NEWPORT
BAY
UPPER
CAMPUS
PALISADES
FAIRGROUNDS
DUCK PONDS
Lido Isle
Reach
Harbor Island
Balboa
BAY

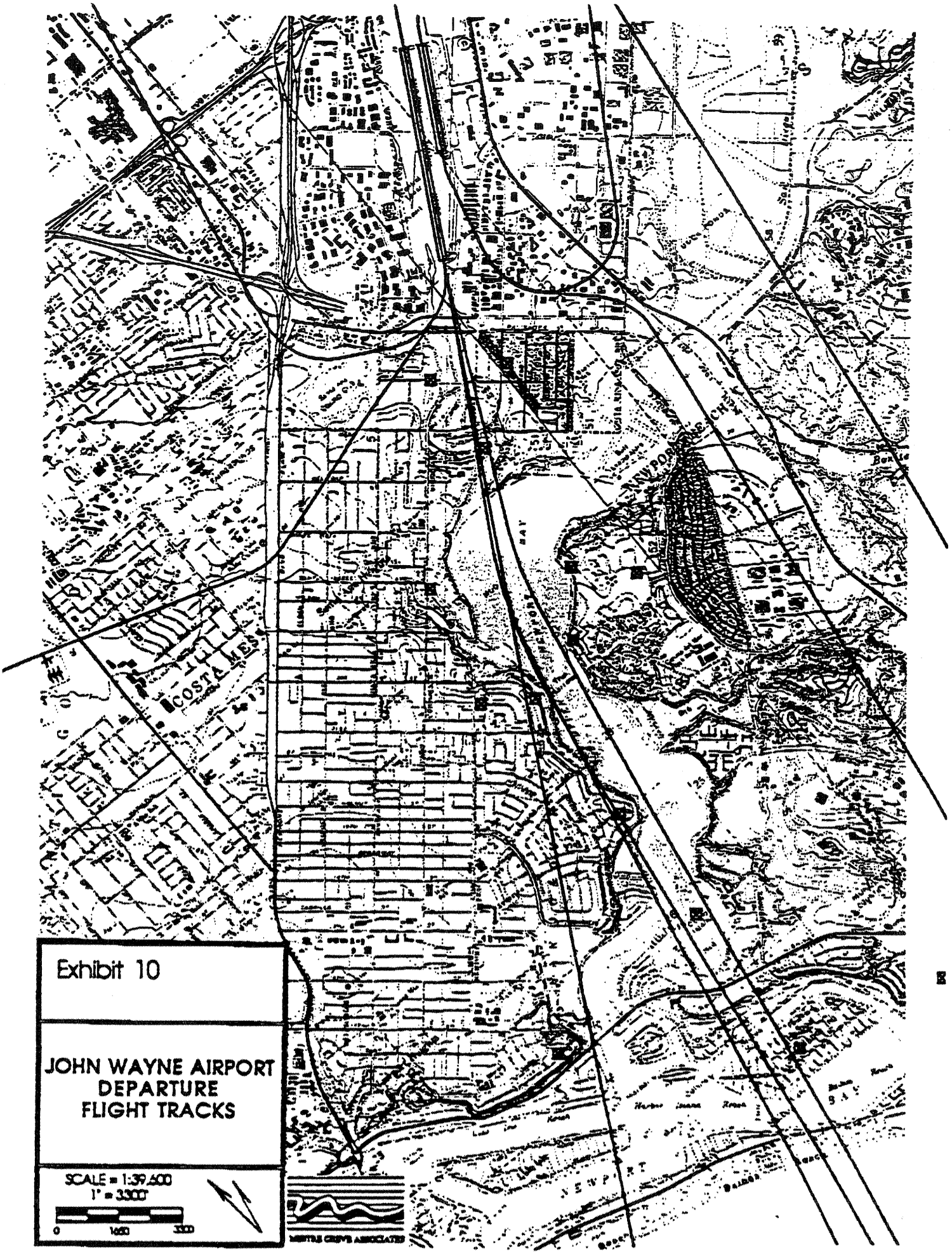


Exhibit 10

JOHN WAYNE AIRPORT
DEPARTURE
FLIGHT TRACKS

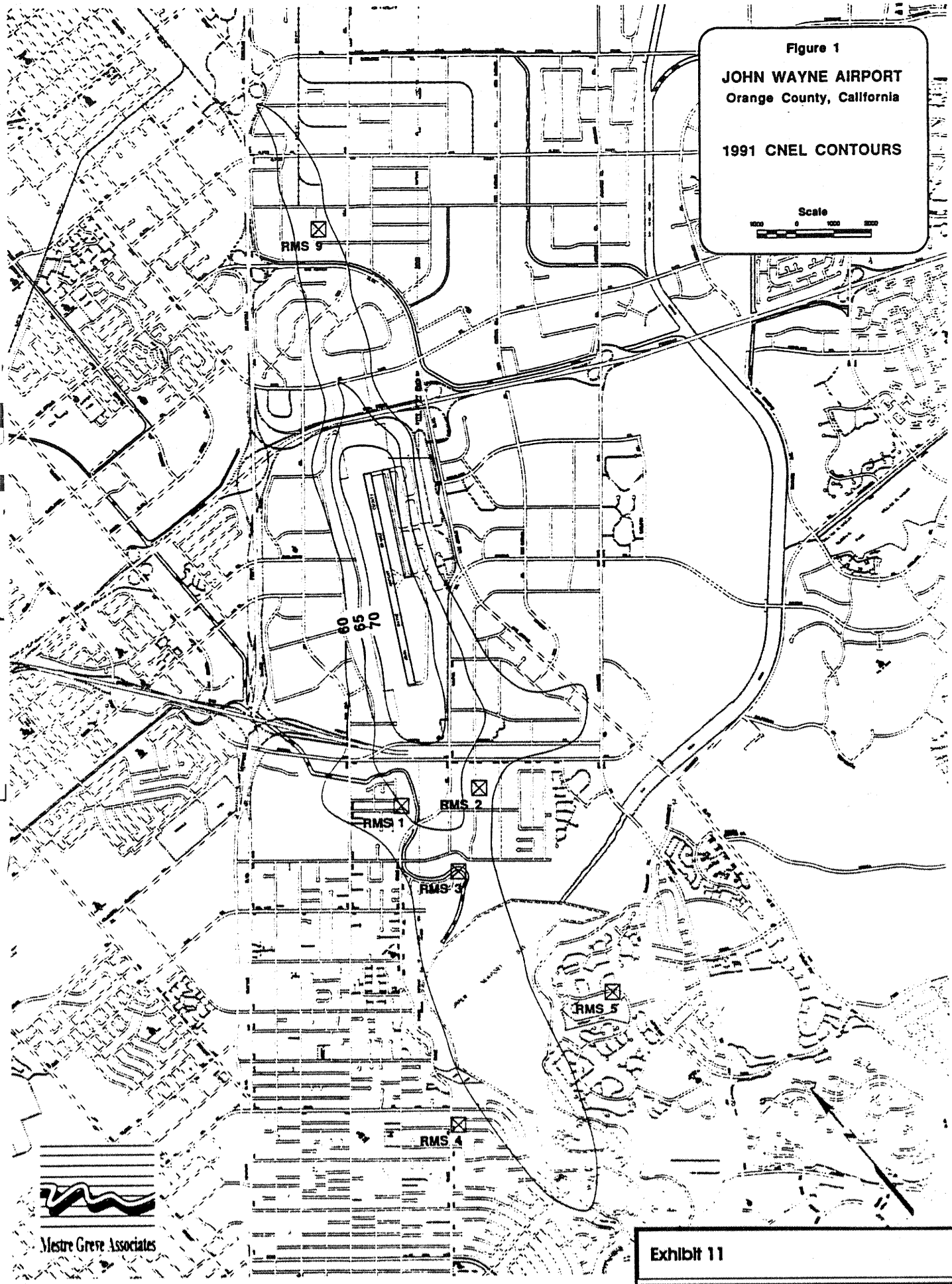
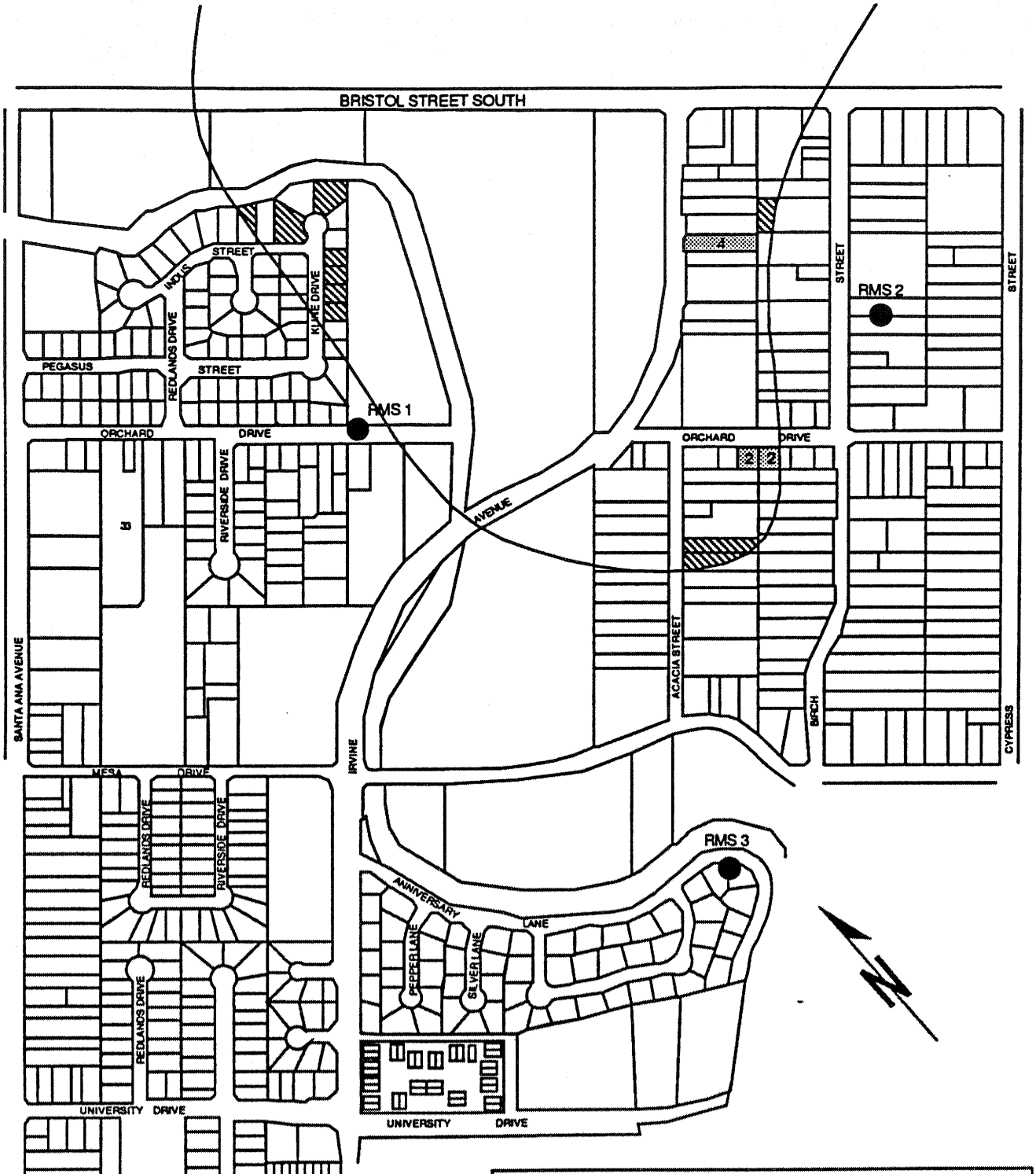


Exhibit 11

1991 Annual CNEL Noise Contours



LEGEND: Single Family Residential:
Multi-Family Residential: 2
(No. in bold is no. of D.U.)

Incompatible Land Use Area: 3.2 acres or 0.005 square miles
Number of Dwellings: 18 dwellings units
Number of People: 45 (based on 2.5 people per D.U.)

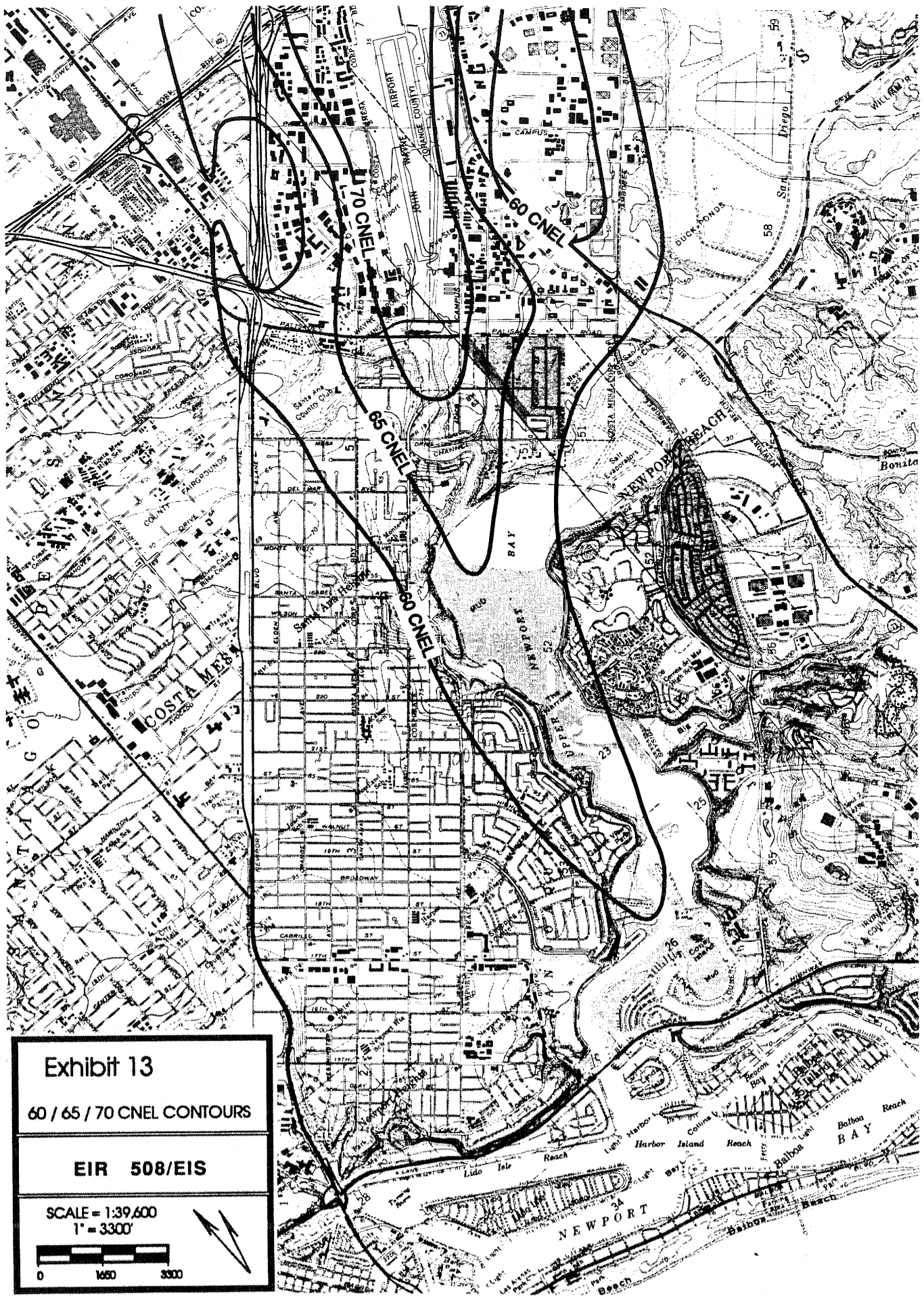
600
0 feet 500 1000

MESTRE GREVE ASSOCIATES

APRIL 1991 - MARCH 1992
65 CNEL IMPACT AREA

Exhibit 12

First Quarter 1992 Santa Ana Heights CNEL Noise Contours


70 CNEL
60 CNEL
65 CNEL
60 CNEL
AIRPORT
ORANGE COUNTY
COSTA MESA
NEWPORT BEACH
BAY
NEWPORT
Exhibit 13
60 / 65 / 70 CNEL CONTOURS
EIR 508/EIS
SCALE = 1:39,600
1" = 3300'
0
1650
3300

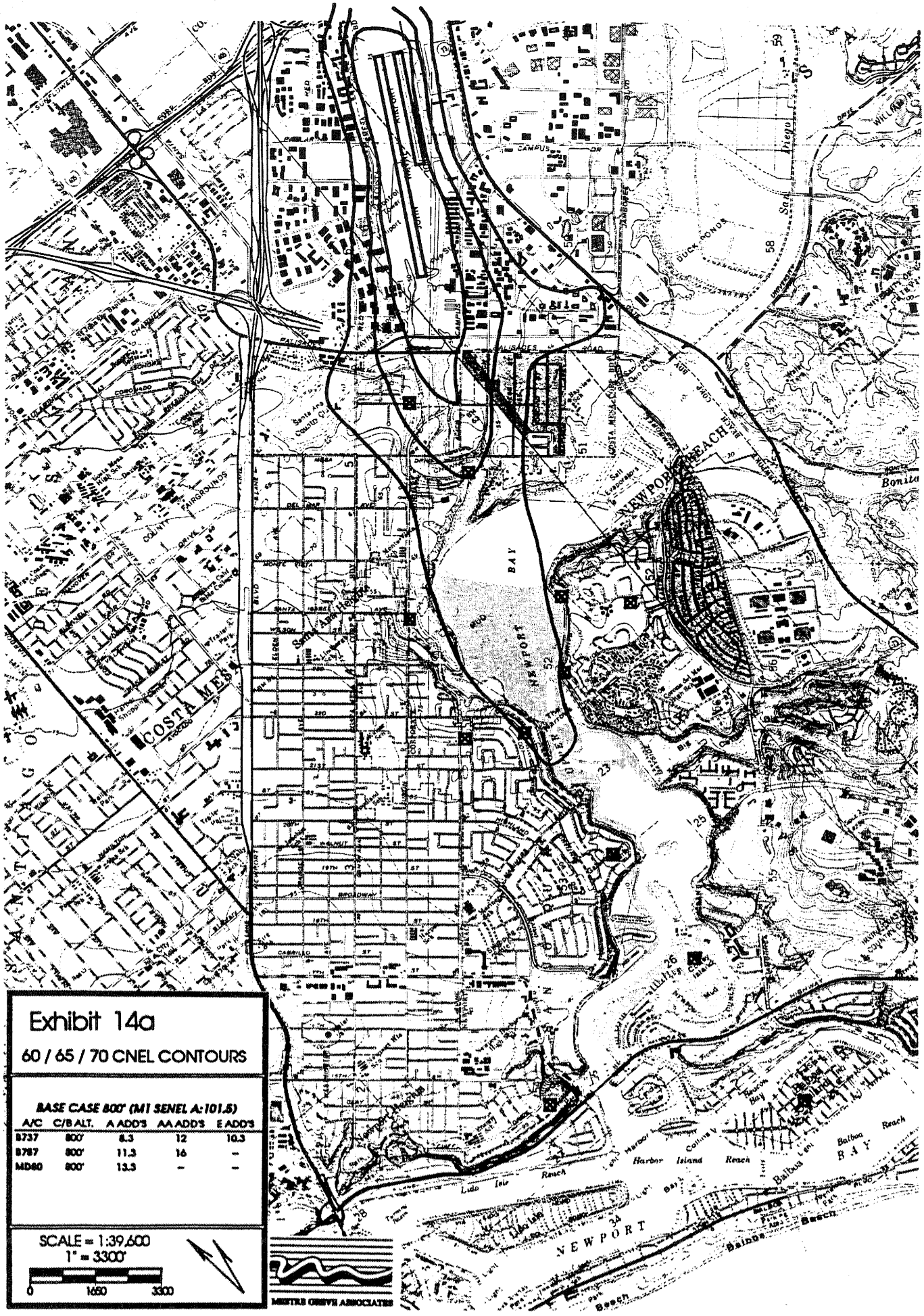


Exhibit 14a
60 / 65 / 70 CNEL CONTOURS
BASE CASE 800' (M1 SENEL A:101.5)
A/C C/B ALT. A ADD'S AA ADD'S E ADD'S
B737 800' 8.3 12 10.3
B767 800' 11.3 16 –
MD80 800' 13.3 – –
SCALE = 1:39,600
1" = 3300'
0 1650 3300
MESTRE GREVE ASSOCIATES
NEWPORT BAY
COSTA MESA
NEWPORT BEACH
NEWPORT

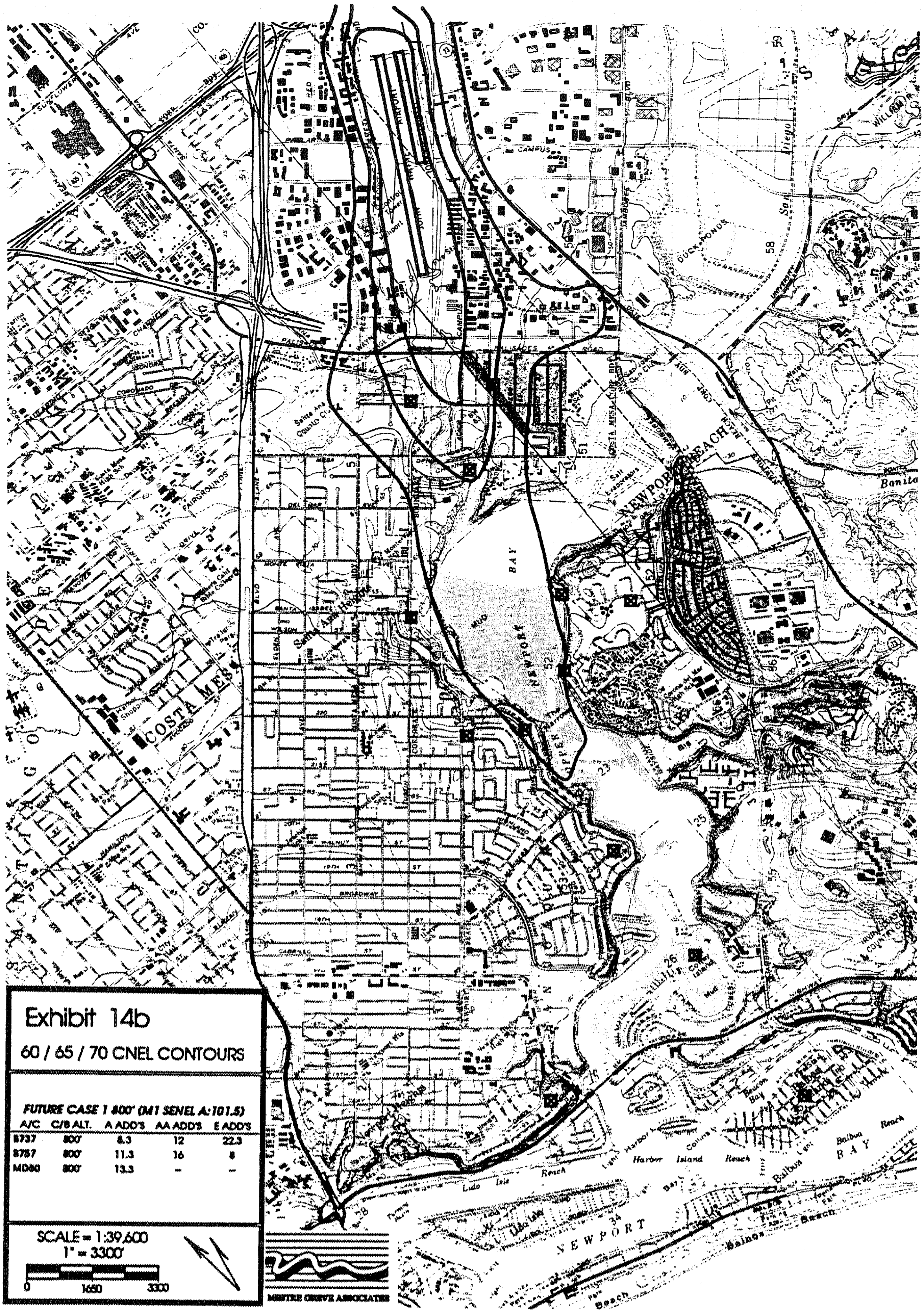


Exhibit 14b

60 / 65 / 70 CNEL CONTOURS

FUTURE CASE 1 800' (M1 SENEL A:101.5)

A/C	C/B ALT.	A ADD'S	AA ADD'S	E ADD'S
B737	800'	8.3	12	22.3
B757	800'	11.3	16	8
MD80	800'	13.3	--	--

SCALE = 1:39,600
1" = 3300'
0 1650 3300

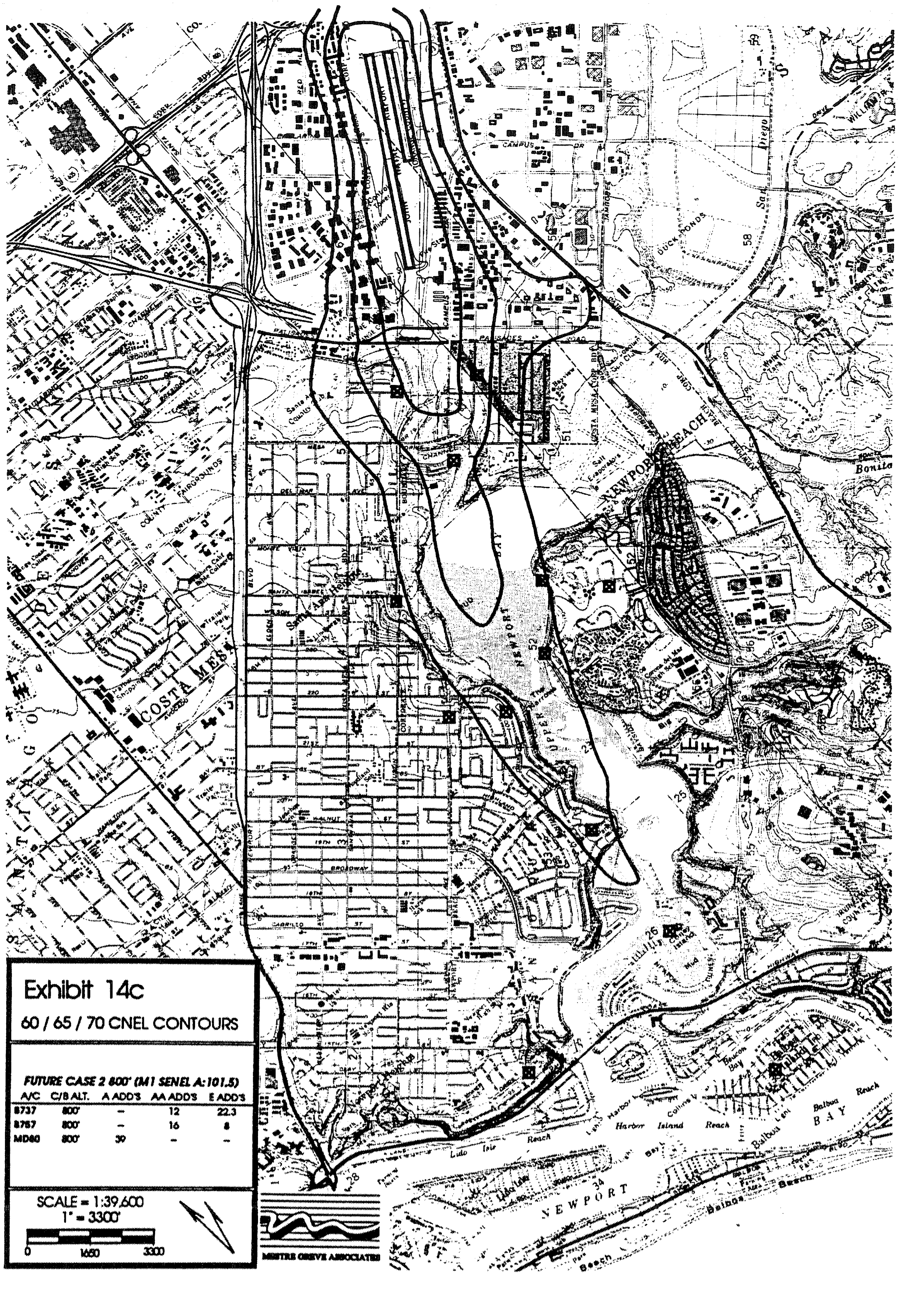


Exhibit 14c

60 / 65 / 70 CNEL CONTOURS

FUTURE CASE 2 800' (M1 SENEL A:101.5)

A/C	C/B ALT.	A ADD'S	AA ADD'S	E ADD'S
B737	800'	–	12	22.3
B757	800'	–	16	8
MD80	800'	39	–	–

SCALE = 1:39,600
1" = 3300'

0 1650 3300

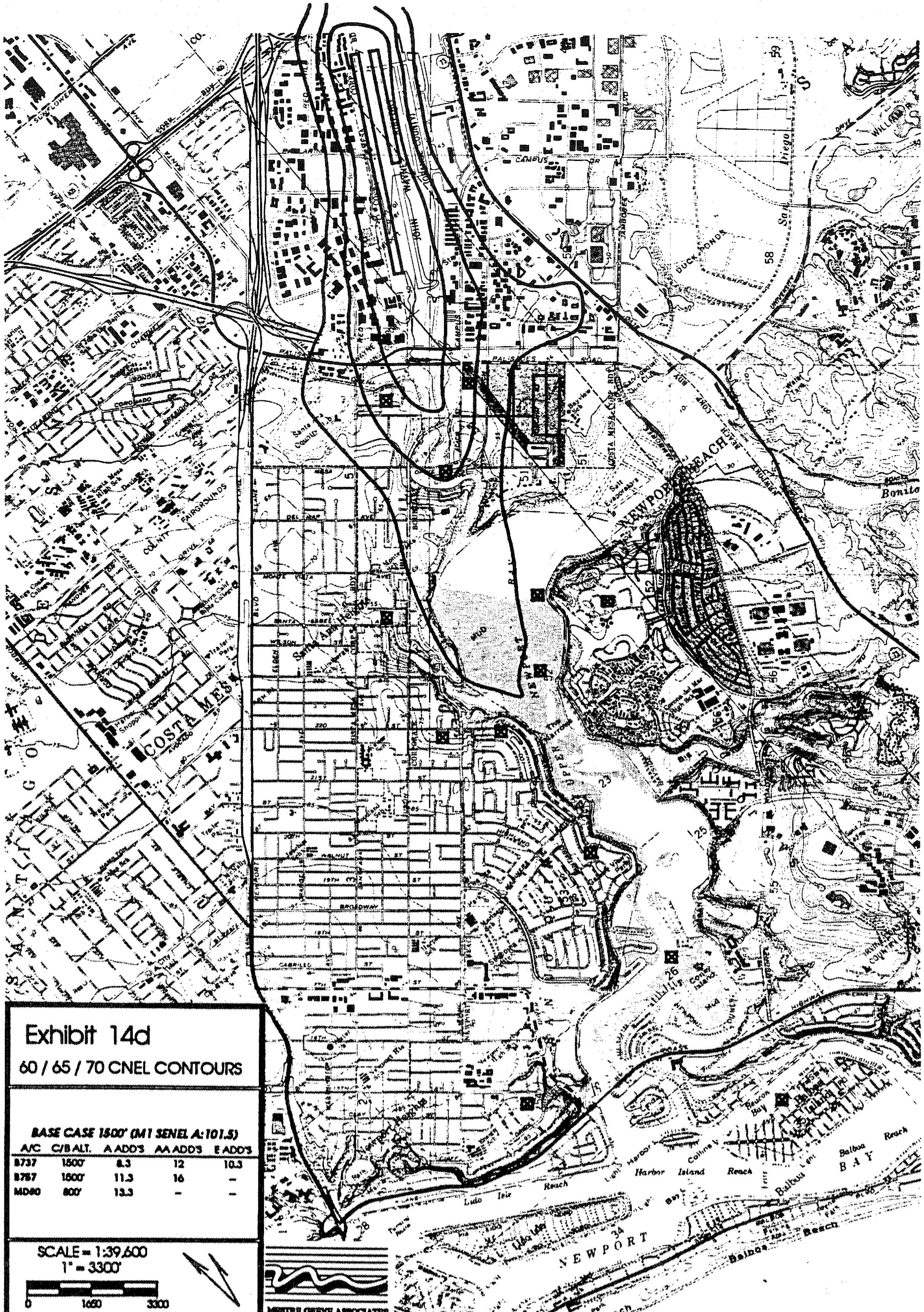


Exhibit 14d

60 / 65 / 70 CNEL CONTOURS

BASE CASE 1500' (M1 SENEL A:101.5)

A/C	C/B ALT.	A ADD'S	AA ADD'S	E ADD'S
B737	1500'	8.3	12	10.3
B757	1500'	11.3	16	--
MD80	800'	13.3	--	--

SCALE = 1:39,600
1" = 3300'

0 1650 3300

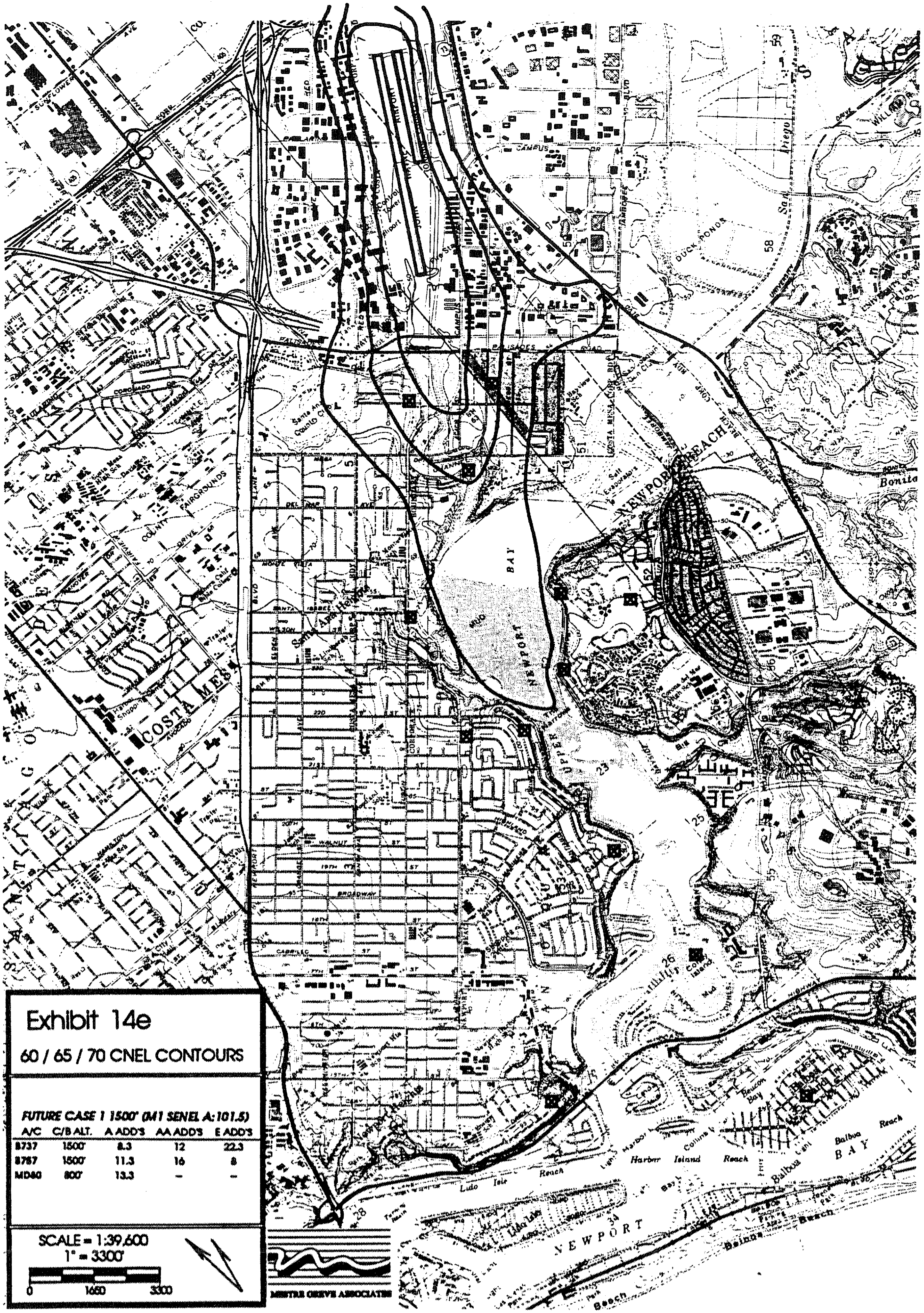


Exhibit 14e

60 / 65 / 70 CNEL CONTOURS

FUTURE CASE 1 1500' (M1 SENEL A:101.5)

A/C	C/B ALT.	A ADD'S	AA ADD'S	E ADD'S
B737	1500'	8.3	12	22.3
B757	1500'	11.3	16	8
MD80	800'	13.3	--	--

SCALE = 1:39,600
1" = 3300'
0 1650 3300

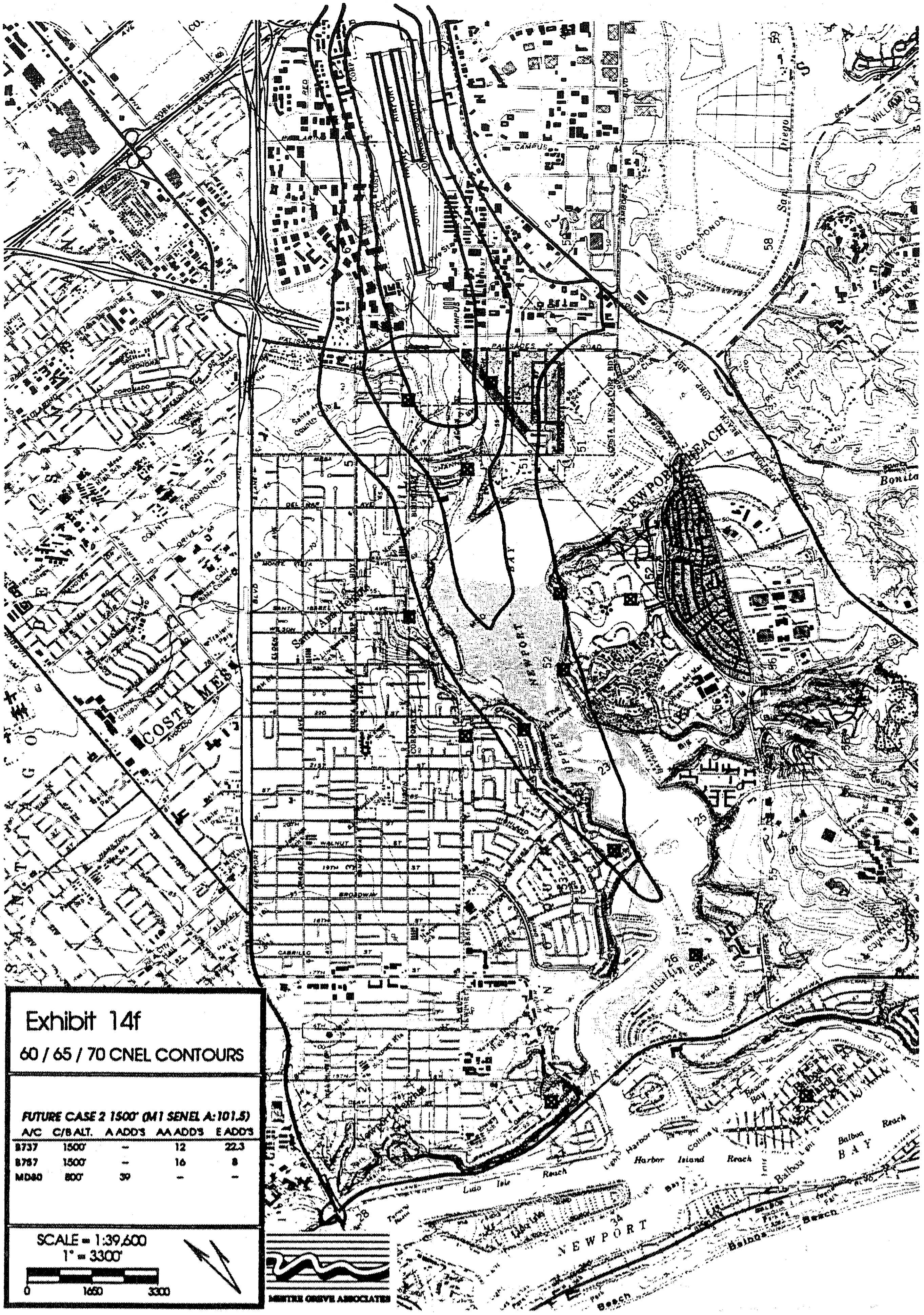


Exhibit 14f

60 / 65 / 70 CNEL CONTOURS

FUTURE CASE 2 1500' (M1 SENEL A:101.5)

A/C	C/B ALT.	A ADD'S	AA ADD'S	E ADD'S
B737	1500'	–	12	22.3
B757	1500'	–	16	8
MD80	800'	39	–	–

SCALE = 1:39,600
1" = 3300'

0 1650 3300

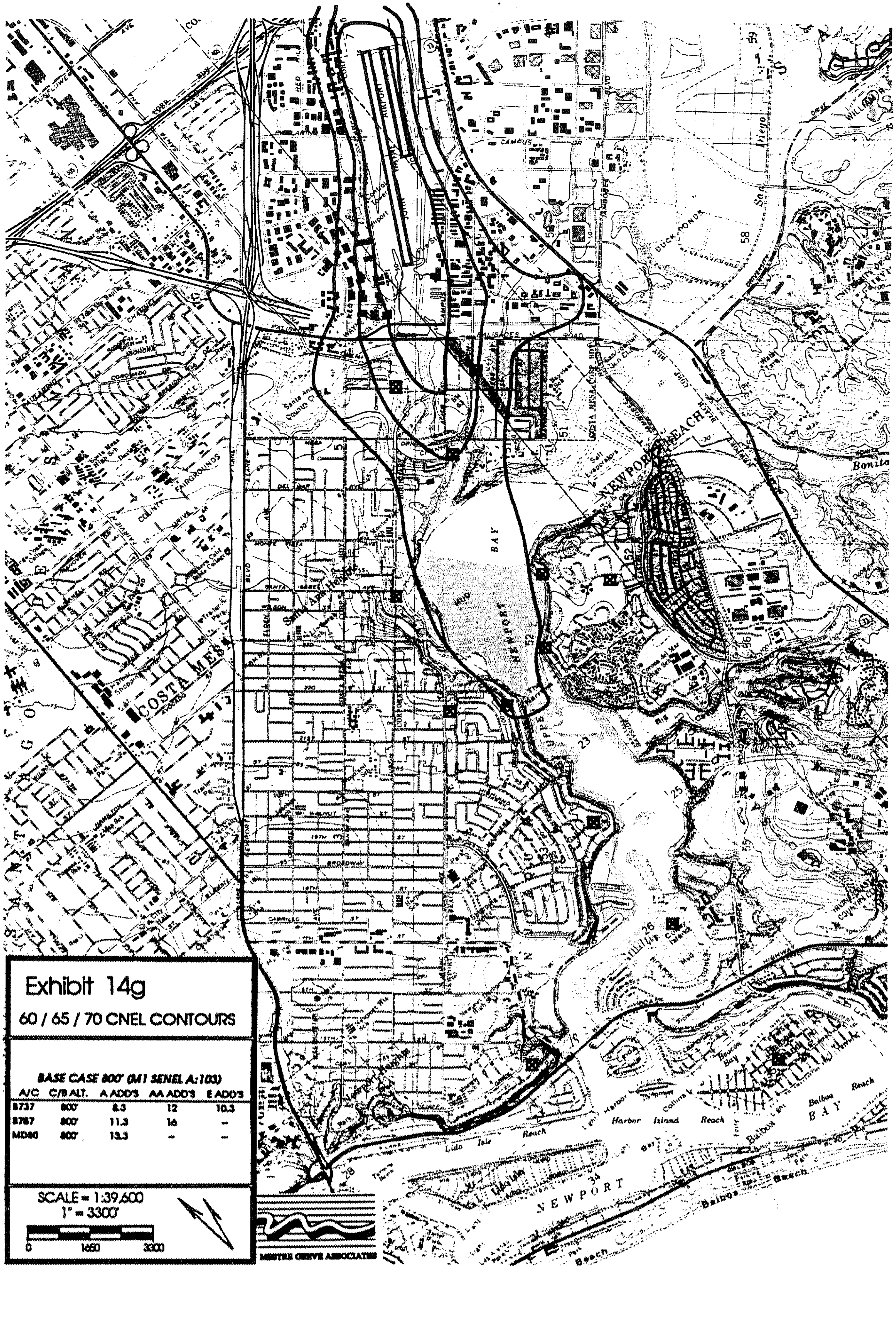


Exhibit 14g

60 / 65 / 70 CNEL CONTOURS

BASE CASE 800' (M1 SENEL A:103)

A/C	C/B ALT.	A ADD'S	AA ADD'S	E ADD'S
B737	800'	8.3	12	10.3
B757	800'	11.3	16	--
MD80	800'	13.3	--	--

SCALE = 1:39,600
1" = 3300'

0 1650 3300

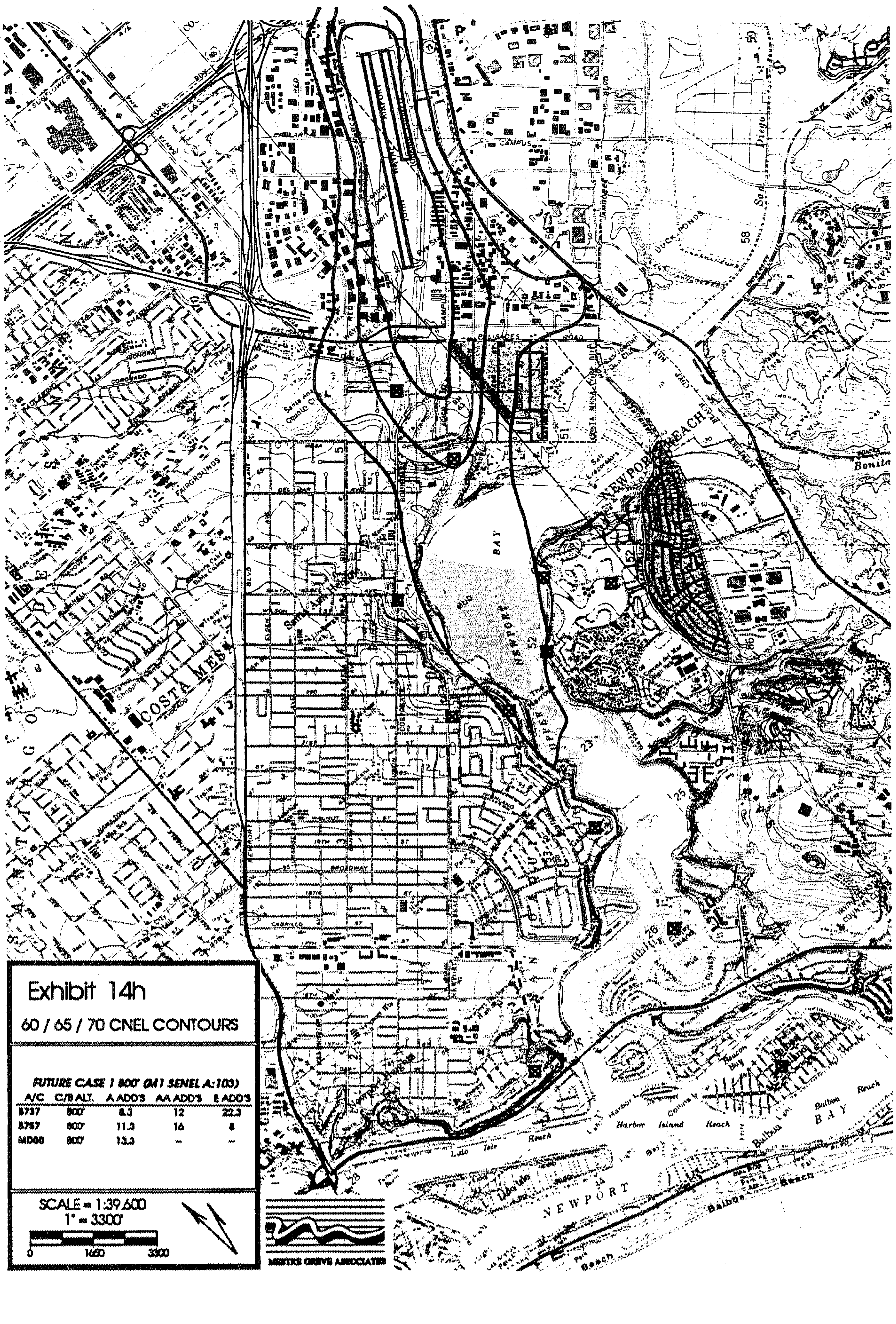


Exhibit 14h

60 / 65 / 70 CNEL CONTOURS

FUTURE CASE 1 800' (M1 SENEL A:103)

A/C	C/B ALT.	A ADD'S	AA ADD'S	E ADD'S
B737	800'	8.3	12	22.3
B757	800'	11.3	16	8
MD80	800'	13.3	--	--

SCALE = 1:39,600
1" = 3300'

0 1650 3300

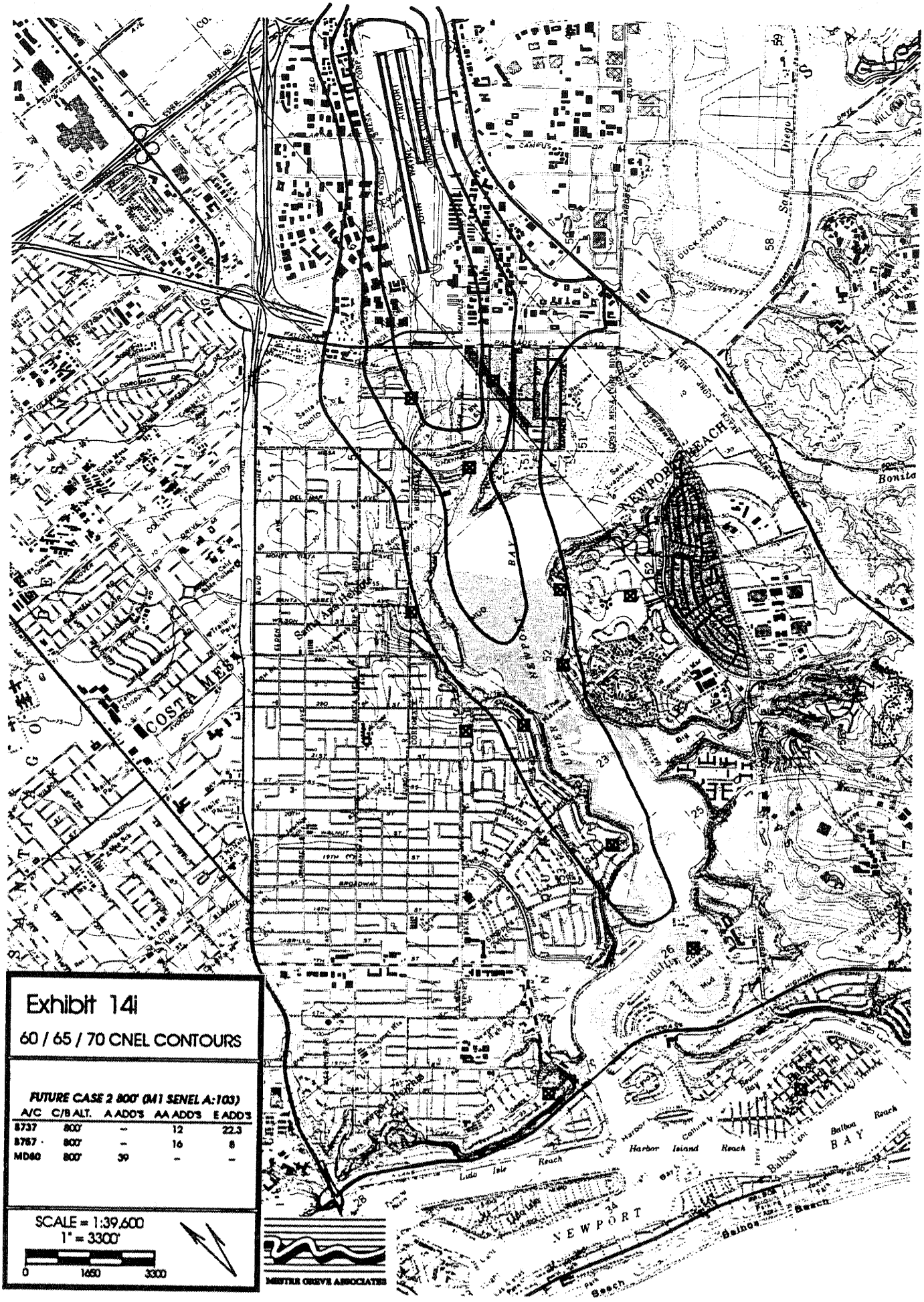


Exhibit 14i
60 / 65 / 70 CNEL CONTOURS
FUTURE CASE 2 800' (M1 SENEL A:103)
A/C C/B ALT. A ADD'S AA ADD'S E ADD'S
B737 800' – 12 22.3
B757 800' – 16 8
MD80 800' 39 – –
SCALE = 1:39,600
1" = 3300'
0 1650 3300
MESTRE GREVE ASSOCIATES
NEWPORT BEACH
COSTA MESA
NEWPORT BAY
Lido Isle
Harbor Island
Balboa
BAY

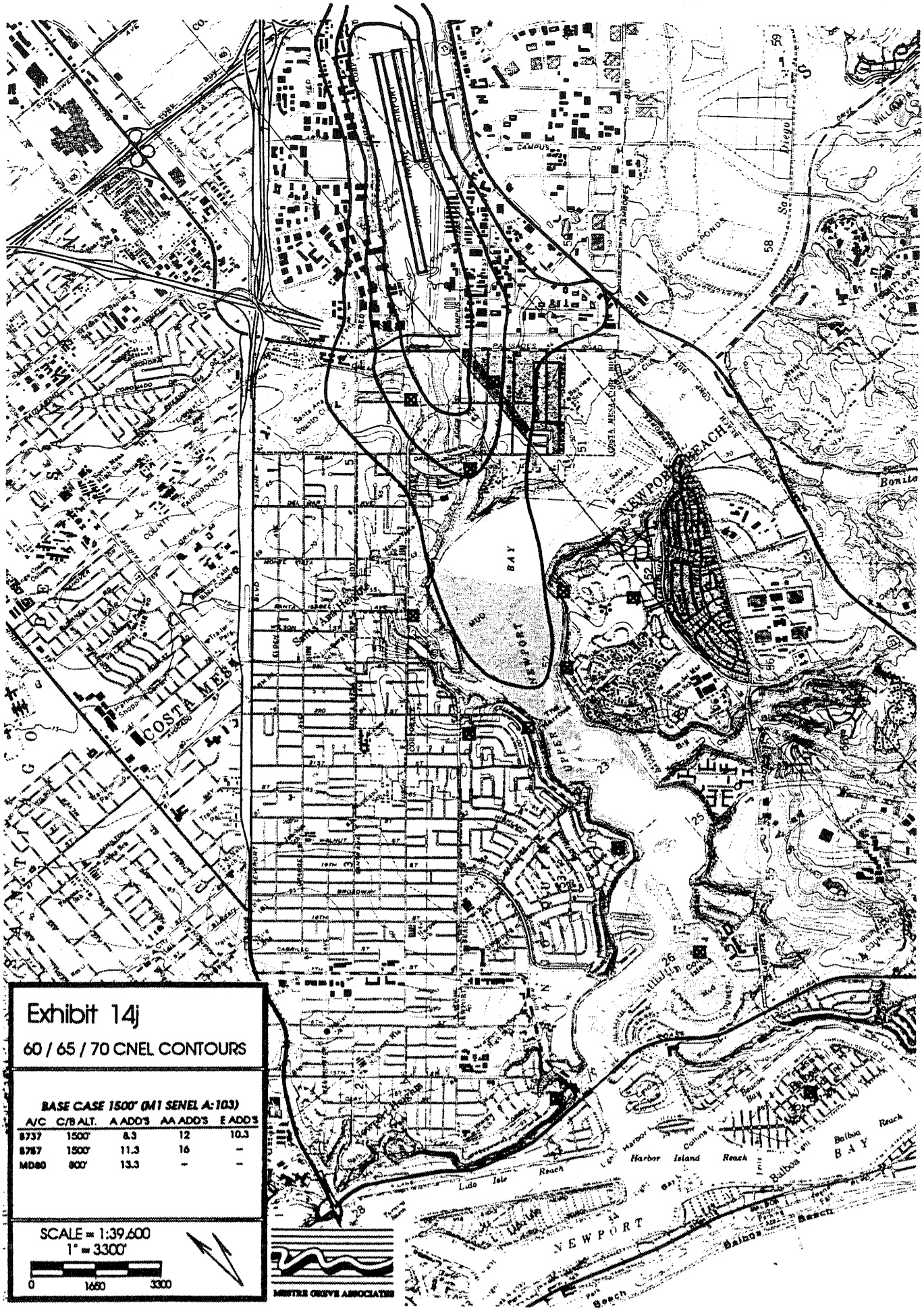


Exhibit 14j
60 / 65 / 70 CNEL CONTOURS
BASE CASE 1500' (M1 SENEL A:103)
A/C C/B ALT. A ADD'S AA ADD'S E ADD'S
B737 1500' 8.3 12 10.3
B757 1500' 11.3 16 –
MD80 800' 13.3 – –
SCALE = 1:39,600
1" = 3300'
0 1650 3300
NEWPORT BEACH
COSTA MESA
NEWPORT BAY
MESTRE GREVE ASSOCIATES

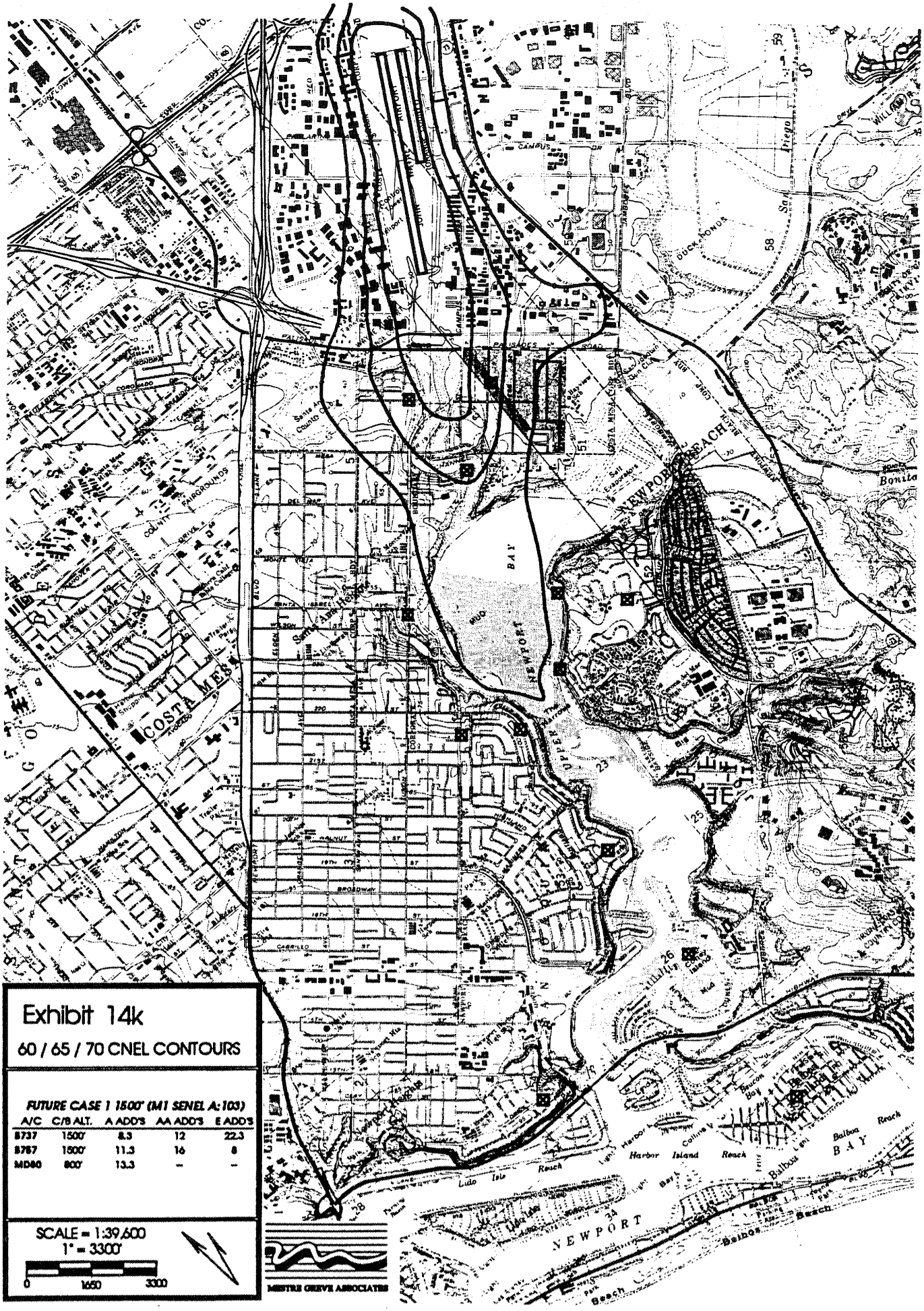


Exhibit 14k

60 / 65 / 70 CNEL CONTOURS

FUTURE CASE 1 1500' (M1 SENEL A:103)

A/C	C/B ALT.	A ADD'S	AA ADD'S	E ADD'S
B737	1500'	8.3	12	22.3
B767	1500'	11.3	16	8
MD80	800'	13.3	--	--

SCALE = 1:39,600
1" = 3300'

0 1650 3300

MESTRE GREVE ASSOCIATES

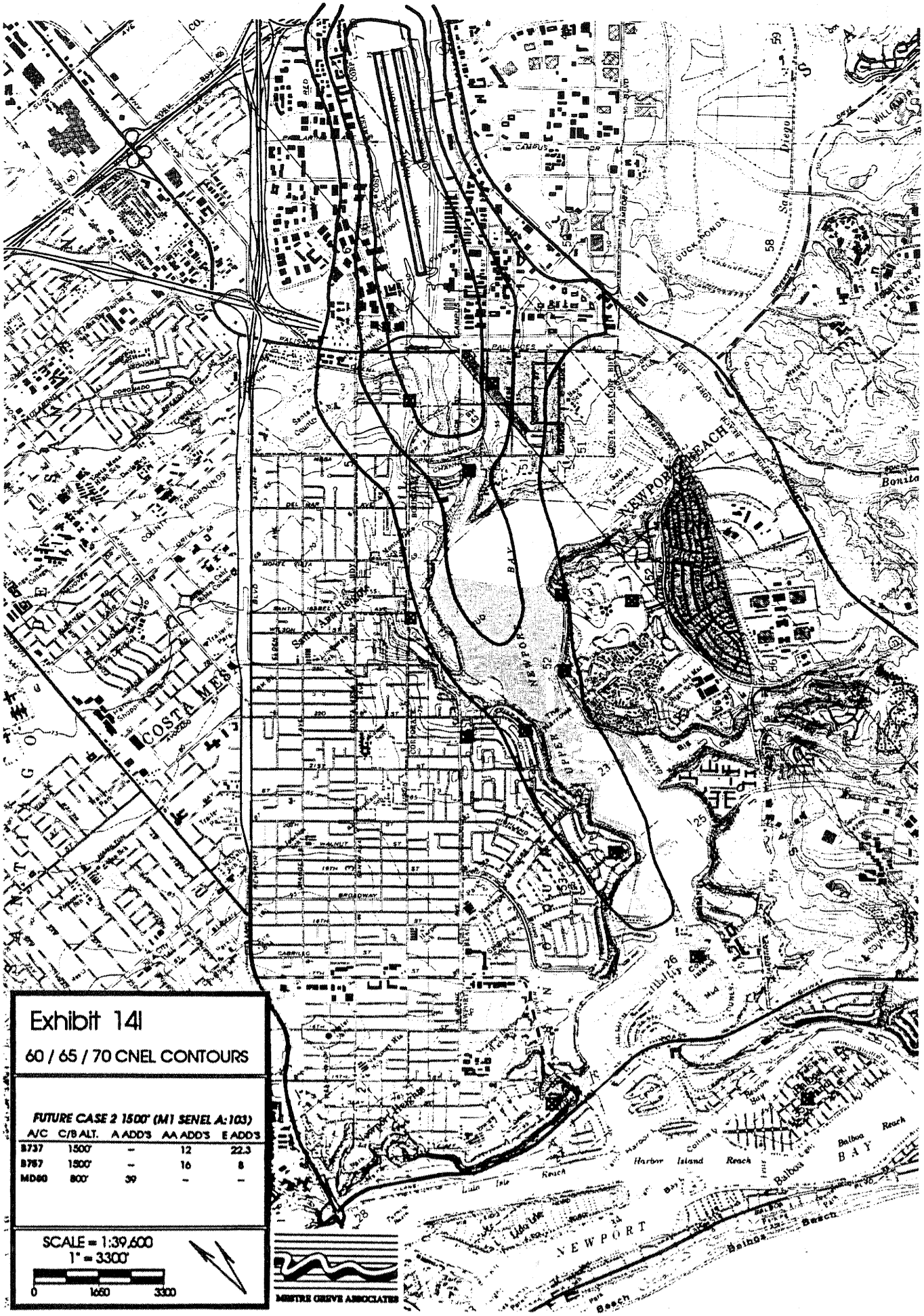
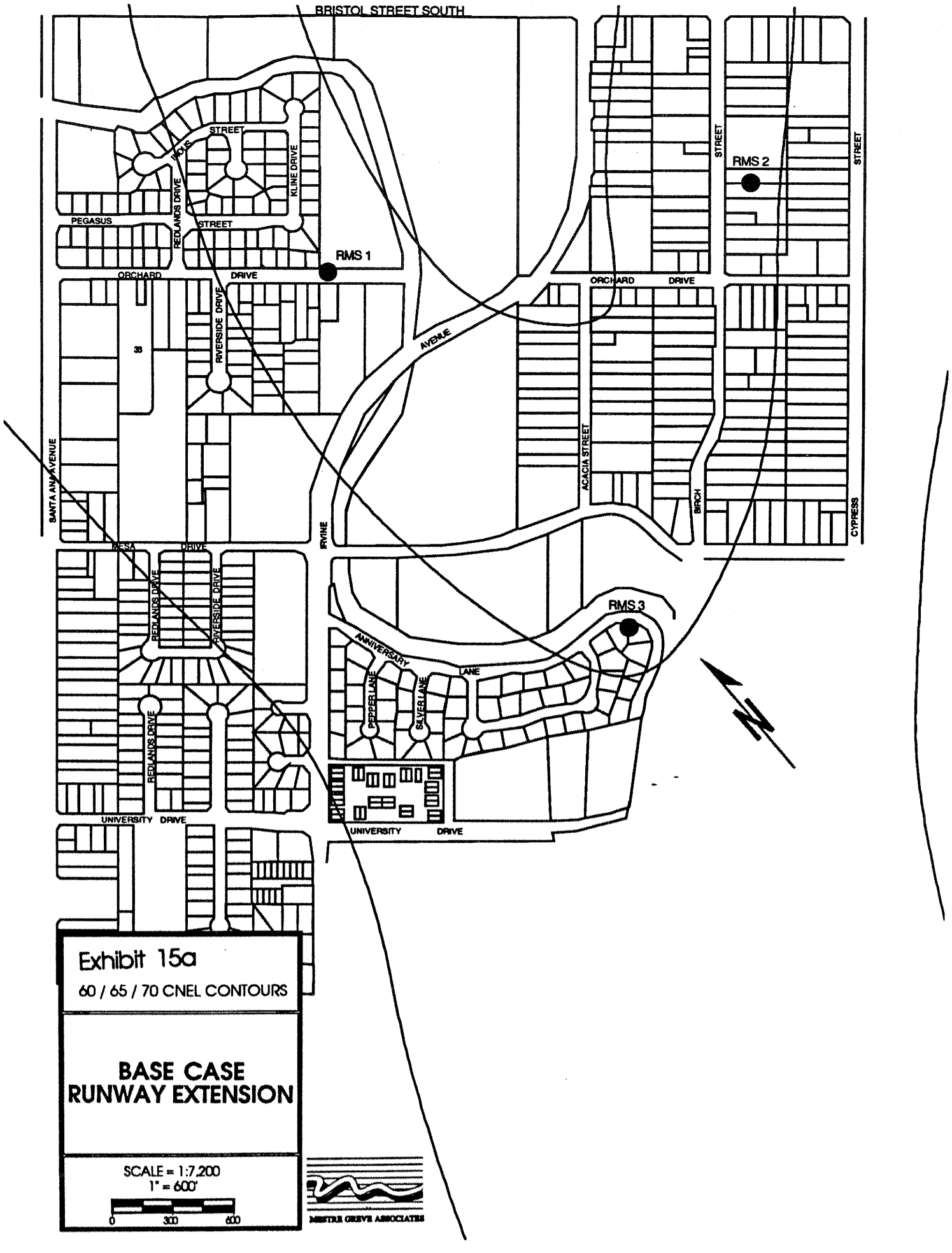
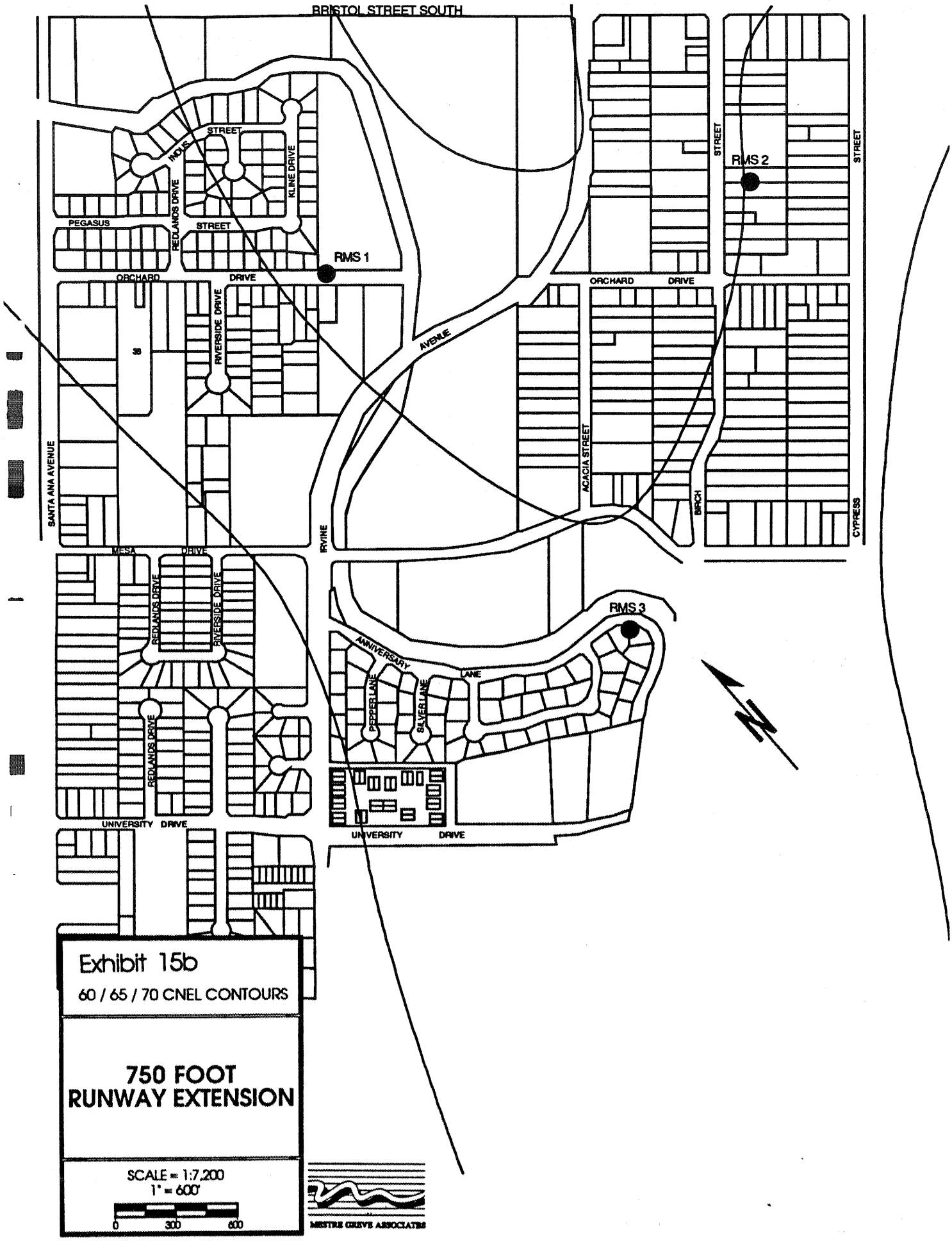


Exhibit 14I
60 / 65 / 70 CNEL CONTOURS
FUTURE CASE 2 1500' (M1 SENEL A:103)
A/C C/B ALT. A ADD'S AA ADD'S E ADD'S
B737 1500' -- 12 22.3
B767 1500' -- 16 8
MD80 800' 39 -- --
SCALE = 1:39,600
1" = 3300'
0 1650 3300
MESTRE GREVE ASSOCIATES
COSTA MESA
NEWPORT BEACH
NEWPORT BAY
Harbor Island Reach
Balboa Reach
BAY
NEWPORT
Balboa Beach


BRISTOL STREET SOUTH
STREET
KLINE DRIVE
REDLANDS DRIVE
PEGASUS
STREET
RMS 1
ORCHARD
DRIVE
RIVERSIDE DRIVE
35
AVENUE
SANTA ANA AVENUE
IRVINE
MESA
DRIVE
REDLANDS DRIVE
RIVERSIDE DRIVE
REDLANDS DRIVE
UNIVERSITY DRIVE
ORCHARD
DRIVE
STREET
RMS 2
STREET
ACACIA STREET
BIRCH
CYPRESS
RMS 3
ANNIVERSARY
LANE
PEPPER LANE
SILVER LANE
UNIVERSITY
DRIVE
N
Exhibit 15a
60 / 65 / 70 CNEL CONTOURS
BASE CASE
RUNWAY EXTENSION
SCALE = 1:7,200
1" = 600'
0
300
600
MESTRE GREVE ASSOCIATES


BRISTOL STREET SOUTH
STREET
INDIS
REDLANDS DRIVE
KLINE DRIVE
PEGASUS
STREET
RMS 1
ORCHARD
DRIVE
RIVERSIDE DRIVE
AVENUE
SANTA ANA AVENUE
IRVINE
ACACIA STREET
BIRCH
CYPRESS
STREET
RMS 2
STREET
ORCHARD
DRIVE
MESA
DRIVE
REDLANDS DRIVE
RIVERSIDE DRIVE
RMS 3
ANNIVERSARY
LANE
PEPPER LANE
SILVER LANE
REDLANDS DRIVE
UNIVERSITY
DRIVE
UNIVERSITY
DRIVE
N
Exhibit 15b
60 / 65 / 70 CNEL CONTOURS
750 FOOT
RUNWAY EXTENSION
SCALE = 1:7,200
1" = 600'
0
300
600
MESTRE GREVE ASSOCIATES

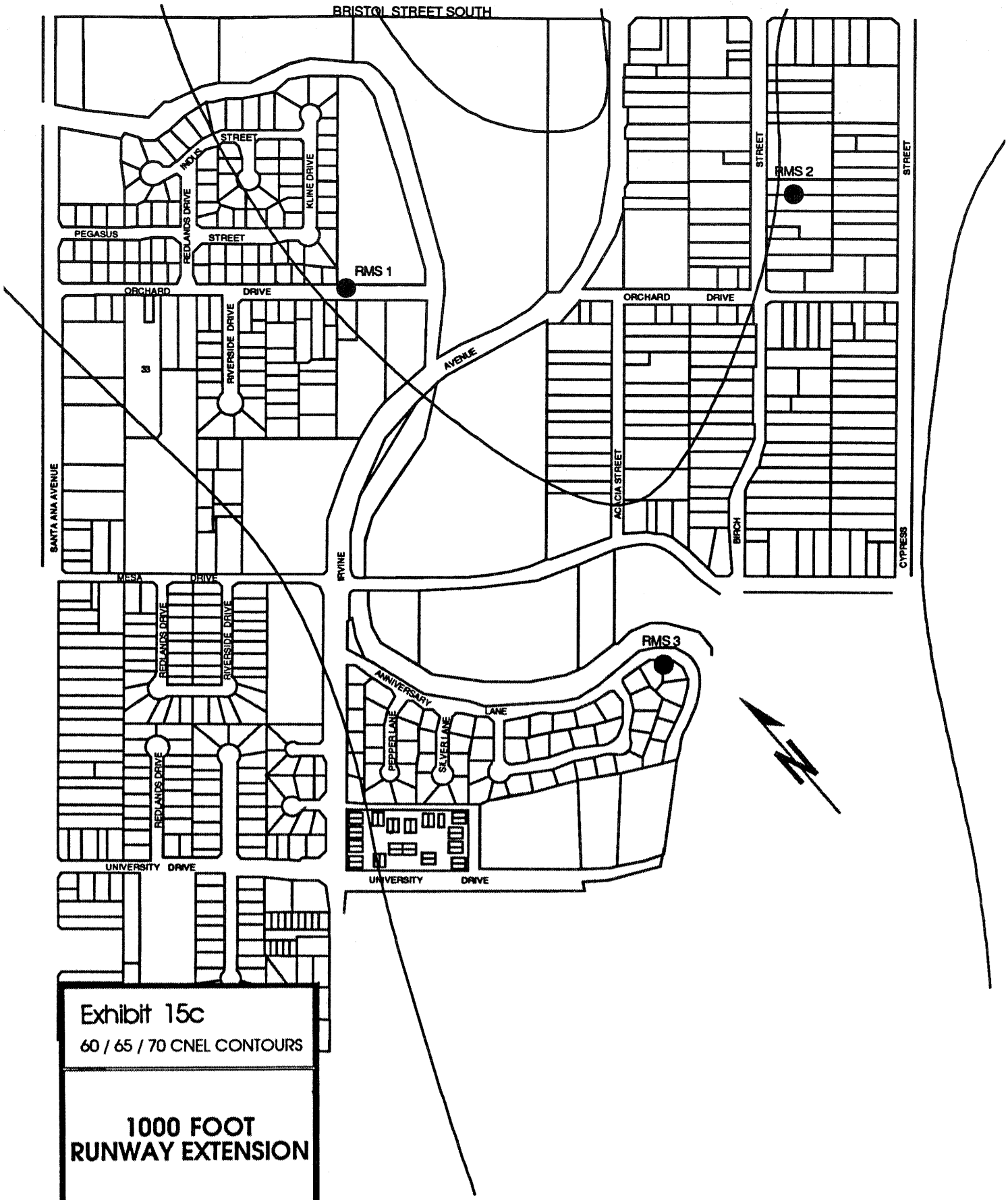


Exhibit 15c

60 / 65 / 70 CNEL CONTOURS

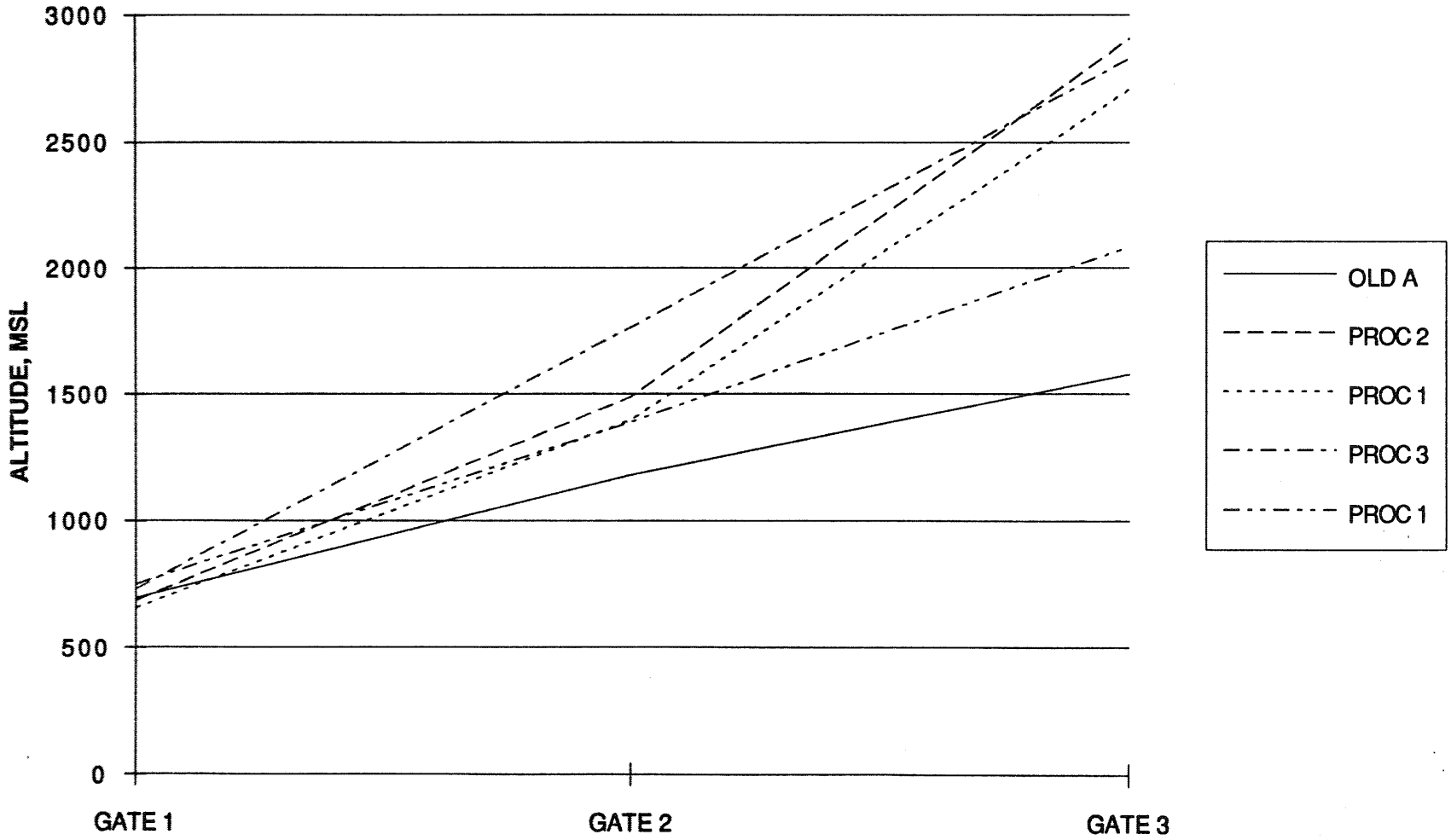
1000 FOOT RUNWAY EXTENSION

SCALE = 1:7,200
1" = 600'

0 300 600

MESTRE GREVE ASSOCIATES

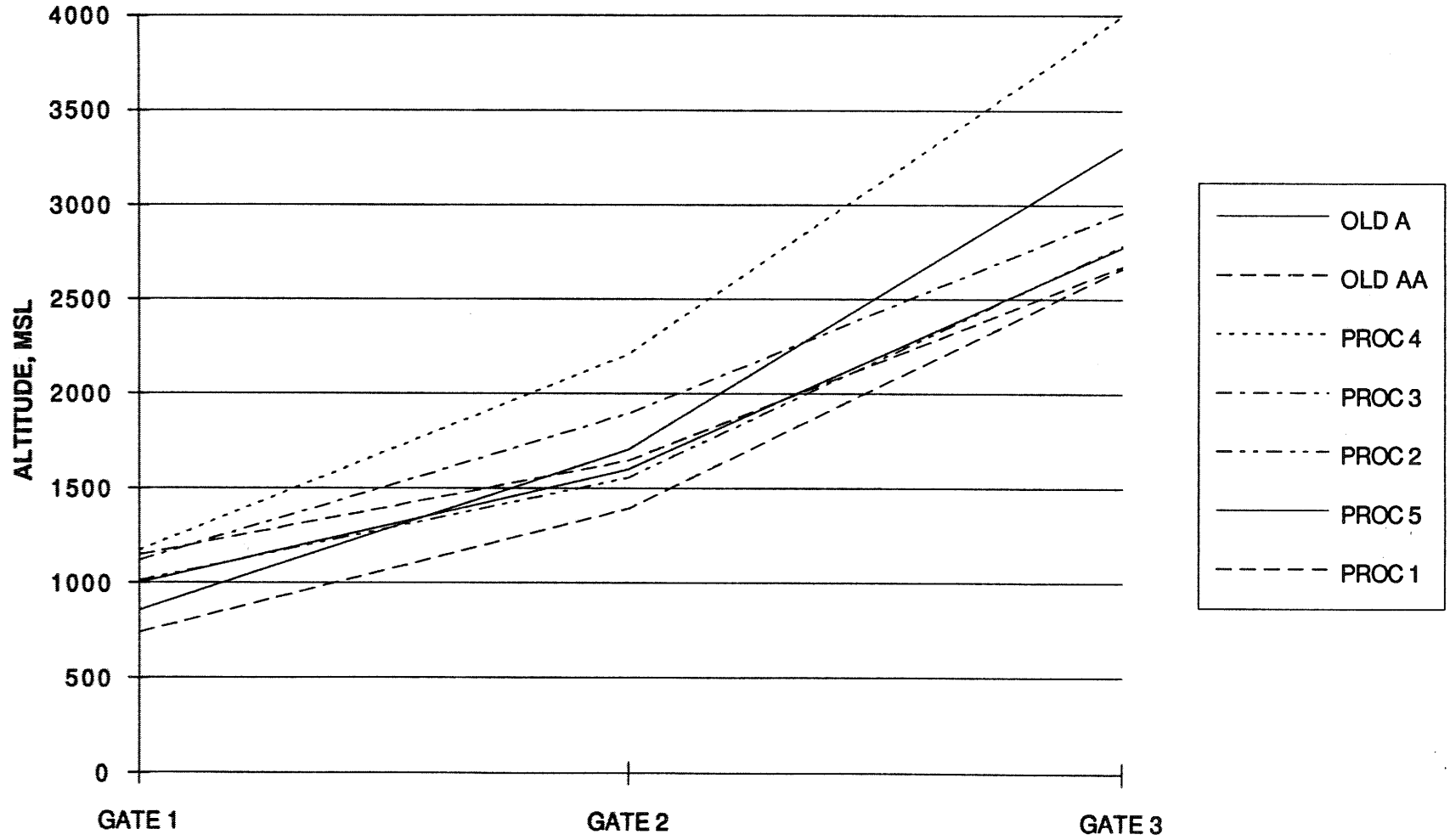
ALTITUDE DATA FOR MD80'S



MESTRE GREVE ASSOCIATES

Exhibit 16
MD80 Altitude Profiles

ALTITUDES FOR B737'S

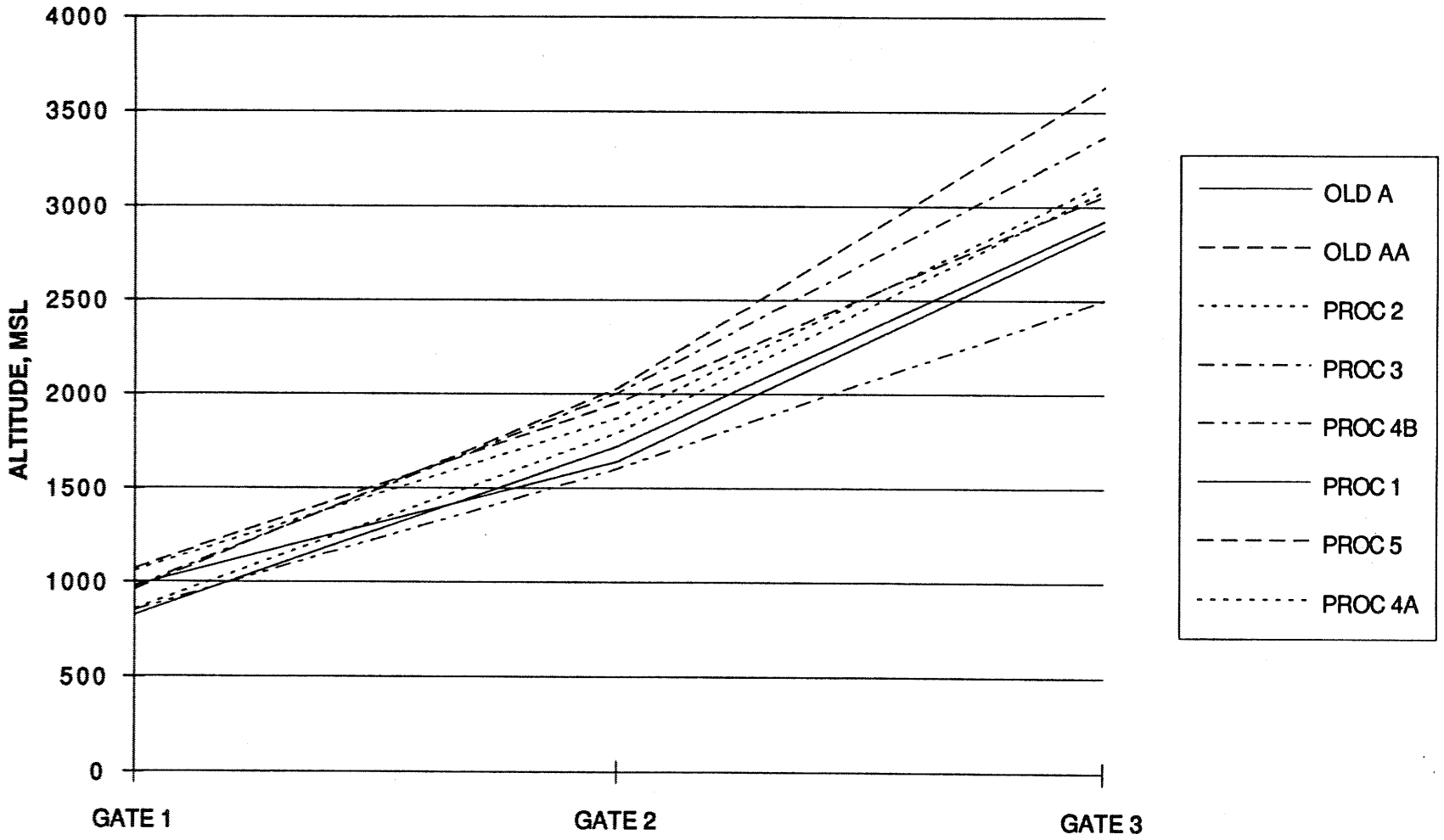


MESTRE GREVE ASSOCIATES

Exhibit 17

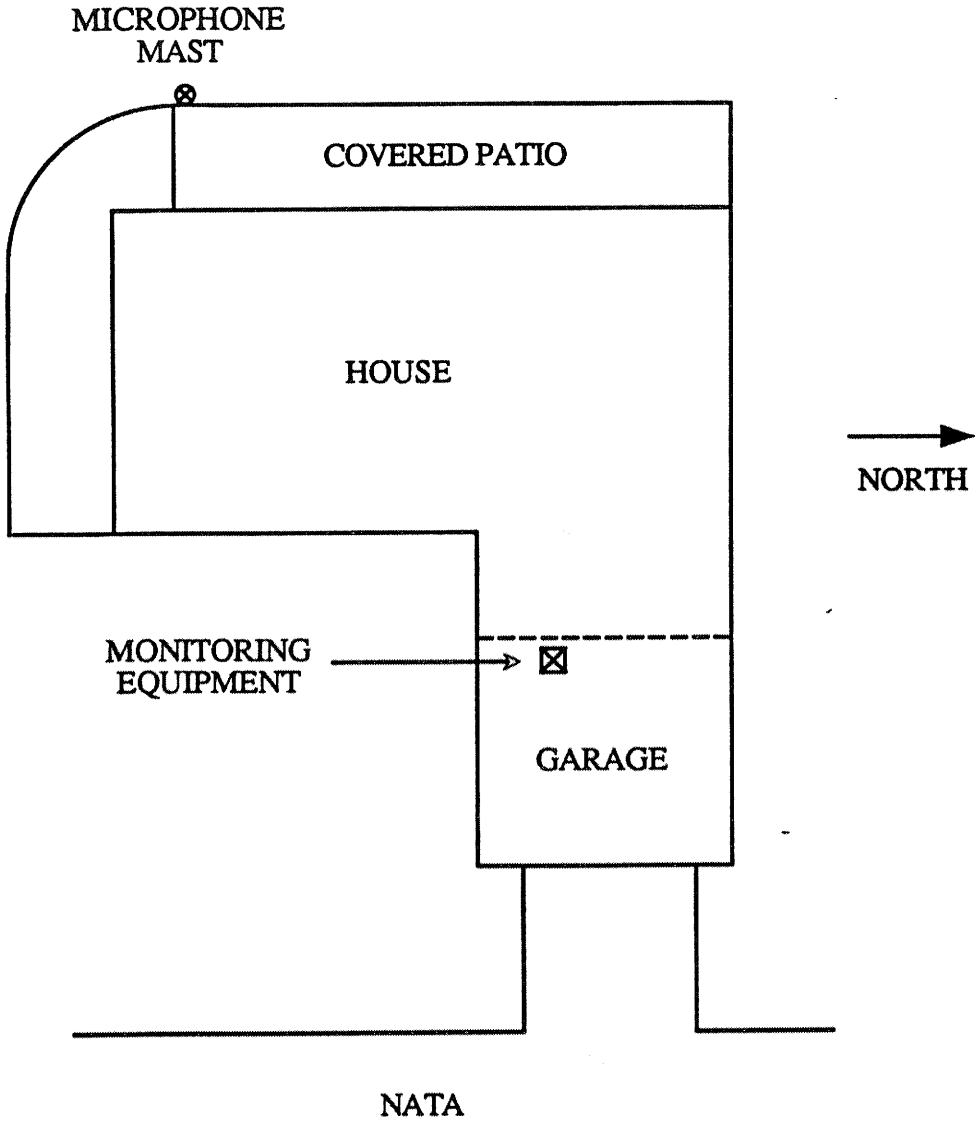
B737 Altitude Profiles

ALTITUDES FOR B757'S

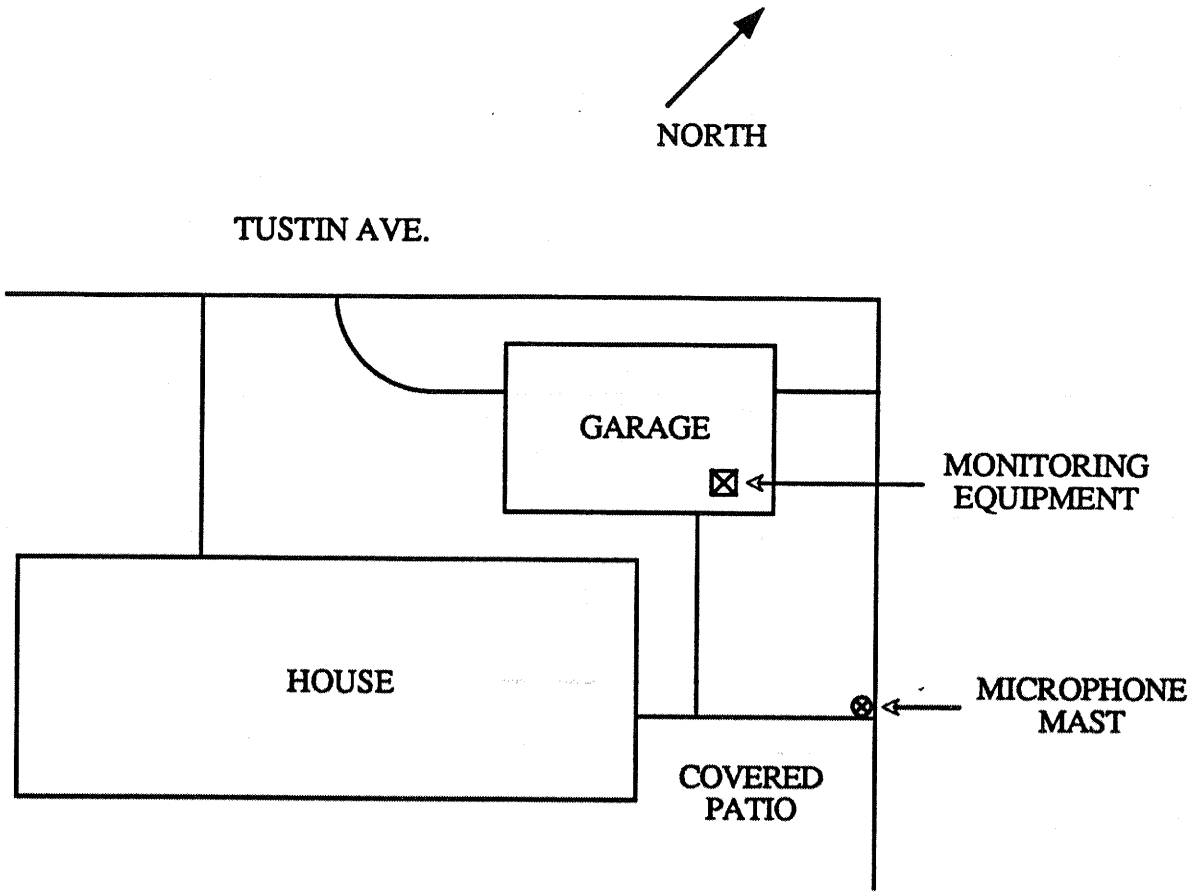


MEISTER GREVE ASSOCIATES

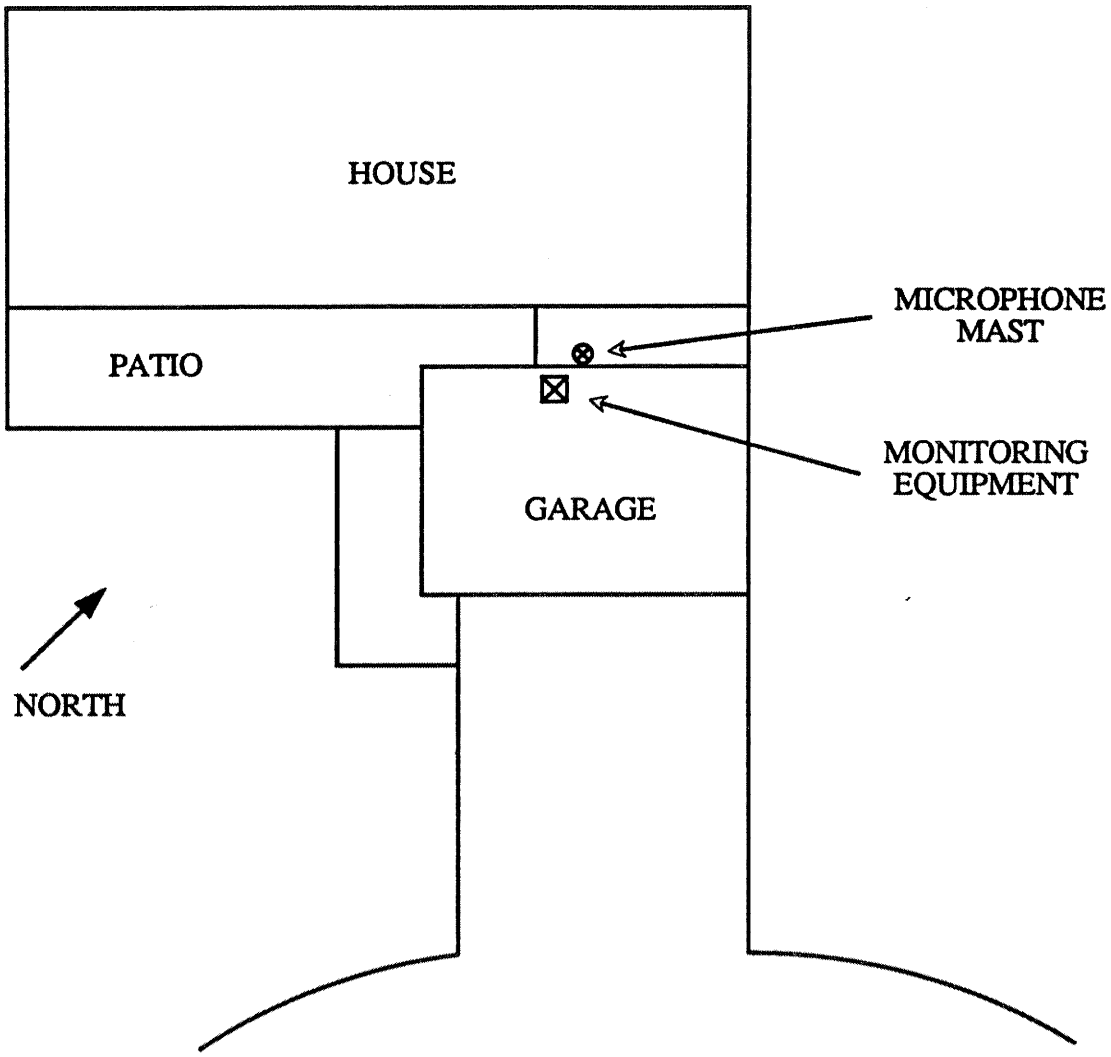
Exhibit 18
B757 Altitude Profiles



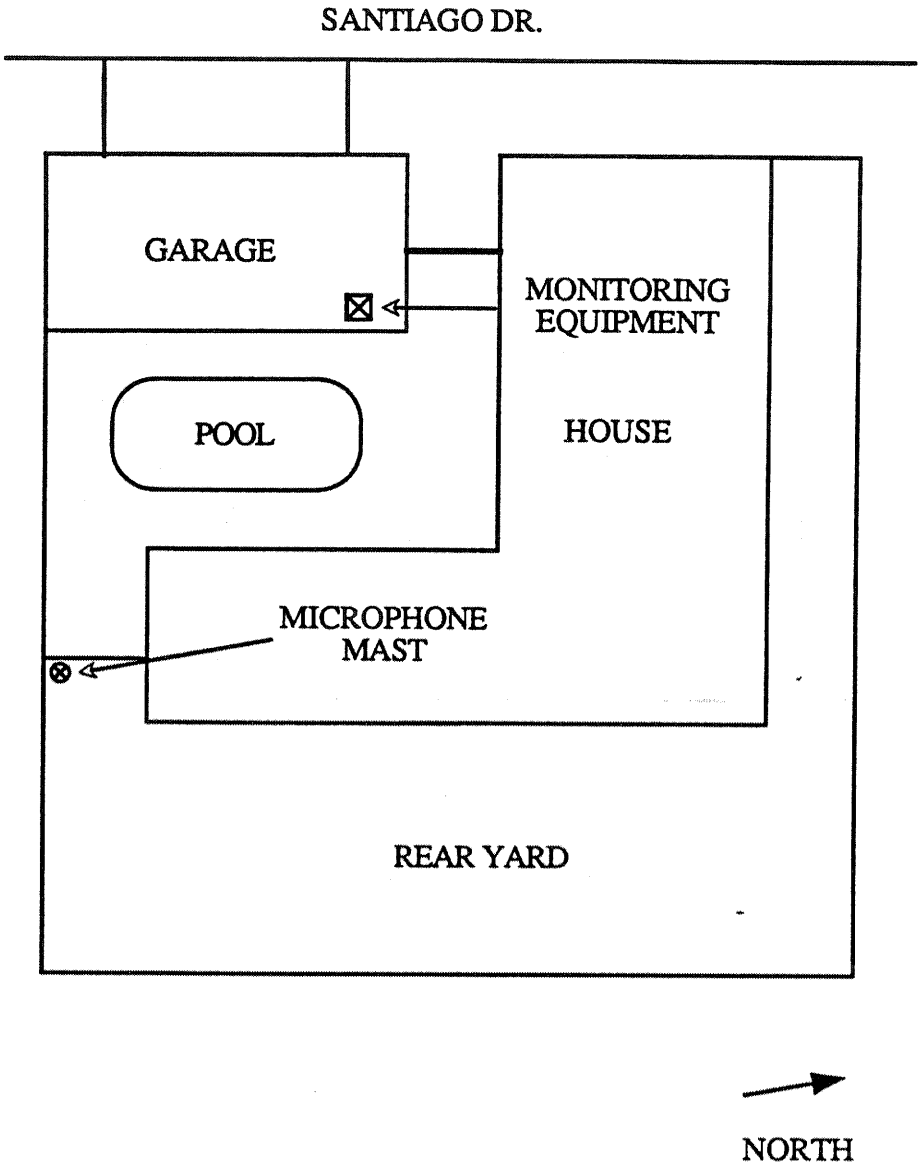
POSITION 21
223 NATA



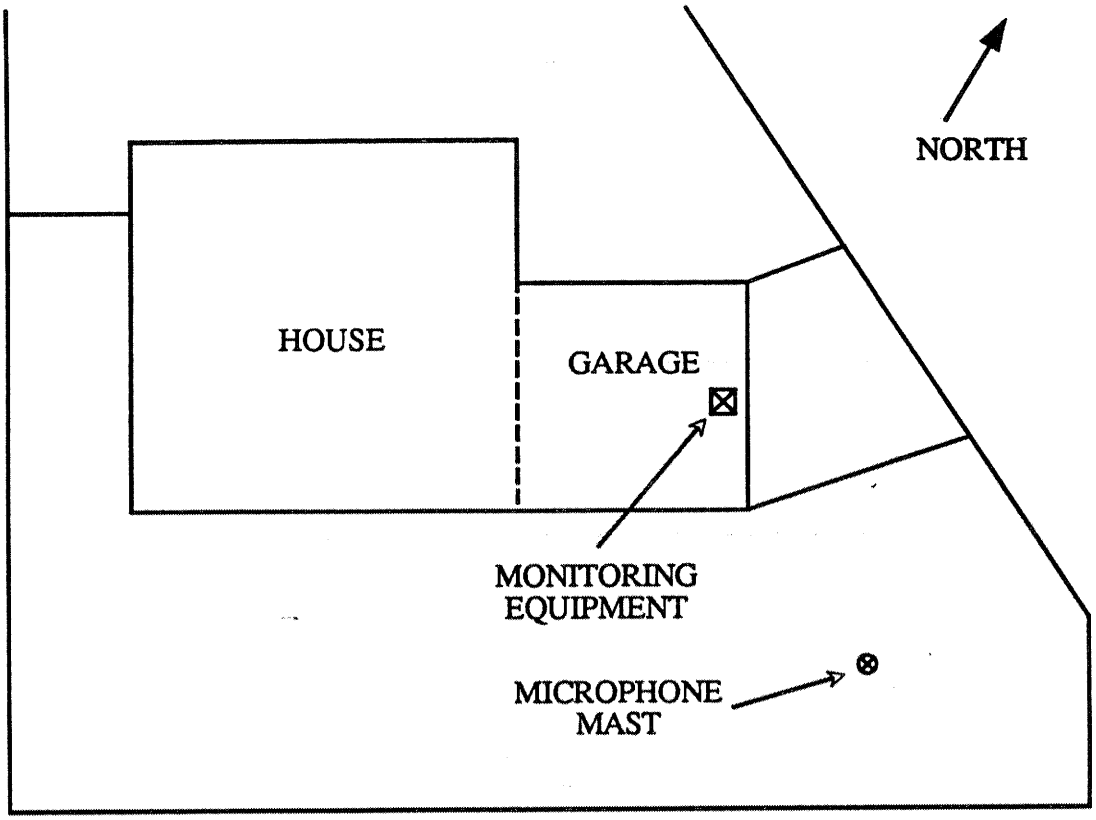
POSITION 22
2338 TUSTIN AVE.



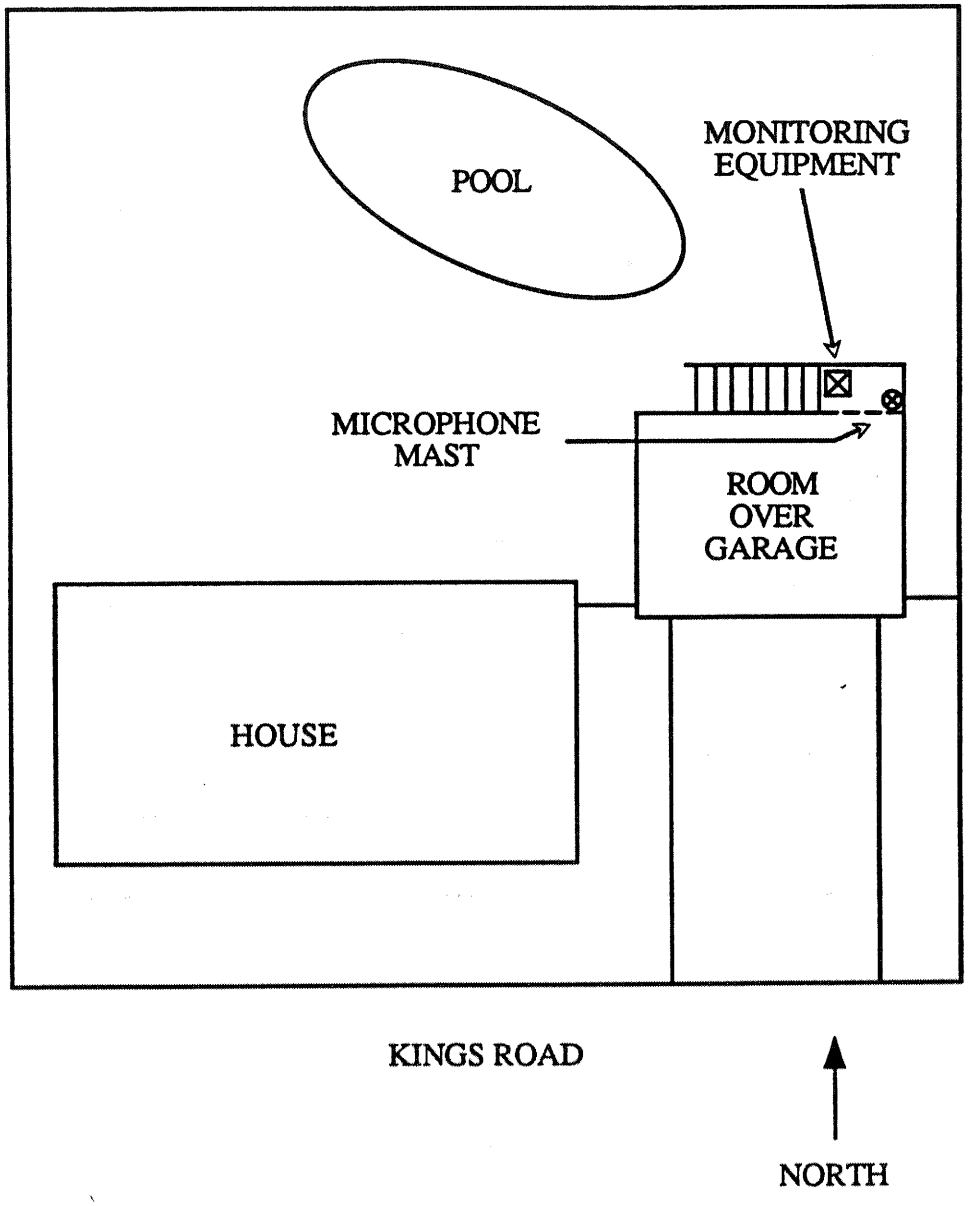
POSITION 23
305 ESPERANZA



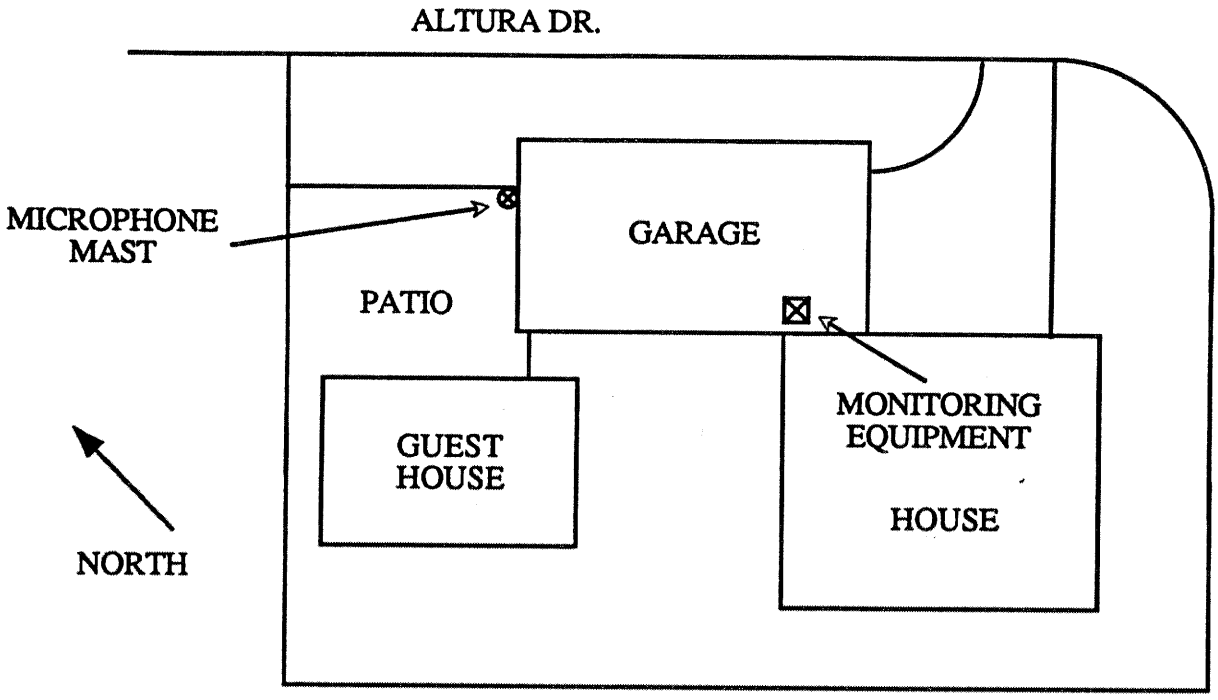
POSITION 24
1918 SANTIAGO DR.



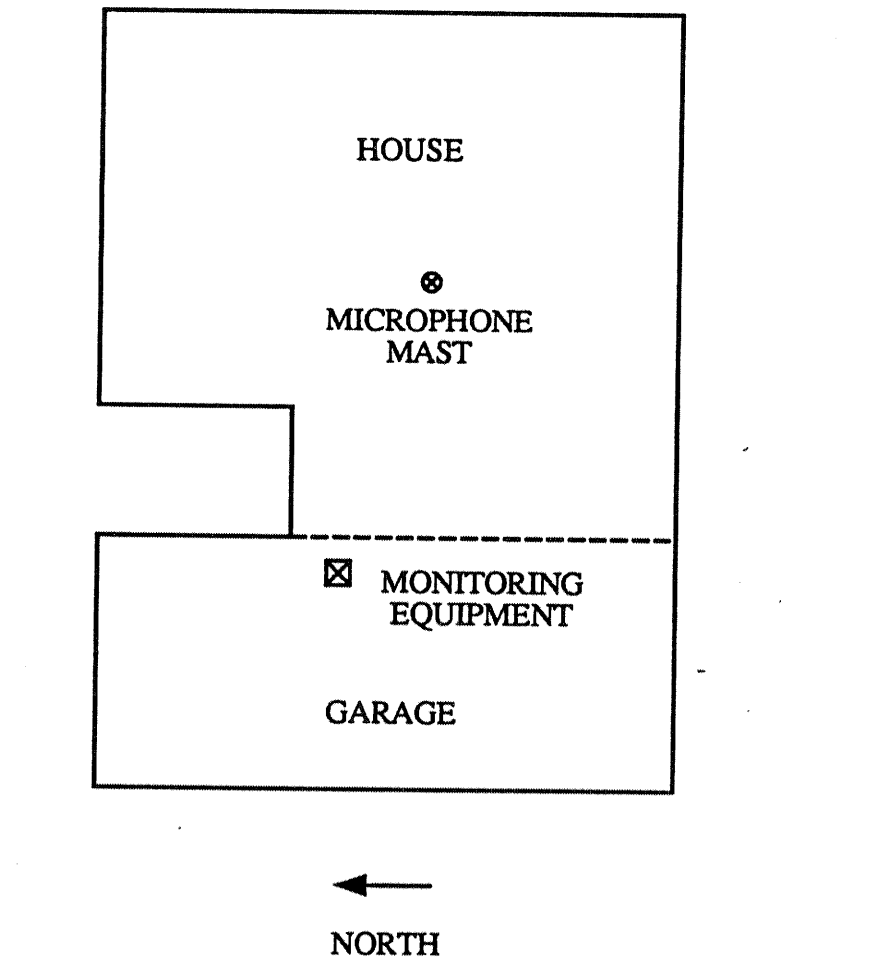
POSITION 25
2 HAMSHIRE CT.



POSITION 26
420 KINGS RD.



POSITION 27
2027 ALTURA DR.



POSITION 28
225 CORAL AVE.

APPENDIX E

LIST OF REFERENCES

APPENDIX E

List of References

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APPENDIX F

COMMENTS RECEIVED ON DRAFT EIR

APPENDIX F

COPIES OF WRITTEN COMMENTS RECEIVED ON DRAFT EIR

The following pages contain copies of the written comments which were received on the Draft EIR. The reader will note that the portions of each comment requiring a response have been marked with brackets and numbers. These numbers correspond to the responses to comments provided in Appendix G.

March 24, 1993

Ms. Kari Rigoni, Senior Planner
EMA/Environmental Planning Division
County of Orange
P.O. Box 4048
Santa Ana, California 92702-4048

Re: DRAFT EIR NO. 546

Dear Ms. Rigoni:

Upon my review of the above referenced draft for the "Phase II Commercial Airline Access Plan and Regulation" document, I would ask that your agency give further consideration to acoustical mitigation guidelines.

It is my opinion, that mitigation guidelines should be set to single noise event levels, as opposed to cumulative noise event levels. The reason is obvious. It is the single noise event which either wakes you up in the morning or keeps you from sleeping in the evening. 1

I thank you in advance for your cooperation by your further investigation of this issue and should you have any questions, please do not hesitate in contacting me: 2382 Bay Farm Place, Santa Ana Heights, California 92707.

Sincerely,

Casey F. Griffin
(818) 810-6417

cgRigoni.ltr/sls*net

Community Development Department

City Of Tustin

15222 Del Amo Avenue
Tustin, CA 92680
(714) 544-8890
FAX (714) 832-0825

December 2, 1992

Kari Rigoni
Environmental Management Agency
Environmental Planning Division
P.O. Box 4048
Santa Ana, California 92702-4048

SUBJECT: NOTICE OF PREPARATION FOR THE JWA ACCESS PLAN AMENDMENTS

Dear Ms. Rigoni:

The City of Tustin appreciates the opportunity to submit our concerns regarding the Notice of Preparation for the John Wayne Airport Access Plan Amendments. After review of the Notice of Preparation, we feel that more detailed information regarding expected noise levels must be specified prior to our determination of significant impacts to the City of Tustin resulting from the proposed project. In addition, it is unclear in the Notice of Preparation whether the higher permitted noise levels would affect the types of aircraft that would be classified as Class A, Class AA, or Class E. Therefore, we have no specific comments at this time.

Again, thank you for the opportunity to comment at this time. We would appreciate receiving any future information or documents related to this project.

Sincerely,
Christine Shingleton
Assistant City Manager

Rita Westfield
Assistant Director of Community Development

RW:SR:kd\jwacess.ltr

RECEIVED
DEC 3 1992
EMA

Community Development Department

City Of Tustin
15222 Del Amo Avenue
Tustin, CA 92680
(714) 544-8890
FAX (714) 832-0825

May 5, 1993

Kari Rigoni
EMA/Environmental Planning Division
P.O. Box 4048
Santa Ana, California 92702-4048

SUBJECT: **AMENDMENTS TO PHASE 2 COMMERCIAL AIRLINE ACCESS PLAN AND REGULATION**

Dear Ms. Rigoni:

The City of Tustin appreciates the opportunity to review and comment on the Amendments to the John Wayne Phase 2 Access Plan.

The amendments include (1) an increase in the maximum permitted noise levels for departures for aircraft taking-off south of the airport and (2) the addition of noise monitoring stations for those areas under the departure flight pattern (commonly referred to as (Santa Ana Heights). The amendments are being proposed in anticipation of the FAA initiative to standardize noise abatement departure procedures which will increase air safety. As I understand it, the current Phase 2 Access Plan departure requirements would not be in conformance with the new initiative, hence the need for the proposed amendments. 4

Although the amended departure procedure will primarily affect aircraft departing south from the airport, should the departure be reversed due to "Santa Ana" conditions (aircraft departing north from the airport) we believe there will be a negative effect upon the City of Tustin. Noise sensitivity pertains to both approaches and departures as can be documented by the number of noise complaints received regarding aircraft approaches over the City of Tustin. 5

The City of Tustin has historically voiced our concerns regarding the expanded aircraft activity and noise allowed by the Phase 2 Access Plan, any amendments to the Access Plan, and the issue of approach noise.

Please include our comments in the Final EIR for the Amendments to the John Wayne Airport Phase 2 Access Plan.

Yours Truly,

Rita Westfield

Rita Westfield
Assistant Director
Community Development Department

RW:kbc\rigoni.#2

NEWPORT FEDERAL

March 24, 1993

John Wayne Airport-Orange County
Administration
3151 Airway Avenue
Building K-101
Costa Mesa, California 92626

RE: Proposed takeoff procedures at John Wayne

Gentlemen:

I reside at 2182 Mesa Drive, Santa Ana Heights, and am troubled by reported official discussions concerning proposed takeoff procedures, which suggest trading higher noise levels for Santa Ana Heights residents (separate and above minimum mandated requirements) in exchange for lower noise levels for the "downstream" Newport Beach area.

6

Aside from the minimum climb-out altitude safety level required by the FAA, every effort for noise abatement should be directed toward easing the burden upon all affected, rather than relieving it for some at the expense of others.

Historically, the effort and goal has been to lessen the noise problem for all. Those of us in Santa Ana Heights already carry a disproportionately heavy burden by being most proximate to the airport and directly under the flight path. To add to that burden by extending the takeoff power pattern beyond mandated safety requirements is patently unfair, and I suggest that any such contemplated noise level adjustments, which do not protect all "downwind" residents, are contrary to law and constitute a taking of property.

4425 JAMBOREE, SUITE 250 • NEWPORT BEACH, CA 92660 • (714) 851-9391 • FAX (714) 851-0450

I trust that any future modification of existing takeoff procedures will not sacrifice my community and property in order to enhance existing benefits enjoyed by more distant neighborhoods. 6

Lastly, I request that this letter be made a part of the record for the related environmental impact study which is reportedly underway. 7

Sincerely,

M. C. Horning, Jr.

cc: John Wayne Airport-Orange County
Noise Abatement Offices
3151 Airway Avenue
Building K-101
Costa Mesa, California 92626

City of Newport Beach
FAX: 363-1719

Airport Working Group
1809 Westcliff Drive, Suite 285
Newport Beach, California 92660

Edwin C. Hall
1572 Indus Street
Santa Ana, Ca..92707-5306
Phone (714) 546-4047

"CHOSE"
SANTA ANA HEIGHTS

Concerned
Home
Owners of
Sherwood
Estates

April 19, 1993

Kari Rigoni, Senior Planner
EMA/Environmental Planning Division
County of Orange
P.O. Box 4048
Santa Ana, Ca..92702-4048

RE: Comments - Draft EIR 546 - Proposed Amendment - Phase 2 Access Plan.

Dear Ms Rigoni:

As requested by Project distribution letter, dated March 18, 1993, cur comments are:

FIRST. We believe the Project is subjective, because noise data derived from aircraft demonstration tests did not adhere to departure flight tracks illustrated in Exhibit 3-3. Even though take-off procedures were conducted no differently than in the past, we nonetheless experience and perceive these flyovers and/or flybys to be "orchestrated departures," defined as: "An intentional flight deviation after lift-off from JWA - 19R runway; thereby directing the aircraft in a circuitous manner (that) would cause the flight to track over or to the West of Remote Monitoring Station (RMS) 2, and then continuing from the apex of this involuted curvature in order to align with the prescribed 175 degree magnetic departure flight track heading that is well beyond RMS 3, and the dog-leg turn." 8

Note: Passive Surveillance Radar (PASSUR) system admits: "Each aircraft will deviate from the reference flight track to some degree (Sec. 9 Appendix D)." Since RMS 2 is located 939 feet at 90 degrees (WLY) from the extended flight path centerline, where flyovers and/or flybys routinely occur, then "some degree" accounts for an excessive tolerance for the PASSUR tracking system, or it is meaningless trade jargon.

SECOND. Normalized aircraft gross take-off weights used during demonstration tests are dubious inre: to runway length requirements (FAR); thereby affecting noise data dB levels, and contour configurations shown in all Project Exhibits. See Data Chart below: 9

AIR CARRIER COMPARISON DATA CHART

A/C TYPE	GEAR TYPE	NORMALIZED WTS USED IN TEST (LBS) *1	RUNWAY STRENGTH FAA RECORD (LBS) *2	RUNWAY STRENGTH JWA RECORD (LBS) *3	A/C OPT MAX TAKE-OFF WT LIMIT (FAR) (LBS) *4	LANDING FLD (FAR) LENGTH (FT) *4	LANDING FLD (JWA) LENGTH (FT) *5
B-757	Dual Tandem	222,000	180,000	234,000	240,000	6,400 to 7,760	5,700
B-737	Dual	120,000	95,000	140,000	135,000	6,360	5,700
MD-80	Dual	132,000	95,000	140,000	140,000	7,250	5,700
A-320	Dual	146,000	95,000	140,000	145,503	5,630	5,700
Bae 146	Dual	86,000	95,000	140,000	93,000	4,950	5,700

Received
April 21, 1993
(See back page)

CHART SOURCE:

*1 - DEIR 546, Sec. 14 Appendix D.
*2 - FAA Western-Pacific Regional Adm. Schellenberg, ltr. to CHOSE, dtd. 11-6-92.
*3 - JWA Phase 2 Access Plan, Sec. 2.26
*4 - Modern Commercial Aircraft by Green-Swanborough-Mowinski, 1987 - Crown Pub. Inc.
*5 - DEIR 546, Sec. 16.3.1 Appendix D.

9

THIRD. Based upon DEIR projections, Santa Ana Heights area could receive noise increases up to 3.5 dB Community Noise Equivalent Level, and Single Event Noise Exposure Level increases up to 5.7 dB; while noise for communities to the South would be reduced. We reject any proposal that would cause this to happen. As stated in Aaron vs the City of Los Angeles: "Some individuals should not be asked to pay more for the public good than others."

10

FOURTH. Project proposes to reroute *VOR 25 Airway from the coastal area to the inland Santa Ana Heights area; thereby availing air carriers on departure from JWA - 19R runway, a climb-out altitude from the present 3,000 foot ceiling to an increased climb-out altitude of 5,000 feet or more. This will further benefit residents of the coastal area, and at the same time, place a greater burden on the residents of the Santa Ana Heights area by rerouting aircraft from other airports that will be ascending or descending during fly-overs.

Presently, **VOR 23 Airway already passes over the Santa Ana Heights area, and that route alone, impacts the area with more than enough disturbing noise levels through-out the late evenings and early mornings. We reject any proposal to reroute VOR 25 Airway, and we believe the FAA will too, because it is extremely dangerous to sandwich this Airway between VOR 23 Airway and ***VOR 64 Airway. To needlessly reroute aircraft over populous inland areas, so as to benefit the coastal areas, further evidences why: "Some individuals should not be expected to share a greater portion of a public burden, in order for some individuals to be favored by receiving a lesser share."

*VOR 23 Airway as of 4-1-93, originates at San Diego (Lindberg), proceeds to Camp Pendleton (MCAS) and passes directly over the Santa Ana Heights area enroute to Los Alamitos (AAF), and then on to Los Angeles (LAX).

**VOR 25 Airway as of 4-1-93, originates at San Diego (Lindberg), and proceeds along the the coast to Los Angeles (LAX).

***VOR 64 Airway as of 4-1-93, originates at Blythe, proceeds to Hemet, Perris, and passes 6 miles North of the Santa Ana Heights area enroute to Los Alamitos (AAF), and then on to Los Angeles (LAX).

Note: If VOR 25 Airway is rerouted, it would originate at San Diego (Lindberg), proceed to Camp Pendleton (MCAS), El Toro (MCAS), and would pass 3 miles North of the Santa Ana Heights area enroute to Los Alamitos (AAF), and then on to Los Angeles (LAX). In other words, VOR 23 already passes over SAH area, VOR 25 would pass within 3 miles of the SAH area, and VOR 64 already passes within 6 miles of the SAH area.

Edwin C. Hall
1572 Indus Street
Santa Ana, Ca..92707-5306
Phone (714) 546-4047

"CHOSE"
SANTA ANA HEIGHTS

Concerned
Home
Owners of
Sherwood
Estates

April 19, 1993

NEWSLETTER 124-7.

TO: All Home Owners.

We welcome all home owners to this neighborhood, who recently purchased their home, and reside at:

20142 Kline Dr.....1571 Pegasus St.....20161 Redlands Dr.
20181 Kline Dr.....1601 Pegasus St.....

FLOOD CONTROL PROJECT. As a result of the 12-10-92 EMA meeting: their surveyors decided to do a complete drainage profile of this locale, and that is the reason you have noticed this activity during the past several weeks. Street drain improvements are suppose to begin sometime this month.

NOTICE OF PREPARATION for the EMA's Draft Environmental Impact Report 546 to amend the Phase 2 JWA Access Plan, was responded to by CHOSE. Our letter, dated 12-13-92, was included in the DEIR 546, and we suggested inre; to their intention to increase the noise limits (that) they should "find an alternate to the problem, rather than to simply raise the limits."

DRAFT EIR 546 is now available at all libraries for you to review and make your own comments, if you care to. Note: Comments must be received by the EMA no later than 5 PM on May 5, 1993. A copy of comments prepared by CHOSE is attached to this newsletter for your information.

ADDRESS ZIP/CODE CHANGE discussion with the Postal Authorities is scheduled for Wednesday, April 21, 1993. Supervisor Thomas F. Riley, initiated this change for the Santa Ana Heights area, on January 4, 1993.

CONTRIBUTIONS. We thank these home owners for their donation:

Rita and Vincent Cook.....1692 Pegasus St.
Frances and Henry O'shea.....1672 Pegasus St.
Yuretta Lorman.....1641 Indus St.
Marguerite and Tom Hogan.....1591 Indus St.

cc: FAA Chief.
CA Aero. Div. Chief.
US Senator Feinstein.
US Senator Boxer.
OC Board of Supervisors.
NB/CM Daily Pilot.
OC Register.
LA Times

FIFTH. Even though the Project is noncommital at this time inre: to extending 19R/01L runway 750 feet and/or 1,000 feet to the North by engineering study and senarios; is nothing more than a waste of time to start with. First, the distance from the North end of 19R/01L runway to the 405 Freeway is approximately 1,580 feet. Next, FAA requires 1,000 feet (FAR Part 139) of that distance for a clear zone area at the end of the runway. Finally, the remaining 580 feet would be further reduced by Freeway right-of-way requirements; therefore, leaving approximately 500 feet or less for possible runway extension to the North.

Question: Why did the 750 foot and 1,000 foot runway extension theory receive so much unwarranted discussion in the Project, when the improbability was so obvious?

SIXTH. Purchase Assurance Program is an ineffectual measure for voluntary mitigation, because: (1) It does not take into account for disproportionate property injury caused by jet aircraft operations. (2) Makes third appraisal mandatory. (3) Requires unnecessary carve-outs and fees.

Remedy: (1) Offer *full fair market value. (2) Eliminate mandatory requirement. (3) Eliminate carve-outs and fees.

SEVENTH. Acoustical Insulation Program does not offer a full measure, because: (1) It is not of equal trade-off value for air rights received. (2) Program has no provisions for mitigating noise impacted outside-property amenities. (3) Previous insulation performance has not been adequate to reduce inside noise level to 45 dB CNEL in all habitable rooms.

Remedy: (1) We argue that air rights are not marketable properties, then why should deeded avigational easements be required? (2) *British Airport Authority in London (Heathrow), provided property owners who opted for acoustical insulation, a sum equal to one half of the cost to insulate. (3) Insulation quality and thoroughness needs to be improved.

*Source: "Some Projected Effects of Jet Noise on Residential Property near Los Angeles International Airport by 1970," by: Paul T. McClure, April 1969, P-4083.

FINAL. Data base is subjective.....Proposals are conjectural.....Remedial mitigating measures are flawed. Otherwise, "an interesting, yet complex report."

We suspect the DEIR 546 Project is faulty.

Submitted by:

Edwin C. Hall - CHOSE

THE BLUFFS HOMEOWNERS COMMUNITY ASSOCIATION

P.O. Box 8167 • Newport Beach, California 92658-8167
Telephone (714) 759-1200
Fax (714) 759-6620

April 27, 1993

Ms. Keri Rigoni
Environmental Management Agency
P.O. Box 4048
Santa Ana, Ca 92702-4048

Re: Draft Environmental Impact Report #546

Dear Ms. Rigoni:

This association of 647 homes, located in the Eastbluff area of Newport Beach, immediately adjacent to the noise abatement departure route from John Wayne Airport (JWA), appreciates the opportunity to comment on Draft EIR 546.

Since action of the Federal government is essentially forcing those who live near JWA to contend with a noisier airport, we consider it important that those citizens so situated receive some assurance that the impact of aircraft noise upon them will be moderated and/or limited in the future. We thus make the following recommendations concerning Draft EIR 546: 16

1. That the term of the existing 1985 Settlement Agreement (Stipulation) be extended from Dec. 31, 2005 to Dec. 31, 2015.

2. That the PASSUR radar system, installed for the departure noise demonstration program, be retained by the County, and utilized to ensure compliance with the long established noise abatement departure route from JWA. 17

3. That the noise abatement performance of departing aircraft be closely monitored over the coming year, and the proposed noise limits for the project case be refined to the lowest levels possible before being finalized in a long term agreement. 18

4. That the project include measures to ensure those residents impacted by the project, and its changing noise limits and exposure, be treated fairly through viable, and funded, "buy-out" and acoustic insulation programs. 19

Thank you for your consideration.

Charles H. Currier, President
The Bluffs Homeowners Community Association

2414 Vista Del Oro • Newport Beach, California

RECEIVED
APR 30 1993
EMA

April 28, 1993

TO: Kari Rigoni, Senior Planner
County of Orange
Environmental Management Agency
12 Civic Center Plaza
P.O.Box 4048
Santa Ana, CA 92702-4048

FROM: Martin R. South Jr., Representative
Riverside Drive Kennel Owners Group
20332 Riverside Drive
Santa Ana Heights, CA 92707

SUBJECT: RESPONSE TO DRAFT ENVIRONMENTAL IMPACT REPORT NO. 546.

Dear Kari Rigoni,

The Riverside Drive Kennel Owners Group (RDKOG) is undoubtedly one of the most completely unique entities Orange County, the State of California and quite possibly the United States of America will ever have. "Tract 2581, in the unincorporated territory, County of Orange, State of California being a subdivision of a portion of Lot 18, Tract 456 as recorded in Book 17, Page 9 of miscellaneous maps, records of Orange County, California, being a portion of block 5 of the Irvine Subdivision MRM BK1 Page 88. April, 1955 14 lots 3.6 acres". The reason for the Tract 2581 description quote will become obvious as I present several points of interest and several of our concerns.

First of all, RDKOG understands that the County of Orange (OC) is attempting to commit an unlawful act through the EIR #546. State of California, California Administrative Code Title 21, Public Works, Division of Aeronautics, Subchapter 6. Noise Standards, Article 2. Airport Noise Limits Sect. 5010 PURPOSE; clearly states....."the purpose of these regulations is to provide a positive basis to accomplish resolution of existing noise problems in communities surrounding airports AND TO PREVENT THE DEVELOPMENT OF NEW NOISE PROBLEMS". It should be obvious to you that your own Document 546 states beyond any doubt that JWA is in fact developing NEW NOISE PROBLEMS since allowing jet carriers access to it and in and during the specific period of testing from late March 1992 to the present.

20

RESPONSE TO DRAFT ENVIRONMENTAL IMPACT REPORT NO. 546 BY RDKOG. (cont.)

Second, under the same Article 2 of Title 21 Sect. 5011.(f) refers to "Development of a compatible land use within the noise impact boundary". RDKOG simply can not imagine a land use more compatible than 14 commercial kennel businesses. The noise of all the dogs of all the kennels barking simultaneously are totally overwhelmed by the single event of all but Class E aircraft departures. 21

Third, still Article 2 of Title 21 Sect. 5014 compatible land uses within the noise impact boundry have deemed (a) "AGRICULTURAL, as a compatible land use". The reason I would bring this to your attention is the fact that Tract 2581 was zoned A-1 (agricultural) until the adoption of the land use district regulations adopted October 15, 1986; Chapter IV of the Santa Ana Heights Specific Plan (SAHSP). RDKOG, at all meetings of the Orange County Planning Commission (OCPC) and Orange County Board of Supervisors (OCBOS), vehemently objected to this zoning change. It has, in fact, created and been an enormous hardship. Commercial bankers see us as a residential community and S & L's see us as commercial businesses. It is very hard and extremely difficult to sell property when there are no willing lenders. 22

Tract 2581 is situated approximately four hundred feet at the nearest and about nine hundred fifty feet at the greatest distance to RMS 1 on a line of about two hundred twenty five degrees or almost due south/west. Normal departures seem to parallel this angle with a turn of about forty five degrees to the south that must be close to due south (180°). Because of this we are bombarded with copious amounts of aircraft noise. Sometimes departures are extreme, turning due west over our homes (as happened April 1, 1992) and Santa Ana Wind conditions make for some interesting arrival aerobatics. Sometimes late arrivals will make our homes rattle when reverse thrust is applied. It would seem that in the later hours, the sound is carried by the gentle breeze that blows from inland out to sea. This happened most recently on the evening of April 22, 1993. Apparently commercial flights were delayed because of a "wheels up landing" of a small general avation type aircraft. RMS 1 must have registered between 90 to 100 dB on at least one of those commercial carriers. We have also noticed a marked increase in the number of commercial carrier repairs that are typically carried out in the wee small hours of the morning. Often the jet engines are run up and down for hours on end and usually from 2330 to 0400 hours. No doubt this noise also registers on RMS 1, and it also violates the curfew. 23

With all this in mind I will get directly to the EIR #546.

First, we are concerned with the OC mitigation measures that include 3.2.3. LUCP Mitigation Programs, Purchase Assurance and Acoustical Insulation (PA),(AI). Those programs were doomed at their inception with RDKOG. I tried to explain our reasons to 24

RESPONSE TO DRAFT ENVIRONMENTAL IMPACT REPORT NO. 546 BY RDKOG (cont.)

Rich Adler in the mid 1980's when he was in charge of the Project Area, long before the SAHSP was being written. The majority of our homes had already been insulated, dual glass windows installed and many had air conditioning. According to note 89 page 129 of EIR #546, a maximum of $32,500.00 for AI improvements plus engineering services of $5,000.00 for a total of $37,500.00 per residence is the typical OC expenditure for the avigation rights of that specific owners property. As far as PA, RDKOG had no use for it because we have the only commercial kennel property in OC that is zoned in such a way (at that time A-1 Agricultural) and now RK which gives us the best of both worlds. Unlike Kermore Lane, Jackson Street, Bativa, Collins, etc., we are able to pull permits to improve both our homes and businesses. When RDKOG inquired about remuneration for our expenses and effort, OC turned us down cold. When we inquired with reference to the purchase of our avigation rights by OC in lieu of AI/PI, once again OC turned us down cold. Though the percentage of real estate would be a fine line in the real estate pie, there are numbers of dog fanciers and dog breeders that would consider our RDKOG something "to die for". We are considered the BelAir of all kennels in the Southern California Area. We are in fact situated in the middle of a highly educated, affluent and knowledgeable clientele. Our Tract 2581 is in a geological area that has not, and never will suffer flooding, such as the Huntington Beach Area of the Santa Ana River Flood Plain. We have geologic stability and will never experience seismic puddling as has been predicted along much of the OC coast. We have a typical southwesterly breeze off the ocean almost every day through the hot months and seldom suffer the smog conditions found inland. We own our own water company. We have sidewalks, curb and gutter, paved street, sewer, phones, electricity, natural gas and cable tv, and all in good repair. Although the OC, to initiate their redevelopement agency, were forced to put the lable "Blighted area" on RDKOG, I can assure you that we are anything but "blighted". In fact, the OCBOS paid $28.14 per square foot for 3.1 acres of the worst part of the area, "Lang Drive", and considered that price to be fair market value. OCBOS paid a total price of three million eight hundred thousand dollars, plus, the cost of removing existing structures and tons of junk and trash just to clear the property. There are still over seven thousand ya rds of dirt that were dumped there illegally by the prior owner of the Lang Drive Property that must be dealt with. 24

Second, RDKOG is concerned with the constant threat that, because of the noise levels experienced in our area, we are candidates for condemnation under the guidelines of Title 21 Section 5012, Airport Noise Criteria. At the Project Area Committee (PAC) meeting held the evening of December 3, 1992 in Airport Conference Room #1 of the Airport Operations/Security Office, Proctor for JWA (Michael Scott Gatzke) made it clear that, based upon the response to the 25

RESPONSE TO DRAFT ENVIRONMENTAL IMPACT REPORT NO. 546 BY RDKOG (cont.)

questionnaire sent out to Santa Ana Heights in general by EMA, he would make a recommendation to the OCBOS. Mr. Gatzke stated that he might have to "inform the OCBOS that it is time for them to bite the bullet and buy us out". The State of California has enacted laws that make it necessary for the owner or seller of a property to disclose any abnormalities that a buyer may encounter in the purchase. I refer specifically to the fact that RDKOG properties have become entraped by the recent testing being conducted at JWA. I personally had my home and commercial kennel business listed with Westgate Properties for over a year . Each time my home and business were shown and the disclosure made with regard to JWA and possible condemnation, the potential buyers were lost. They simply "did not wish to become involved in litigation with potential loss of home and commercial kennel business." It was always a "let us know when the airport thing is straightened out".I took my house and business off the market April 1, 1992 to wait out a test that was to have terminated December 31, 1992. JWA then extended the test and here it is, almost May of 1993 with no decision. Here I am, spending hundreds of hours studying documentation and just as involved as I ever have been when I had hoped to be retired and out of here several years ago. The OCBOS are finally going to have to make a decision, and rather quickly. While I do not know the finer points of the law, I am aware that the JWA has and does entrap us. We are unable to market our homes and businesses. This is against the law. We have received no "Just Compensation" from JWAfor this "taking of our property for the purpose of noise tests which have now exceeded one calendar year". It is my understanding that precedents have been set in law that require "Reasonable Time","Time of the Essence" be observed. In other words, OCBOS are going to have to make a decision right away. If not, you will force us into a position wherein the court will make the decision for you. We hereby declare that we refuse to wait for any further tests or studies to be done and fur thermore we will not tollerate waiting another five to fifteen years for a possible El Toro Projct. If it is your intent to condemn us, condemn us. Do it now. Let us get on with our lives. Thank you. 25

Third, if it is your intent to leave us to our homes and businesses, let us know in a written statement to that effect. We would then expect OCBOS, in good will and faith, to zone us back to A-1 Agricultural. This would eliminate the hardship of dealing with S & L's and commercial bankers and also exempt us with Title 21 Section 5014 (a) which would automatically make our land use compatible with the activities of JWA. We would also demand that Section g. SPECIAL REGULATIONS be totally eliminated from the SAHSP. That entire section is ludicrous considering the intent of EIR #546. 26

RESPONSE TO DRAFT ENVIRONMENTAL IMPACT REPORT NO. 546 BY RDKOG (cont.)

Last, we are having a hard time accepting the Appendix D, Noise Technical Appendix, as presented in the EIR #546 by Mestre Greve Associates. In the SENEL Contours, the RMS are set to monitor all commercial departures, but few of the general avation departures. I do not believe the CNEL averages are accurate because of this. I have personally monitored private aircraft over my home that are will above 85dB. I was shocked at several twin engined departures that I call "Sky Kings" (maybe that radio show was before your time) that went over 92 dB on my meter. The all time noise maker is a twin-boomed thing with a puller engine in front and a pusher engine in the rear of the centeral fuselage. That thing hit 109 dB on six touch and go's. I finally called Noise Abatement and complained. Noise Abatement returned my call and stated that a student pilot had the manifold pressure set at 135 pounds and corrected the problem. I have enclosed Exhibit 12 with General Avation departures marked as we see them day in and day out. It would seem reasonable to me that the 65 CNEL impact area should be extended to the south/west to include the greater portion of the Lang Drive Project. Even though Exhibit 12 says April 1991-March 1992, I believe it should depict Exhibit 15a, with the exception that the 60dB contour line would be in fact the 65 or 70 dB CNEL contour line. In any case I just can not buy the Mestre Greve projected data of Exhibits 15a, 15b and 15c.

27

Sincerely,

Martin R. South Jr.

Copies:

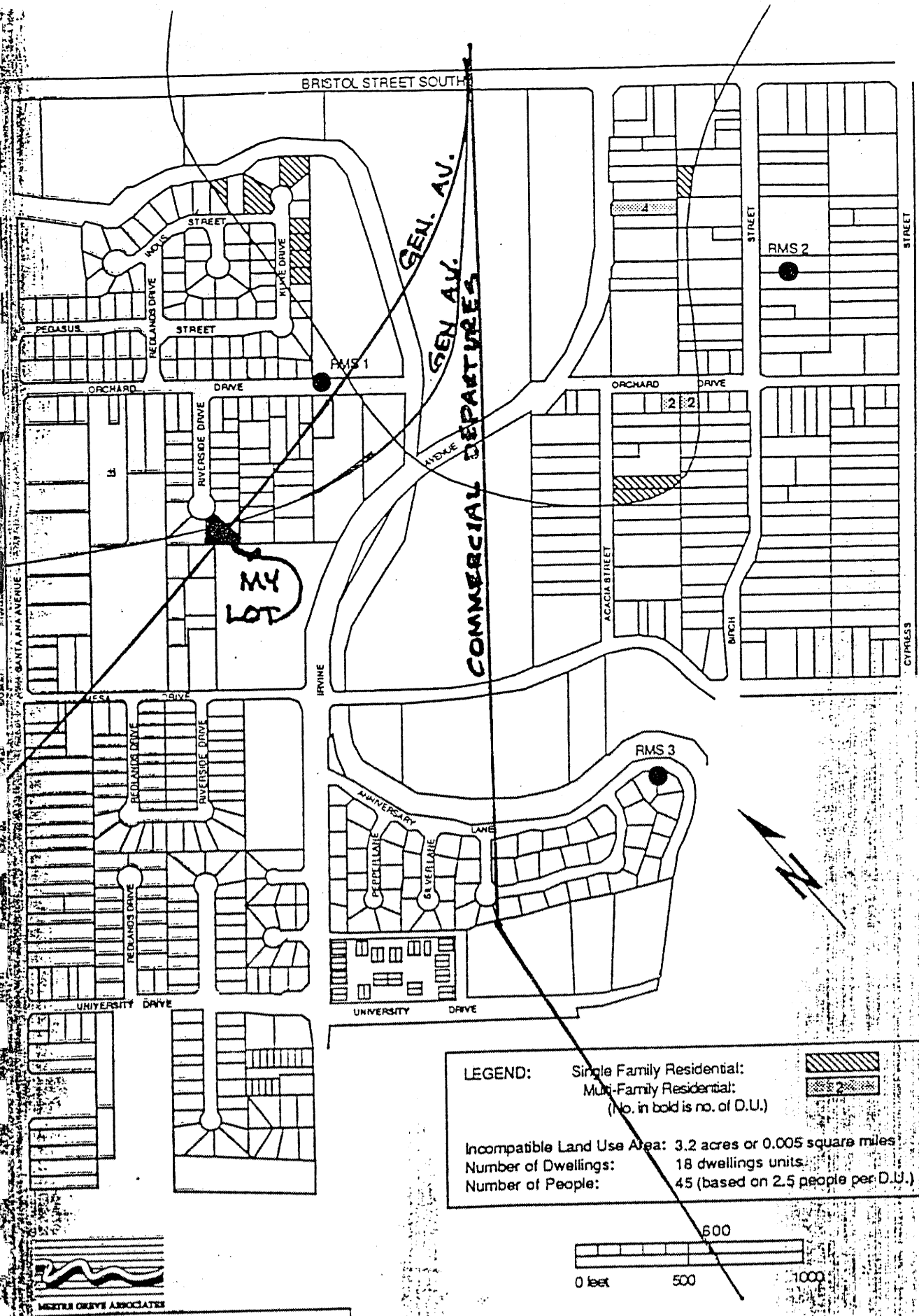
ROBERT BANGHART RDKOG PAC Member

GEORGE BRITTON EMA Project Area Director

ROBERT F. WALDRON Attorney Palmieri, Tyler, Wiener, Wilhelm, Waldron

CHRISTOPHER COX Representative Fortieth District U S Congress

File - 2



MEIETH GREVE ASSOCIATES

APRIL 1991 - MARCH 1992
65 CNEL IMPACT AREA

Exhibit 12

First Quarter 1992 Santa Ana Heights CNEL Noise Contours

April 28, 1993

The Honorable Christopher Cox,Representative Fortieth District
United States Congress
4000 Mac Arthur Blvd.
East Tower, Suite 430
Newport Beach, CA 92660

Dear Congressman Cox,

As the representative for the Riverside Drive Kennel Owners Group (RDKOG) and owner of a commercial kennel business/residential property (zoned RK) in the Santa Ana Heights area between Mesa Dr.(south), Bristol (north), Irvine (east) and Santa Ana Ave. (west), I would pray for your consideration to an immediate crisis. The County of Orange has released Draft Environmental Impact Report No. 546"Phase 2 Commercial Airline Access Plan and Regulation" document for review and comment. All comments must be received by Wednesday, May 5, 1993 by 5:00 pm.

Enclosed is RDKOG response to the EIR 546. Suffice it to say that the "bottom line" is that federal funding is critical to the necessary mitigation measures that will occur, not only to my respective group, but to the specific area.

In December of 1992 John Wayne Airport Administrators met with Federal Avation Administration people in Washington DC and as I understand it, returned with the understanding that FAA was quite amicable to the imminent funding proplems of Orange County, JWA, and the redevelopment agency. This was during the Bush Administration. No one seems to have a clue about the Clinton Administration. We need all the help we can get.

Thank you for your kind attention to this mat ter Congressman Cox.

Martin R. South Jr., Representative
Riverside Drive Kennel Owners Group
20332 Riverside Drive
Santa Ana Heights, CA 92707

Copies:

Robert Panghart	RDKOG PAC Member
George Britton	EMA Project Area Director
Robert F. Waldron	Attorney Palmieri, Tyler, Wiener, Wilhelm
File- 2	

CITY OF COSTA MESA

CALIFORNIA 92628-1200 P.O. BOX 1200

DEVELOPMENT SERVICES DEPARTMENT

April 29, 1993

Ms. Kari Rigoni, Senior Planner
EMA/Environmental Planning Division
County of Orange
Post Office Box 4048
Santa Ana, CA 92702-4048

Re: **DRAFT EIR #546**
JOHN WAYNE AIRPORT PHASE 2 ACCESS PLAN

Dear Ms. Rigoni:

Thank you for addressing comments from the City of Costa Mesa (letter dated December 11, 1992) in Draft EIR #546. The City is concerned about noise impacts to sensitive receptors such as day care centers, schools, congregate care centers, as well as residential areas.

According to Section 3 of the Draft EIR, none of the project alternatives would impact sensitive receptors in Costa Mesa. The 65 CNEL contour (a threshold of significance) for any of the alternatives would not encroach into the City's residential areas. However, the portion of Santa Ana Heights, west of Irvine Avenue in the City's Sphere of Influence, would be significantly impacted by either Alternative 1, (1,500 foot power cut-back) or Alternative 2 (800 foot power cut-back), although slightly less so for Alternative 2. The No Project alternative (no amendments to Phase 2 Access Plan) and Alternative 3 (maintain existing 65 CNEL contour) are environmentally superior although neither meets the project objectives. 28

The City of Costa Mesa has three comments to correct errors in the Draft EIR. On page 47 in Section 2.6.7, the document says that the City adopted a revised General Plan in 1981. This is true, however, the General Plan was updated again in March of 1992. A Growth Management Element was added the following month. 29

Secondly, on top of page 48, the Draft EIR says that Costa Mesa has a policy which 'encourages "retention of current capacity limitations on JWA"'. This is not on the list of General Plan policies attached to the City's letter (see Appendix B). Please clarify where this language was found. 30

Lastly, also on page 48, third paragraph, the Draft EIR says that the "City's policies relating to the airport are included in Chapter 4". This is the chapter on alternatives. Do you mean Appendix B or perhaps Section 3.2, Land Use? 31

The City of Costa Mesa will need to update the Noise Element of the General Plan based on the project alternative approved by the Orange County Board of Supervisors. Please forward a copy of the Final EIR to me for this purpose. If possible, may we have a clear copy of the CNEL contour exhibits showing existing and ultimate (year 2005) contours? The exhibits in the Final EIR may not reproduce well. 32

Thank you for the opportunity to review and comment on the Draft EIR. Please call me at (714) 754-5136 if you have any questions.

Sincerely,

Kristen C. Petros /plw

KRISTEN C. PETROS
Associate Planner

(EIR#546.KCP)C14

cc: Allan Roeder, City Manager
Don Lamm, Deputy City Manager-Dev. Services
Thomas Kathe, City Attorney
Perry Valantine, Planning Manager
Mike Robinson, Principal Planner

May 7, 1993

Ms. Kari Rigoni
Orange Co. Environmental Management Agency
12 Civic Center Plaza
P.O. Box 4048
Santa Ana, CA 927092-4048

SNA AIR CARRIERS/AIRFRAME MANUFACTURERS COMMENTS CONCERNING DRAFT ENVIRONMENTAL IMPACT REPORT #546

Dear Ms. Rigoni,

On April 14, 1993, representatives from nine SNA air carriers, three airframe manufacturers, and the Air Transport Association met at SNA to review and develop this response to the subject Draft E.I.R. #546. Mr. W. TeWinkle, from FAA Flight Standards was also present to give the group guidance on the status, and timing of the Advisory Circular 91-53A, and FAR part 161.

I would like to stress the fact that the comments that follow have a unanimous agreement among the nine SNA air carriers, (American West, American, Alaska, Continental, Delta, Northwest, Transworld, United, and U.S. Air) which were arrived at with the technical assistance of three airframe manufacturers (Boeing, Fokker, and McDonnell Douglas). Based on the analysis performed by the airlines and airframe manufacturers, it was decided to submit a single industry response concerning the E.I.R. 1

Executive Summary

The nine airlines and three airframe manufacturers listed above agree with the Draft E.I.R. #546 objectives of maintaining the pre-demonstration (April 1, 1992) aircraft and airport capacity capabilities, and, avoiding the use of an SNA specific noise abatement departure profiles. These objectives can not be met if the maximum noise levels of the "No Project", or "Alternative 2" are implemented. 33

Either of two variations of "Alternative 1", which we call "Version A" and "Version B" would be an excellent compromise in everyone's interest and would resolve the current significant differences of interpretation in noise levels between all interested parties. Both version "A" & "B" are described below in detail.

Joint Industry Comments

1. For the past six months, the SNA air carriers and basically three airframe manufacturers, Boeing, Fokker and McDonnell Douglas, have spent many hours at numerous meetings with the SNA airport staff reviewing the noise database developed from the flight demonstration program which commenced on April 1, 1992. During these meetings a very large difference of opinion developed between the airport staff and the industry about interpretation of the proposed class "A" and "E" noise limits required at noise monitor numbers 1, 2, and 3 in order to preserve the pre-demo level of airplane capability. 34

   All during our discussions with the airport staff, the airlines have emphasized that it was not our intent, nor desire to increase the number of allowable "A" class operations at SNA. The airlines' desire has been simply to operate as close as possible to runway limited weights in order to carry as many passengers on a given flight as possible thereby improving the economics of the operation.

   The Draft E.I.R. fails to recognize the further changing market place that is occurring in the air transportation system due to many factors, including a depressed domestic economy which has resulted in the United States' airlines losing approximately Ten Billion dollars during the past three years. 35

   If the "Alternate 1" maximum noise levels are implemented it is quite apparent that TWA will have great difficulty meeting the quarterly noise average requirements. This is because TWA is operating only two MD-80 departures per day, both to St. Louis, at close to runway limited takeoff weights, that is, 130,000 lb. to 133,000 lb. Alaska Airlines also has a high probability of problems with its Seattle MD-80 operation. Changing market strategies, such as the recent American Airlines announced reduction of service at San Jose, and more long-haul flying at SNA with MD-80's to Seattle raises the specter of similar problems occurring with them. 36

   The flight profile demonstration testing from April 1, 1992 to Sept. 30, 1992, provided a very useful database. However, a majority of the noise data was provided for short haul missions, at substantially less than runway limited takeoff weights. There was, in general, a lack of noise data for the high takeoff weight case. It wasn't until October 1992 that the longer mission higher takeoff weight noise levels were generated in quantity by the two TWA departures to St. Louis. 37

   When the TWA data, along with historic American Airlines takeoff weight data for August and September 1990, (a time period when American Airlines operated MD-80s to Dallas/Fort Worth and Chicago), and MDC noise qualification data are carefully analyzed, the industry reaches the conclusion that perhaps the selection of either of two modified versions of "Alternate 1" would best serve everyone's interest. We propose "Alternate 1, version A" and "Alternate 1 Version B" described below:

"Version A"
Since the industry and the airport staff still have significant difference of opinion on the interpretation of the MD-80 demonstration noise database, we would like to offer a concept where "Alternate 1" noise levels are selected, but the MD-80 operation be exempt from penalties for nine months starting July 1, 1993. During this time the airport staff will continue to add to the noise database, giving all concerned an opportunity to better understand the noise impact/benefit trade that is occurring in the airport communities. It is hoped that at the end of the additional nine months of data collection, all parties would accept the noise limits inherent in the data, and close this chapter for the remainder of the access plan. 37

"Version B"
If the airport/communities are unwilling to accept the "Version A" concept, the EIR's "Alternate 1" should be implemented with the maximum noise levels at monitors # 1 & 2 raised to 102.5 dBA SENEL. The Airlines desperately need some flexibility in the operation to serve the market place. The price of this flexibility is about 1.0 dBA increase if the "Alternate 1 Version B" maximum noise levels are implemented.

We further believe that implementation of either "Alternate 1 Version A" or "Alternate 1 Version B" is consistent with our formal understanding from the FAA Associate Administrator of Flight Standards that the adoption of AC91-53A would not be permitted to have adverse impact on any air carrier or manufacturer and that operating missions after implementation of AC 91-53A should be no less than those flown before. FAA informed SNA staff of its intention. We believe that limiting the MD-80 or any other airplanes' capability from SNA would violate the provisions of Federal Aviation Regulation (FAR) Part 161 established by the Airport Noise and Capacity Act of 1990. 38

We believe that the SNA staff recommendations for class "A" airplanes at monitors 1 and 2 rely too much on a "snapshot" database taken during the third quarter demonstration at SNA while ignoring the broader MD-80 current and probable future mission requirements. The SNA staff recommendations reflect a lack of flexibility for airlines to be able to operate the MD-80 profitability over historically longer missions as market demands. Weight restrictions on the order of 4000 lbs. could occur which represents approximately 20 passengers. This is an unwarranted penalty. 39

Implementation of either "Version A" or "Version B" noise limits would preclude single event noise levels in Santa Ana Heights that are perceivably different to humans than those in the past. Moreover, the MD-80 airplane altitudes, when power is reduced at 800 ft instead of 500 ft, would be higher south of Santa Ana Heights producing lower noise than before. 40

2. The industry is very concerned about the potential impact on the SNA operation if "Alternative 2" or "No Project" is implemented. The issue of concern is that the Low Load carrying capability associated with the 41

"Alternative 2" or "No Project" Class E noise limits for many airplane types will have the effect of not allowing the airlines to move into Class "E" since they will be unable to carry sufficient passengers to make a profit. 41

The community agreed to the 8.4 map so noise limits should be adopted that allow growth (primarily in Class E) to that number of passengers. The airport will find that with "Alternative 2" and "No Project", it will be impossible to grow to the 8.4 million passenger cap because the airlines will be impeded from increasing the "E" class operations. The "Alternative A or Version B" would minimize this adverse impact.

A good example of this impact can be demonstrated with the America West B737-300 Class "E" operation. Pre-test history reveals that a B737-300 with CFM56-3B2 Engines were capable of takeoffs at 103,000 lb. This equated to carrying 95 to 105 passengers on a one hour stage length. This capability was achieved by reducing thrust at 1000 feet above field elevation, to a power level that would provide a negative 3% climb gradient with one engine failed. Impending amendment to Advisory Circular 91-53 prohibits power reductions below positive 1.2% gradient settings. For two-engine aircraft this factor alone adds to the minimum noise levels the aircraft is capable of producing. To perform 90.0 SENEL levels as proposed at monitor 1, takeoff weights must be limited to approximately 93,000 pounds. This 10,000 lb. lower weight equates to approximately 72 to 77 passengers. 42

And so, the issue of concern is how to accommodate future passenger growth. If "Alternative 2" is implemented, some airplanes will require blocked seats just to meet the noise limits, so future passenger growth will not be accommodated by simply filling empty seats. Furthermore, additional flights to carry the additional passengers will be unlikely since Class "A" & "AA" slots cannot be increased and Class E flights will be impractical as previously discussed. So future passenger growth might not be viable under "Alternative 2", whereas the "Alternative 1" would allow at least moderate growth by filling a few of the unused seats and by expansion into Class E. "Alternative 2" and "No Project" will cost the carriers many millions of dollars in terms of revenue left standing at the gates. Neither the airlines nor John Wayne Airport can afford this many denied boardings, and consequent lost revenue. 43

Also in September 1991 the Fokker 100 qualified as an Class "E" aircraft using 400 ft cutback altitude. Although the aircraft was not operated at the airport during the noise trials, Fokker has done enough flight testing to be able to estimate the effect of changing the cutback altitude. Based on data presented to the Noise Assessment Working Group, the revised limits required to maintain the qualified weights would be: 44

M1	91.3 to 94.8 dB SENEL
M2	91.1 to 94.6
M3	87.0 to 94.1

The lower values would be for an 800 ft. cutback, the higher for a 1500 ft cutback. It is obvious that "Alternate 2" would further limit the operating weight of the Fokker 100 by approximately 15 passengers and make Class "E" Operation not economically viable for the operators. The "Alternate 1" numbers would permit reasonable Class "E" payloads and give the airlines some flexibility in choosing cutback altitude. 44

3. The airport staff has requested that the airlines declare what future noise abatement procedure they intend to use in order to comply with Advisory Circular 91-53A, by no later than May 24, 1993. We believe that's "putting the cart before the horse". 45

   The airlines' position is that the airport should set the allowable noise levels at the various noise monitors. Neither the airport or community should dictate the details of the takeoff procedure, such as the altitude at which power reduction is initiated. The airlines will develop the appropriate procedures as we have done in the past, to meet the maximum noise requirements, and be consistent with the criteria of Advisory Circular 91-53A.

4. In 1985, Orange County entered into a settlement agreement with the city of Newport Beach and two community groups. Inherent in this settlement agreement was a 65 CNEL contour representing the level of airline operation contemplated in the 1985 master plan which covered the time period through year 2005.

   Since 1985, the airlines have produced yearly 65 CNEL contours that were smaller than the base line contour of the 1985 master plan. This was in large part achieved primarily by the introduction of quieter aircraft in the "A" category, such as the B-757 substitution for the MD-80. Note that the present 39 "A" slots are occupied by 14 MD-80 departures, with the rest being occupied by quieter aircraft. Because of this, the industry believes that the Draft E.I.R. #546 places too much emphasis on the operational scenario of 39 MD-80 "A" category departures. This is not a scenario that appears to have any degree of probability of occurrence. 46

   Draft E.I.R. #546 shows numerous future 65 CNEL contours based on the "N.O.P.", "Alternative 1" and "Alternative 2" operational scenarios. Changes in impact areas are then developed by comparison with pre-demo actual operation. The industry believes this comparison is erroneous. The real comparison should be made against the 1985 Master Plan 65 CNEL contour. The projected adverse impacts will be much less.

   It is unfortunate that the E.I.R. along with the airport staff, and the communities, do not give the airlines any credit for past noise reduction achievements that were beyond those required.

Conclusions and Recommendations

The industry concludes that the "No Project Option" and "Alternative 2" would not meet the Draft Environmental Impact Report objectives, that is:

1. Maintaining pre-demonstration airplane capability.

2. Avoiding airport specific noise abatement departure profiles.

47

A failure to not conform with 1 & 2 above would, we believe, put the airport in non-compliance with F.A.R. Part 161, and possibly jeopardize the airport "Grandfather" status.

The industry recommends the support of "Alternative 1, Version A or B" which we feel would be a good compromise between the communities, local businesses, the airlines, and the flying public. The safety of the operation will be enhanced through operational standardization action, and the resultant economic improvements will benefit all concerned.

48

Very Truly Yours,

Richard Linn

Richard Linn
Chairman, Noise
Assessment Working Group

cc: Mrs. Jan Mittermeier
Director-John Wayne Airport
3161 Airway Ave. - Bldg. K-101
Costa Mesa, CA 92626

Mr. Wes TeWinkle
Technical Prog. Div. AFS 430-FAA
800 Independence Ave S.W.
Washington D.C. 20591

Mr. Anthony J. Broderick
Assoc. Adm. Regulation & Certification - FAA
800 Independence Ave. SW
Washington D. C. 20591

SNA Air Carriers
America West
American
Alaska Airlines
Continental Airlines
Delta Airlines
Northwest Airlines
Transworld Airlines
United Airlines
U.S. Air

Airframe Manufacturers
Boeing
Fokker
McDonnell Douglas

STEINER INVESTMENT COMPANY
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1560 SUPERIOR AVE. #A2
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Kari Rigoni
EMA/Enviornmental Planning
300 N. Flower #321
S.A., Cal. 92702-4048

R.E. Draft EIR #546- John Wayne Airport Phase 2 Access Plan

Dear Kari Rigoni;

As impacted residents, located at 389 Seawind, Newport Beach, Cal., we have read EIR #546 and believe it is inadaquate or incomplete as to the following items:

1)- No study of alternative sites for Class A, and noisier, flights to depart Orange County. We believe El Toro to be an ideal site for a new O.C. airport, for all Class A, etc. flights in and out of O.C.
2)- Runway lengthening study and it's effect on all noise at John Wayne.
3)- Study completely disregards all Class E, general aviation. Of particular conscern to us, are the following;
A)-No regulation of any flights between 10:00P.M. and 7:00A.M., daily. This has led to increased night noise over surrounding homes. There are no controls to monitor dangerously low aircraft, flying directly over homes. There are no tracking controls to steer gen. aviation flights away from surrounding homes, as there is for Commercial planes. No monitoring of increasing noisy night flyers who avoid being identified by flying after 10:00P.M. We feel all night flights that break the monitor levels for allowable night time noise, should reduce the allowed daytime noisiest flights by the same number.
4)- Study does not allow for future errors in take-off tracking by all Commercial flights. County has no control over pilot's take-off tracking, however, to date they have volutarily tried to follows tight tracking for the current EIR studies. In the future, do to either County being lax in monitoring tracking, or pilot's resistance to same, the CNEL projected by the EIR, could actually be much wider than predicted. This would put bordering homes within the 65 CNEL, that are now projected to be just outside same.
5)- Possible error to projected 65 CNEL contours do to distance between Monitors #3 and #4 on the West side of the bay. Even temporary #22, was spaced where there may have been two monitors,(as there was on the East side of the bay).
6)- Many homes such as ours, used to be outside the 60 CNEL contours,as they were before 1992. Such homes are now well within the 60 CNEL cont but are projected to be just outside the critical 65 CNEL contours. As such, they do not qualify for the County's "insulation" or "purchase" programs. Yet, these homes are the most impacted by the new noisier take-offs. Many home owners purchased their homes after 1985. Those people were counting on the "Agreement" for noise levels at John Wayne to remain the same until 2005. Some of the owners made large, expensiv additions, based on the same premises. The EIR does not propose any mitigation for these people's reduced property values or damaged life-styles, do to the proposed perminant increase in noise. There should be a "Hardship" program for people who purchased, and/or added on to their properties between 1985 and 1992, that are dramatically affected by the proposed new, noisier take-offs.

7)- No studies of individual homes especially impacted by noise. i.e. certain homes face directly onto Irvine Ave. or directly face the Back Bay. Other homes are protected from aircraft noise by other homes or walls,etc. Second stories would be more impacted than single story homes. Different roofing materials or other construction may affect noise inside homes. Study ignores all noise levels inside the living areas of homes. 55

8)- No study of how sleep disruption caused by increasing general aviation or increased noise around the 60 CNEL contour proposed, would affect individuals. No study of different sensitivety to noise by certain individuals. 56

9)- Finally, we feel the EIR proposals may be prejudiced. The County may be reducing noise over the marginally affected residents well out of the proposed 60 CNEL contour, at the expense of the individuals that are at, or near the proposed 60 CNEL contour. 5

Sincerely,

Michael and Cherie
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Newport Beach, Cal.
92660

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ELIZABETH M. DODD
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May 11, 1993

Via Federal Express

Kari Rigoni, Senior Planner
EMA/Environmental Planning Division
County of Orange
300 N. Flower St., Room 321
Santa Ana, CA 92702

Re: Comments of the Airport Working Group on Draft EIR #546

Dear Ms. Rigoni:

These comments are submitted on behalf of the Airport Working Group of Orange County, Inc. ("AWG"). AWG is a party to the 1985 Settlement Agreement which established the flight levels and passenger capacity now available at John Wayne Airport ("JWA"). That settlement also established maximum noise levels for commercial aircraft operations. This latter provision is extremely important to AWG and, of course, it is the subject of Draft EIR #546.

AWG has a continuing role in the enforcement and implementation of the 1985 Settlement Agreement. The proposed changes in maximum noise levels at criterion monitoring stations can not be implemented without AWG's consent as well as the consent of the City of Newport Beach and SPON. AWG has cooperated in the noise testing procedures which began in March of 1992 by executing several stipulations in the federal court litigation which temporarily vacated the maximum noise levels allowed by the Settlement Agreement. These comments are submitted in order to highlight AWG's concerns with the increases in aircraft noise which would occur if the County's proposal is adopted. We ask that these comments be addressed in the Final EIR.

AWG is aware that the proposal to increase maximum noise levels is not the County's idea.[1] The County, as well as AWG and the rest of the community, are reacting to proposals by the FAA to modify departure procedures such that the procedures in use at JWA for years could no longer be used. Those long standing procedures were sanctioned by the FAA and AWG has seen no data which supports the proposed changes. In fact, while the FAA portrays the changes as having national significance, it is apparent that their main, if not only, impact would be at JWA. 58

These comments first present AWG's general concerns and then set forth specific comments.

General Concerns

1. Postpone adoption of project until FAA actions require adoption

The County proposes to adopt specific increases in noise levels at the criterion noise monitoring stations in June of this year even if the FAA has not adopted the proposed Advisory Circular which would necessitate these changes. See pages 39, 102 and 104 of Draft EIR #546. The FAA has continually postponed adoption of the circular. We are not aware of a new target date for adoption. There is a new Administration in Washington but as of yet a new FAA Administrator has not been selected. Frankly, the proposed FAA action has always had a political component. The whole notion of adopting the changes in departure procedures may be abandoned. 59

As acknowledged in the Draft EIR the noise environment in the area south of JWA will increase under either of the alternatives receiving serious consideration by the County. If these increases are sanctioned beyond the current test period as proposed by the County, they would tend to reflect a new status quo, or, in other words,

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[1] AWG has stated on several occasions, and will repeat here, that the County has implemented the Settlement Agreement in good faith and in full consultation with the settling parties. Were it not for the FAA proposal to change departure procedures, this Draft EIR would not have been produced and this whole controversy would not have occurred.

acquire a life of their own. There is no justification for this except if the Advisory Circular is adopted by the FAA. It is AWG's position that the proposed increases in noise levels not be adopted unless the FAA takes actions which necessitate that they be adopted. 59

2. AWG supports the 1500 foot power cutback

If the FAA does adopt the advisory circular, AWG supports specifying noise maximums based on an 800 foot power cutback by the MD-80 and a 1500 foot power cutback by all other jet aircraft.[2] This would result in fewer people suffering an increase in their noise environment. It also is more realistic to expect that carriers would adopt this procedure if the FAA does actually limit each carrier to two departure procedures per aircraft type. This reasoning is explained at pages 187 and 188 of Draft EIR #546 and we agree. Thus, at 800 feet above ground at most airports the aircraft would still be over the runway. This means that carriers are less likely to choose the 800 foot procedure as one of the two which might be allowed since it since it would not afford noise relief. 60

3. AWG requests lower increases in maximum noise levels

It must be observed that if the maximum noise levels are increased, the entire burden of absorbing the impact of the changes required by the FAA would fall on the community. Changes which would reduce flight levels or require use of quieter aircraft are beyond the power of the County to mandate due to the provisions of the Airport Noise and Capacity Act of 1990 ("ANCA"), 49 U.S.C. app. § 2151 et seq. As a practical matter AWG would not expect the FAA to approve such changes. This makes it all the more important that the noise increases be the minimum necessary to accommodate the FAA actions. AWG believes, based on expert advice, that the noise levels at the various monitors can be 61

[2] The noise created by MD-80's is minimized by use of an 800 foot power cutback procedure according to the data AWG has reviewed. AWG agrees with the County that a 1500 foot cutback procedure should not be used by the MD-80.

lower and still maintain the service levels and capacity of JWA. We propose the following levels for Class A and Class AA aircraft: 61

	A	AA	
RMS 1	100.5	93.5	
RMS 2	100	94.0	(same as County)
RMS 3	99	90.5	

4. Additional mitigation is necessary

Again, because the it is the community which suffers the entire burden of the increased noise, mitigation measures are critically important. In this regard, AWG disagrees with the conclusions of the Draft EIR that immediate implementation of reduced maximum noise levels for Class AA and Class E flights at monitoring stations south of RMS 3 not necessary, reasonable or feasible. AWG also disagrees with the same conclusion which the Draft EIR reaches concerning creation of a separate noise category for the MD-80. We do appreciate the County's willingness to continue discussing these issues but we request that the County reconsider the conclusions of the Draft EIR and adopt these mitigation measures as part of the proposed project. 62

In large part the reasons given in the Draft EIR for rejecting lower maximum noise levels down the bay for Class AA and Class E aircraft are based on concern over changing the rationales upon which maximum noise levels were set as part of the 1985 Settlement Agreement and the implementing Access Plan. However, those rationales are undermined by the FAA proposal to require different departure procedures. While it may be necessary to preserve JWA's flight levels and capacity as allowed by the 1985 Settlement Agreement (to avoid problems under ANCA), it is also necessary to protect the community from increased noise. AWG, SPON and the City bargained for stable noise levels as part of the settlement. Mitigation measures which would reduce noise must receive serious consideration. Establishment of lower maximum noise levels at RMS 21, 22 and 24 for Class AA and Class E aircraft would assure that the noise benefits of the 1500 foot power cutback procedure

are achieved.[3] AWG has proposed the following maximums:

	AA	E
RMS 21	84.0	83.0
RMS 22	83.5	82.5
RMS 24	84.0	83.0

They are designed to assure reduced noise and yet preserve flight levels and capacity at JWA.

As regards the MD-80, AWG is of the opinion that maximum noise levels for Class A aircraft could be substantially lower if the MD-80 were not a Class A aircraft. If the County is correct in projecting reduced usage of that aircraft at JWA in the future, there seems to be little reason to have maximum noise levels based on an aircraft that is little represented in the "Class A pool". For example, AWG believes that maximum noise levels for Class A aircraft without including the MD-80 could be established as follows:

RMS 1	96.0
RMS 2	96.5
RMS 3	92.5

Thus, to serve the purpose of minimizing the noise increase which would be imposed on the community by the proposed project, the MD-80 should be placed in a different category than other aircraft currently deemed to be Class A.

AWG requests the addition of a mitigation measure. The PASSUR flight tracking system which is being used as part of the noise testing program should be made permanent. That system allows precise tracking of individual flights as they depart JWA. This is very helpful in determining if particular flights or carriers are not following agreed upon departure procedures. It also aids in monitoring whether

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[3] On page 111 of the Draft EIR it is stated that if alternative 2 is selected, lower maximum noise levels at RMS 21, 22 and 24 would not be necessary. AWG disagrees. A departing aircraft could reapply power after achieving 800 feet above ground level but before reaching RMS 21, 22 and 24 or the coastline. This would result in more noise than is appropriate. Specifying lower maximum noise levels at the down the bay monitors would prevent this from occuring.

flights adhere to departure routes down the bay which in turns allows for more accurate noise measurements because it can be determined whether flights are passing over the noise monitors as anticipated. 63

Finally, as regards mitigation measures, AWG strongly opposes the runway extension study. While denominated a mitigation measure, actual extension of the runway could result in more aircraft noise due to longer stage lengths or higher takeoff weights by aircraft already using JWA or noisier aircraft qualifying to use the airport. Also, the data AWG has reviewed suggests that the runway extension would have marginal noise benefits. Continued consideration of the runway extension creates unnecessary controversy since many believe that it would end up being used to enhance the capacity of the airport in a manner which will increase aircraft noise. 64

If the study proceeds, it must address more than the engineering feasibility of an extension. It must address whether there are mechanisms for assuring that a longer runway will not, at some time in the future, be used for more than noise mitigation as suggested in the previous paragraph. It must also describe what additional noise could be generated if the full length of the runway extension were to be used.

Specific Comments

1. On page 8, footnote 10, it is stated that the project will have no effect on arrival patterns and therefore no effect on noise levels in areas normally under the arrival path. This is not the case when wind or other conditions cause departures to be to the north. Under these circumstances, areas normally under the arrival path will experience the same increases in noise as do areas normally under the departure path. 65

2. On page 28 there is a discussion of the background of the noise testing program. It is noted that during Phase III the carriers were generally flying those departure procedures anticipated to be in the lower range of single event noise levels. AWG has reviewed some of the data generated during that time and observed anomalies where supposedly quiet procedures appeared to produce higher single event noise levels. This suggests the wisdom of continuing the noise tests in order to make adjustments in the maximum noise levels. 66

3. On page 32, footnote 39, it is stated that the Board of Supervisors adjusted the maximum noise levels at RMS 1 and 2 because those monitors had to be moved. AWG, as well as SPON and the City, also concurred in these adjustments. The consent of these parties was necessary because the higher noise levels would otherwise have been in violation of the Settlement Agreement. Two points should be made. The Draft EIR does not give sufficient recognition to the role of the settling parties in describing the regulatory regime at JWA. And, the document does not acknowledge the good faith cooperation these parties have given to the County in implementing and adjusting the Settlement Agreement. 67

4. On page 34 it is stated that an increase of up to 4.2 dB SENEL is necessary at RMS 1,2 and 3 for Class AA aircraft. This is a large increase which, as determined by the Draft EIR, is above the level of significance for an increase in noise perceptible to human beings. The reasons for an increase this large should be explained. Further, the assumptions used for gross takeoff weights and stage lengths should be explained in comparison with actual takeoff weights and stage lengths under pre-test procedures for each aircraft in use at JWA. The public should be assured that the increases in maximum noise levels will not allow aircraft to qualify for a different class than they did under the old procedures. For example, a Class A departure under the preexisting rules should not become a Class AA under the new rules. 68

5. On page 34 the increase contemplated for maximum noise levels for Class E aircraft is in some instances even higher than for the Class AA situation discussed previously. The questions asked for comment 4 above should be answered for this situation as well. 69

6. On page 35 it is stated that TMS 21, 22 and 24 would be made permanent to provide permanent regulatory stations for Class AA and E aircraft. These monitors would also set maximums for Class A aircraft. See page 101 of Draft EIR 546. 70

7. On page 102 it is stated that McDonnell-Douglas has not reached agreement with the County on maximum noise levels. Neither has AWG which believes, as pointed out elsewhere in this letter, that lower maximum noise levels than proposed by the County are appropriate in some 71

instances. In this regard, on page 103 the County states that higher noise levels may be necessary based on further evaluation. These would be implemented for the 1994-95 Plan Year. AWG believes it just as likely that lower noise levels may be appropriate in some instances. 71

8. At page 196 of the Draft EIR it is stated that the FAA is studying making 5000 feet the permanent ceiling for departures from Runway 19R. AWG has been informed that the FAA has already made 5000 feet the permanent ceiling. Please confirm the status of this in the Final EIR. 72

Thank you for the opportunity to comment.

Very truly yours,

SHUTE, MIHALY & WEINBERGER

Clement Shute

E. CLEMENT SHUTE, JR.

ECS:kl

cc: Courtney Wiercioch
Michael Scott Gatzke
Robert H. Burnham
Thomas C. Edwards
Barbara E. Lichman

DOVER SHORES

COMMUNITY ASSOCIATION

May 4, 1993

County of Orange
Environmental Management Agency
12 Civic Center Plaza, P. O. Box 4048
Santa Ana, California 92702-4048

Attn: Ms. Kari Rigoni

Subject: Recommendations on Draft Environmental Impact Report #546, dated March 16, 1993

Dear Ms. Rigoni:

The enclosure to this letter constitutes the recommendations of the Dover Shores Community Association relative to the subject report. The Association consists of 310 homeowners located on the west side of the Upper Newport Bay.

Respectfully,

Seth M. Oberg, President
2012 Galaxy Drive
Newport Beach, California 92660
(714) 645-8999

Enclosure

DOVER SHORES COMMUNITY ASSOCIATION RECOMMENDATIONS
RELATIVE TO DRAFT EIR #546, DATED MARCH 16, 1993

1. Dover Shores endorses the proposed project, the alternate 1 departure procedure, as offering the best balance in noise impact for the communities affected by the John Wayne Airport as well as satisfying the requirements of FAA Draft Advisory Circular 91-53A. 73

2. Linked to recommendation #1 above is the requirement that the noise mitigation program for Santa Ana Heights and the Anniversary Tract be simultaneously established. It is vital to give all communities south of the airport assurance that all residents who are noise impacted are being treated fairly. The takeoff procedural change should not be put into effect until the mitigation measures program is in place and funded.

3. It is recommended that the proposed monitor sound limits be re-analyzed for reduction prior to adoption. Data in the Airport Noise Abatement Report for the last Quarter of 1992 indicates that the limits in some instances could be lowered for all classes of Air Carriers. 74

4. It is recommended that the new procedure be implemented on the basis of a one year trial to gain experience with its characteristics and impact. Final endorsement at that time would follow analysis and review by all parties. 75

5. Since this change in takeoff departure is not advantageous to the County, the airport or nearby communities, and is entered into only at the direction of the Federal Government, it is recommended that the Settlement Agreement be extended from 2005 for another ten years. 76

6. It is recommended the Passur Radar System be retained. It will be of material aid to the airport staff in monitoring and improving on the performance of the airlines in following the established noise abatement departure procedures, particularly over the Upper Bay regions. 77

7. The small reductions in noise level impact on communities resulting from the displaced threshold for takeoff are not considered to be sufficient to justify the expense involved in a runway extension. It is recommended that the study of this concept be terminated. 78

8. While not discussed in the Draft EIR, it is urged that the 5,000' departure ceiling be supplemented with a requirement to delay the application of increased power to a 2 mile DME fix beyond the coastline. Compliance with this provision will materially reduce the impact of noise migrating aft from the departing aircraft towards the coastal and island regions of Newport Beach. 79

United States Department of the Interior

FISH AND WILDLIFE SERVICE

ECOLOGICAL SERVICES
CARLSBAD FIELD OFFICE
2730 Loker Avenue West
Carlsbad, California 92008

RECEIVED 1993
MAY 13 1993
ORANGE COUNTY EMA
ENVIRONMENTAL PLANNING
DIVISION

Ms. Kari Rigoni
Environmental Management agency
County of Orange
P.O. Box 4048
Santa Ana, CA 92792-4048

RE: Amendments to John Wayne Airport Phase 2 Access Plan (DEIR #546)

Dear Ms.Rigoni:

The Fish and Wildlife Service (Service) is providing comments on the above-referenced document, which indicates noise levels may increase in certain areas around John Wayne Airport. Our concerns relate to the federally listed endangered, or threatened species occurring in Upper Newport Bay (Bay) which include: the light-footed clapper rail, (Rallus longirostris levipes); peregrine falcon, (Falco peregrinus); brown pelican, (Pelecanus occidentalis); California least tern, (Sterna antillarum browni); California gnatcatcher, (Polioptila californica); and possibly least Bell's vireo, (Vireo bellii pusillus).

80

The proposed changes result from regulatory actions taken by the Federal Aviation Administration (FAA) to increase the safety for the operation of commercial aircraft. These changes include the limitation of each aircraft operator to no more than two noise abatement departure procedures, and a new minimum altitude standard for initiating thrust reduction. The DEIR states that the "areas which are affected by potentially greater aircraft noise levels are located within the unincorporated areas of Santa Ana Heights", and that "noise impacts on the Upper Newport Bay Ecological Reserve may actually decrease". Given this information, the Service believes that there will be little to no change in the noise impacts to the biological resources of the Bay.

Because of the lack of carefully controlled studies, and the difficulty of assessing the impacts of noise, the Service is unable to establish what the affects of current noise levels are, or to establish a threshold of significant impact. However, given the acoustic dependence of the species of concern in the Bay, it is unlikely that the effects of aircraft noise are either neutral, or therapeutic. In view of the inadequacy of methods to assess noise impacts, it is clear that function could be affected even in birds that appear to be completely adapted to current conditions.

81

It may be of interest to the County of Orange that a recent workshop on The Effects of Noise on Birds was sponcered by Caltrans, and organized by Dr. Ann Bowles, a bioaccoustician at Hubbs-Sea World Research Institute. An

outstanding international panel of scientists attended the workshop, and presented research papers and compilations of the literature on a variety of topics. This information is being assembled and will be published in the form of a book, available within the next year. A unanimous conclusion of these scientists was that the dB(A) type of noise analysis is inappropriate for birds and other forms of wildlife. Instead, an unweighted one-third octave band analysis should be done whenever impacts to wildlife are to be assessed. Also, birds are not less sensitive to low frequency sound; they appear to be more sensitive. Dr. Mel Kreithen, of the University of Pittsburgh, has performed behavioral audiograms using cardiac conditioning methods and determined that several avian species are 200 times more sensitive to noise in the frequency range of 1 to 10 Hz. At 50 Hz, birds are 20 dB more sensitive. The crossover point for audiograms of humans and birds, where hearing sensitivity is roughly equivalent is at 100 Hz. A diagram depicting these relationships is included. The point that needs to be resolved is the extent of cross-coupling between sound and vibration.

81

If you have any questions concerning this correspondence, please call Linda Dawes, of my staff, at (619) 431-9440.

Sincerely,

Jeffrey D. Opdycke
Field Supervisor

cc: Mestre Greve Associates

1-6-93-TA-156

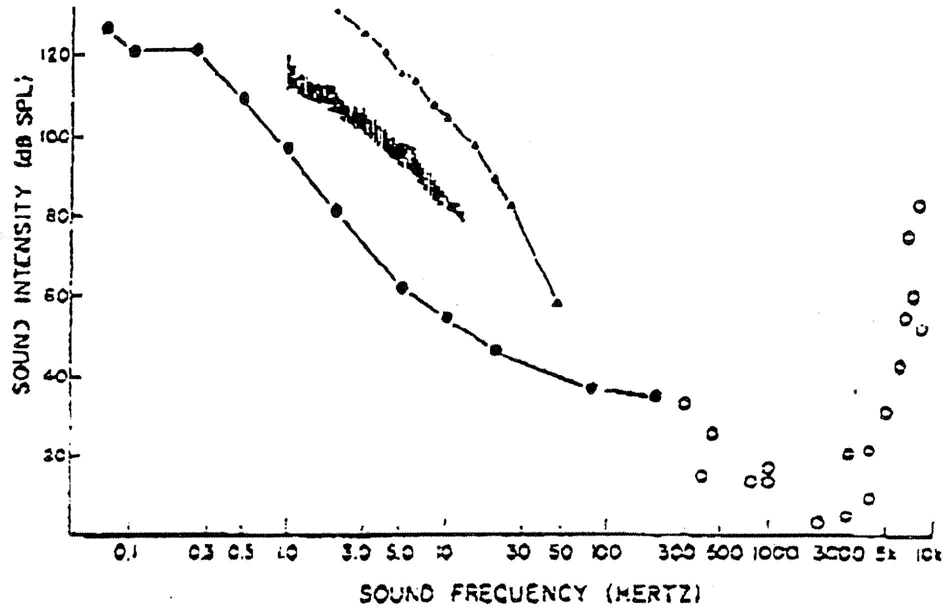


Fig. 6. Infrasound sensitivity of the homing pigeon. Each *filled circle* is the behaviorally determined threshold (50%) at that frequency. *Open circles* are from other laboratory studies. *Triangles* are human thresholds; *vertical bars* indicate natural infrasound levels

LITERATURE CITED

Kreithen, M.L., Quine, D.B. (1979). Infrasound detection by the Homing Pigeon: A Behavioral Audiogram., J. Comp. Physiol. 129, 1-4.

CITY OF NEWPORT BEACH

OFFICE OF THE MAYOR
(714) 644-3004

May 12, 1993

Kari Rigoni, Senior Planner
EMA/Environmental Planning Division
County of Orange
P.O. Box 4048
Santa Ana, CA 92702-4048

Re: Comments of the City of Newport Beach on Draft EIR 546

Dear Ms. Rigoni:

These comments are submitted on behalf of the City of Newport Beach. The City Council has approved these comments with the understanding that the County is giving serious consideration only to Alternatives 1 and 2 under the base case scenario and scenario A. If our assumptions are inaccurate, we reserve the right to make additional comments. 82

The City Council has not yet determined which alternative it intends to recommend or the specific noise levels appropriate for the various classes of aircraft. The City's position will be communicated to staff and the County officials by separate letter before formal consideration of the project and EIR 546.

Very truly yours,

Clarence J. Turner,
Mayor

COMMENTS BY CITY OF NEWPORT BEACH, RE EIR 546

1. Proposed Increases in Class AA and Class E Noise Levels. The primary purpose of the project is to allow the County to establish new maximum permitted noise levels to "preserve the operational capacity at JWA contemplated by the Phase 2 Access Plan...." The City understood, and made this position known to staff and special airport counsel, that preservation of the operational capacity meant that aircraft qualifying as A, AA or E departures under pre-test conditions would continue to operate within those classes under modified noise thresholds. However, the noise levels suggested by EIR 546 appear to allow certain aircraft, such as the B737-300+ and B757, to qualify as Class AA or Class E aircraft at significantly higher gross take off weights than permitted under pre-test conditions.

83

The proposed AA and E thresholds are based upon noise generated by aircraft under test program conditions. During the testing program, air carriers were not required to reduce aircraft noise by reducing gross take off weight. As the County notes, carriers have historically "blocked seats" to reduce gross take off weight and allow aircraft to increase stage length within class or qualify as a quieter aircraft. Accordingly, the proposed noise levels for AA and E aircraft are significantly higher because the gross take off weights have increased and carriers are no longer permitted to use "extraordinary" noise abatement departure procedures to qualify within certain classes.

The County contends that "seat blockage" is inefficient and simply generates unmet demand. The counter to that argument is that seats were blocked on aircraft which neither the County nor the City assumed would qualify within AA or E categories (at certain gross take off weights) given the noise levels established in 1985. The proposed revisions to AC 91-53(a) should not be the trigger for authorizing aircraft to depart at higher gross take off weights. We believe the noise levels proposed should be adjusted downward to maintain the pre-test status in terms of the gross take off weight of aircraft within Class AA and E categories. 83

There is another good reason for ensuring that increases in noise thresholds are no greater than necessary to simply account for modifications in noise abatement departure procedures. The noise thresholds proposed in the EIR would increase Class E flights by 20ADD. While the noise levels are temporary, we find it difficult to envision a scenario where the County is able to return to the pre-test status quo by eliminating these departures. The County has acknowledged that it would be extremely difficult to reduce departure noise levels if that action would reduce airport capacity. Since the proposed numbers are to be temporary and enforcement of the Settlement Agreement will be stayed for the indefinite future, there is simply no need to increase permitted AA and E noise levels to avoid the need for seat blockage or other methods of reducing gross take off weight. 84

2. Noise Analysis. While the noise analysis of the proposed project is extensive, there is a scenario which is discussed, but not evaluated. The City of Newport Beach and others have expressed concerns based upon the County's inability to mandate a particular NADP. Assuming the County selects the proposed project (alternative 1), air carriers nonetheless have the right to select an 800 foot cutback as the close-in NADP, and meet noise thresholds while significantly increasing the gross take off weight of the aircraft. The City acknowledges the County has faithfully complied with and implemented provisions of the Settlement Agreement, but we also recognize that air carriers have historically taken advantage of all available opportunities and there is no reason to expect them to do otherwise in the future. The County acknowledges that, under such a scenario, "the noise reduction south of RMS 21 and 22 expected from the use of a 1500 foot power cut-back procedure would not be realized." (EIR 546 at page 110). However, we believe that, with the dramatic increase in Class E noise levels, there is a significant potential for an increase in noise as compared to the current condition. CEQA requires a comparison of the proposed project to the current conditions rather than adopted plans or earlier predictions. We appreciate the County's willingness to continue to discuss the possibility of establishing modified "downstream" noise levels and we assume that this possibility will be fully explored with the FAA.

85

3. Runway Extension. We believe the County should reject runway extension as a mitigation measure. The County concedes that the feasibility and impact of any northerly extension of the runway has yet to be determined. More importantly, any potential noise reduction from a runway extension could be immediately offset by increases in gross take off weight or the use of aircraft which generate noise at the upper end of any classification. The City is concerned that identification of the runway extension as a mitigation measure could lead to some reduced level of environmental analysis if and when such a project is proposed. 86

4. Continued Noise Level Demonstration. The County proposes, as a mitigation measure, to continue its collection and analysis of noise level data. We assume this means the County will maintain the passive radar system and temporary noise monitoring stations for the remainder of the 1993 calendar year and beyond if questions persist as to appropriate noise levels. In this regard, we note that this mitigation measure does refer to a desire to "preserve the pre-demonstration operational status at JWA." (EIR at page 104). 87

5. Santa Ana Heights Impact. The City Council is concerned about the potential impact of the project on those significantly noise-impacted residents of Santa Ana Heights and the Anniversary tract. These residents will experience additional noise which we believe would be significant under either 88

alternative. Obviously, the greatest impact results from the MD-80s and noise levels for these aircraft are identical under either alternative. However, the additional noise generated by AA and E aircraft cannot be ignored. Accordingly, the Council supports full and timely reactivation and funding of the noise insulation and purchase assurance programs. 88

6. Postponed Adoption of Project. The City acknowledges that this draft EIR would not have been necessary but for the FAA proposal to modify AC 91-53. The City wishes to compliment the County on their involvement in the process and efforts to ascertain the impacts of compliance. We also wish to acknowledge the County's full and good faith implementation of the Settlement Agreement. However, we support AWG and others who suggest that adoption of the project, and certification of the EIR, be postponed until the FAA adopts the revised Advisory Circular. 89

Respectfully Submitted,

Very truly yours,

Clarence J. Turner,
Mayor

546comms.doc

America West Airlines

1133 Connecticut Avenue, N.W., Suite 1000, Washington, D.C. 20036
(202) 775-2365, FAX (202) 775-2368
JOHN W. TIMMONS
Vice President Government Affairs

May 12, 1993

Ms. Kari Rigoni
Environmental Planning Division
Environmental Management Agency
12 Civic Center Plaza
P.O. Box 4048
Santa Ana, California 92709-4048

Dear Ms. Rigoni:

America West Airlines, Inc. (America West) appreciates the opportunity to comment on the draft E.I.R. #546, Amendments to the John Wayne Airport Phase 2 Access Plan Increasing Certain Maximum Permitted Noise Levels and the Addition of New Regulatory Noise Monitoring Stations. We would like to thank all of those who labored so hard in the creation of this document, particularly the County staff and associated individuals.

America West strongly supports the Proposed Project, believing it to be the only option which would allow us to operate a financially sound service at Orange County's John Wayne Airport (JWA) and meet the County's objective of establishing new noise levels in order to preserve the operational capacity at JWA contemplated by the Phase 2 Access Plan and accommodate the safety concerns expressed by the FAA over proliferating noise abatement departure procedures. Any other alternative would have a highly negative impact on our operations at JWA and, in our view, not meet the above mentioned objectives.

90

America West first began service at JWA on April 1, 1985. At that time America West was allocated 1 Class A ADD and 2 Class AA ADDs. With the use of environmentally sensitive Class E ADDs, America West has been able to craft an economically viable service pattern and grow to become the second largest carrier at JWA. Under the current plan allocation America West has been allocated 1 Class A ADD and 7 Class AA ADDs. With this limited allocation America West will once again rely on Class E ADDs to maintain and expand upon our current operations at JWA.

The draft E.I.R. #546 lays out three alternatives for consideration. The first has been labeled the No Project Alternative. Under this proposal the noise limits currently in place at and around JWA would remain so. Prior to this project America West was operating B737-300 with CFM56-3B2 engines capable of takeoffs at 103,000 pounds and in conformance with the

established noise limits, which equated to carrying 95 to 105 passengers on a one hour stage length. This was achieved by reducing thrust at 1,000 feet above field elevation to power levels that would provide a negative 3% climb gradient with one engine failed. Recent amendments to FAA Advisory Circular 91-53 prohibit power reductions below positive 1.2% gradient settings. This factor adds to the minimum noise levels the aircraft is capable of producing. To perform 86.8 SENEL levels at monitor 1 in a manner conforming with FAA Advisory Circular 91-53 would not allow the Class E ADD to be economically viable for America West.

Similarly, the proposal labeled Alternative 2 would severely constrict, if not eliminate, the economic viability of the Class E ADD for America West. To perform 90.0 SENEL levels as proposed at monitor 1, takeoff weights must be limited to approximately 98,000 pounds. This equates to approximately 72 to 77 passengers on a one hour stage length. Additionally this noise level is based on an 800 feet above field elevation power cutback. Because of recent FAA directives, this would require America West to adopt an 800 feet cutback as a noise abatement procedure for the entire county. Because of the variety of conditions in terms of altitude, temperature, and obstructions existing at the airports nationwide at which America West operates, we would be extremely reluctant to adopt such a procedure as it could well entail operational limitations for other airports. 90

America West finds the proposal labeled as the Proposed Project (also labeled Alternative 1) to be the only one consistent with the County's stated objective as well as our objective and we strongly support its adoption. Included with these comments as Attachment 1(A-H) is an engineering analysis of each of the four routes flown by America West out of JWA. This analysis reviews the performance characteristics of the current noise levels using the now proscribed departure profile, the Proposed Project noise levels, and the Alternative 2 noise levels. While the resulting figures are averages which may not be applicable to all or even most flights, they are useful for comparative purposes. This comparison clearly demonstrates both the questionable viability of the Class E ADD under Alternative 2 and the superior benefits to be derived from the Proposed Project. While the Proposed Project still results in significant payload restrictions for America West, it does retain a viable Class E ADD which is in conformance with FAA requirements and provides for limited expansion of lift capabilities at JWA, as market conditions permit.

In addition, America West believes that the data used to establish aircraft take-off weights upon which the allowable noise limits are based is skewed. For a variety of reasons not within either America West's or the airport's control the test data used weights that are, by historical standards, somewhat low. Attachment 2 to these comments contains historical data which more accurately reflects pre-test takeoff weights. We would respectfully request that the information found within Attachment 2 be factored in prior to the finalization of draft E.I.R. #546 and its accompanying permitted noise levels. 91

In conclusion, America West believes the adoption of the Proposed Project or Alternative 1, as modified by the comments contained herein, would have a result satisfactory to all concerned and we urge this course of action.

Sincerely,

John W. Timmons
Vice President, Government Affairs

Attachments (2)

America West Airlines
Flight Operations Engineering

Route Analysis for:
SNA - LAS

Aircraft: B737-300 CFM56-3B2

Mission Basis: AWA Domestic

Airport Conditions:	-Average daily maximum temperature for each quarter -Zero wind -Most favorable available runway for takeoff
Enroute Temp.:	-85% reliable temperatures quarterly
Enroute Winds:	-85% reliable winds quarterly
Cruise Schedule:	-Cost Index = 25
Reserve:	-Fuel for 45 minutes normal cruise flight.

Prepared by:

Terry McDonough, Flight Operations Engineering, (602) 693-7392
Lisa Jean D. Horvath, Flight Operations Engineering, (602) 693-7201

Date: April 9, 1993

Requested by:

Peter Ciradovec, Revenue Planning

Date: April 6, 1993

America West Airlines
Flight Operations Engineering

OLD "E"

FROM	TO	DIST (NM)	ALTER-NATE	DIST (NM)	MONTHS	ENROUTE WIND	ENROUTE TEMP	A/P TEMP	RWY	TAKEOFF WEIGHT	FUEL REQRD	TIME	PAYLOAD (LBS)	FILLED SEATS	CARGO (LBS)	LIMIT
SNA	LAS	255	None		DEC - FEB	HD1	ISA+5	68	19R	103,000	10,000	0+48	22,900	101	0	T/O
					MAR - MAY	HD	ISA+5	73	19R	103,000	10,000	0+48	22,900	101	0	T/O
					JUN - AUG	TS	ISA+7	83	19R	103,000	10,000	0+48	22,900	101	0	T/O
					SEP - NOV	HD	ISA+7	79	19R	103,000	10,000	0+48	22,900	101	0	T/O

PROPOSED "E"

FROM	TO	DIST (NM)	ALTER-NATE	DIST (NM)	MONTHS	ENROUTE WIND	ENROUTE TEMP	A/P TEMP	RWY	TAKEOFF WEIGHT	FUEL REQRD	TIME	PAYLOAD (LBS)	FILLED SEATS	CARGO (LBS)	LIMIT
SNA	LAS	255	None		DEC - FEB	HD1	ISA+5	68	19R	106,700	10,100	0+48	26,500	117	0	T/O
					MAR - MAY	HD	ISA+5	73	19R	106,700	10,100	0+48	26,500	117	0	T/O
					JUN - AUG	TS	ISA+7	83	19R	106,700	10,100	0+48	26,500	117	0	T/O
					SEP - NOV	HD	ISA+7	79	19R	106,700	10,100	0+48	26,500	117	0	T/O

ALTERNATIVE 2 "E"

FROM	TO	DIST (NM)	ALTER-NATE	DIST (NM)	MONTHS	ENROUTE WIND	ENROUTE TEMP	A/P TEMP	RWY	TAKEOFF WEIGHT	FUEL REQRD	TIME	PAYLOAD (LBS)	FILLED SEATS	CARGO (LBS)	LIMIT
SNA	LAS	255	None		DEC - FEB	HD1	ISA+5	68	19R	98,200	9,900	0+48	18,200	80	0	T/O
					MAR - MAY	HD	ISA+5	73	19R	98,200	9,900	0+48	18,200	80	0	T/O
					JUN - AUG	TS	ISA+7	83	19R	98,200	9,900	0+48	18,200	80	0	T/O
					SEP - NOV	HD	ISA+7	79	19R	98,200	9,900	0+48	18,200	80	0	T/O

Remarks: None.

America West Airlines
Flight Operations Engineering

Route Analysis for:
SNA - PHX

Aircraft: B737-300 CFM56-3B2

Mission Basis: AWA Domestic

Airport Conditions:	-Average daily maximum temperature for each quarter -Zero wind -Most favorable available runway for takeoff
Enroute Temp.:	-85% reliable temperatures quarterly
Enroute Winds:	-85% reliable winds quarterly
Cruise Schedule:	-Cost Index = 25
Reserve:	-Fuel for 45 minutes normal cruise flight.

Prepared by:

Terry McDonough, Flight Operations Engineering: (602) 693-7392
Lisa Jean D. Horvath, Flight Operations Engineering: (602) 693-7201

Date: April 9, 1993

Requested by:

Peter Ouradovec, Revenue Planning

Date: April 6, 1993

America West Airlines
Flight Operations Engineering

OLD "E"

FROM	TO	DIST (NM)	ALTER-NATE	DIST (NM)	MONTHS	ENROUTE WIND	ENROUTE TEMP	A/P TEMP	RWY	TAKEOFF WEIGHT	FUEL REQRD	TIME	PAYLOAD (LBS)	FILLED SEATS	CARGO (LBS)	LIMIT
SNA	PHX	331	None		DEC - FEB	T16	ISA+6	68	19R	103,000	10,900	1+01	22,000	97	0	T/O
					MAR - MAY	T19	ISA+5	73	19R	103,000	10,900	1+01	22,000	97	0	T/O
					JUN - AUG	H2	ISA+7	83	19R	103,000	10,900	1+01	22,000	97	0	T/O
					SEP - NOV	T8	ISA+7	79	19R	103,000	10,900	1+01	22,000	97	0	T/O

PROPOSED "E"

FROM	TO	DIST (NM)	ALTER-NATE	DIST (NM)	MONTHS	ENROUTE WIND	ENROUTE TEMP	A/P TEMP	RWY	TAKEOFF WEIGHT	FUEL REQRD	TIME	PAYLOAD (LBS)	FILLED SEATS	CARGO (LBS)	LIMIT
SNA	PHX	331	None		DEC - FEB	T16	ISA+6	68	19R	106,700	11,000	1+01	25,600	113	0	T/O
					MAR - MAY	T19	ISA+5	73	19R	106,700	11,000	1+01	25,600	113	0	T/O
					JUN - AUG	H2	ISA+7	83	19R	106,700	11,100	1+01	25,500	113	0	T/O
					SEP - NOV	T8	ISA+7	79	19R	106,700	11,100	1+01	25,500	113	0	T/O

ALTERNATIVE "E"

FROM	TO	DIST (NM)	ALTER-NATE	DIST (NM)	MONTHS	ENROUTE WIND	ENROUTE TEMP	A/P TEMP	RWY	TAKEOFF WEIGHT	FUEL REQRD	TIME	PAYLOAD (LBS)	FILLED SEATS	CARGO (LBS)	LIMIT
SNA	PHX	331	None		DEC - FEB	T16	ISA+6	68	19R	98,200	10,700	1+00	17,300	76	0	T/O
					MAR - MAY	T19	ISA+5	73	19R	98,200	10,700	1+00	17,400	77	0	T/O
					JUN - AUG	H2	ISA+7	83	19R	98,200	10,800	1+00	17,300	76	0	T/O
					SEP - NOV	T8	ISA+7	79	19R	98,200	10,800	1+00	17,300	75	0	T/O

Remarks: None.

America West Airlines
Flight Operations Engineering

Route Analysis for:
SNA - SFO

Aircraft: B737-300 CFM56-3B2

Mission Basis: AWA Domestic

Airport Conditions:	-Average daily maximum temperature for each quarter -Zero wind -Most favorable available runway for takeoff
Enroute Temp.:	-85% reliable temperatures quarterly
Enroute Winds:	-85% reliable winds quarterly
Cruise Schedule:	-Cost Index = 25
Reserve:	-Fuel for 45 minutes normal cruise flight.

Prepared by:

Terry McDonough, Flight Operations Engineering, (602) 693-7392
Lisa Jean D. Horvath, Flight Operations Engineering, (602) 693-7201

Date: April 9, 1993

Requested by:

Peter Obradovec, Revenue Planning

Date: April 6, 1993

America West Airlines
Flight Operations Engineering

OLD "E"

FROM	TO	DIST (NM)	ALTER-NATE	DIST (NM)	MONTHS	ENROUTE WIND	ENROUTE TEMP	A/P TEMP	RWY	TAKEOFF WEIGHT	FUEL REQRD	TIME	PAYLOAD (LBS)	FILLED SEATS	CARGO (LBS)	LIMIT
SNA	SFO	362	None		DEC - FEB	1168	ISA+5	68	19R	103,000	11,900	1+14	21,800	93	0	T/O
					MAR - MAY	1162	ISA+5	73	19R	103,000	11,900	1+13	21,000	93	0	T/O
					JUN - AUG	1129	ISA+8	83	19R	103,000	11,600	1+09	21,300	94	0	T/O
					SEP - NOV	1154	ISA+7	79	19R	103,000	11,800	1+12	21,100	93	0	T/O

PROPOSED "E"

FROM	TO	DIST (NM)	ALTER-NATE	DIST (NM)	MONTHS	ENROUTE WIND	ENROUTE TEMP	A/P TEMP	RWY	TAKEOFF WEIGHT	FUEL REQRD	TIME	PAYLOAD (LBS)	FILLED SEATS	CARGO (LBS)	LIMIT
SNA	SFO	362	None		DEC - FEB	1168	ISA+5	68	19R	106,700	12,000	1+14	24,600	109	0	T/O
					MAR - MAY	1162	ISA+5	73	19R	106,700	12,000	1+13	24,600	109	0	T/O
					JUN - AUG	1129	ISA+8	83	19R	106,700	11,700	1+09	24,900	110	0	T/O
					SEP - NOV	1154	ISA+7	79	19R	106,700	11,900	1+12	24,700	109	0	T/O

ALTERNATIVE "E"

FROM	TO	DIST (NM)	ALTER-NATE	DIST (NM)	MONTHS	ENROUTE WIND	ENROUTE TEMP	A/P TEMP	RWY	TAKEOFF WEIGHT	FUEL REQRD	TIME	PAYLOAD (LBS)	FILLED SEATS	CARGO (LBS)	LIMIT
SNA	SFO	362	None		DEC - FEB	1168	ISA+5	68	19R	98,200	11,800	1+14	16,300	72	0	T/O
					MAR - MAY	1162	ISA+5	73	19R	98,200	11,700	1+13	16,400	72	0	T/O
					JUN - AUG	1129	ISA+8	83	19R	98,200	11,400	1+09	16,700	74	0	T/O
					SEP - NOV	1154	ISA+7	79	19R	98,200	11,700	1+12	16,400	72	0	T/O

Remarks: None

America West Airlines
Flight Operations Engineering

Route Analysis for:
SNA - SMF

Aircraft: B737-300 CFM56-3B2

Mission Basis: AWA Domestic

Airport Conditions:	-Average daily maximum temperature for each quarter -Zero wind -Most favorable available runway for takeoff
Enroute Temp.:	-85% reliable temperatures quarterly
Enroute Winds:	-85% reliable winds quarterly
Cruise Schedule:	-Cost Index = 25
Reserve:	-Fuel for 45 minutes normal cruise flight.

Prepared by:

Terry McDonough, Flight Operations Engineering, (602) 693-7392
Lisa Jean D. Horvath, Flight Operations Engineering, (602) 693-7201

Date: April 9, 1993

Requested by:

Peter Otradovec, Revenue Planning

Date: April 6, 1993

America West Airlines
Flight Operations Engineering

OLD "E"

FROM	TO	DIST (NM)	ALTER-NATE	DIST (NM)	MONTHS	ENROUTE WIND	ENROUTE TEMP	A/P TEMP	RWY	TAKEOFF WEIGHT	FUEL REQRD	TIME	PAYLOAD (LBS)	FILLED SEATS	CARGO (LBS)	LIMIT
SNA	SMF	388	None		DEC - FEB	H62	ISA+5	68	19R	103,000	11,800	1+14	21,300	93	0	T/O
					MAR - MAY	H57	ISA+5	73	19R	103,000	11,800	1+13	21,100	93	0	T/O
					JUN - AUG	H23	ISA+8	83	19R	103,000	11,500	1+09	21,400	95	0	T/O
					SEP - NOV	H50	ISA+7	79	19R	103,000	11,700	1+12	21,200	94	0	T/O

PROPOSED "E"

FROM	TO	DIST (NM)	ALTER-NATE	DIST (NM)	MONTHS	ENROUTE WIND	ENROUTE TEMP	A/P TEMP	RWY	TAKEOFF WEIGHT	FUEL REQRD	TIME	PAYLOAD (LBS)	FILLED SEATS	CARGO (LBS)	LIMIT
SNA	SMF	388	None		DEC - FEB	H62	ISA+5	68	19R	106,700	12,000	1+13	24,600	109	0	T/O
					MAR - MAY	H57	ISA+5	73	19R	106,700	12,000	1+12	24,600	109	0	T/O
					JUN - AUG	H23	ISA+8	83	19R	106,700	11,600	1+09	25,000	111	0	T/O
					SEP - NOV	H50	ISA+7	79	19R	106,700	11,900	1+12	24,700	109	0	T/O

ALTERNATIVE "E"

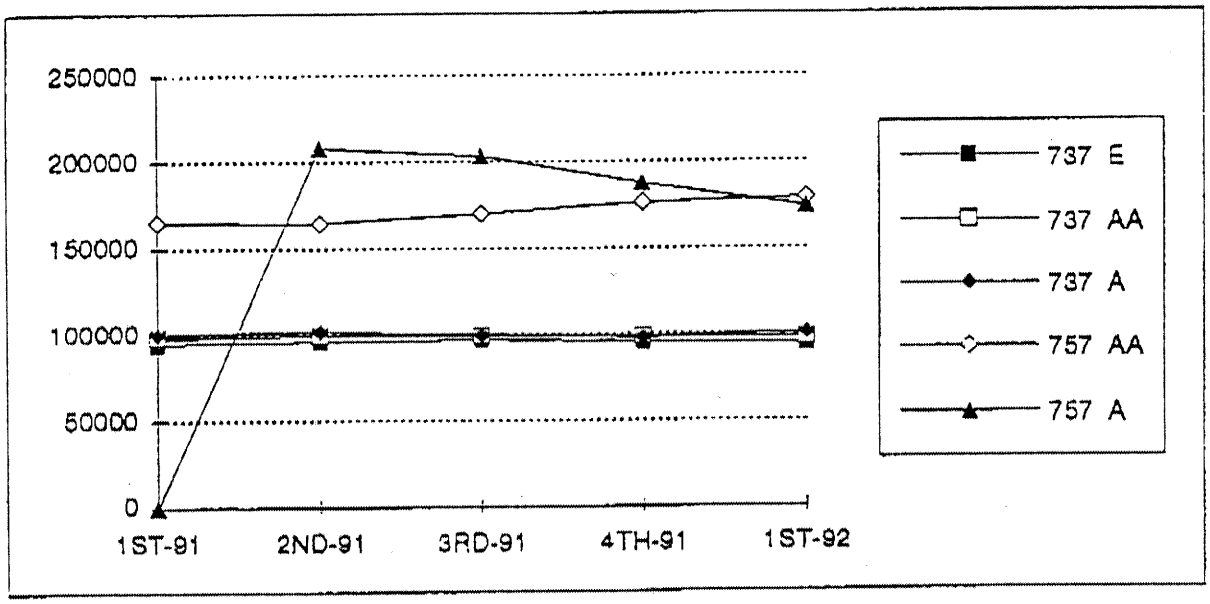
FROM	TO	DIST (NM)	ALTER-NATE	DIST (NM)	MONTHS	ENROUTE WIND	ENROUTE TEMP	A/P TEMP	RWY	TAKEOFF WEIGHT	FUEL REQRD	TIME	PAYLOAD (LBS)	FILLED SEATS	CARGO (LBS)	LIMIT
SNA	SMF	388	None		DEC - FEB	H62	ISA+5	68	19R	98,200	11,700	1+14	16,400	72	0	T/O
					MAR - MAY	H57	ISA+5	73	19R	98,200	11,600	1+13	16,500	73	0	T/O
					JUN - AUG	H23	ISA+8	83	19R	98,200	11,400	1+09	16,700	74	0	T/O
					SEP - NOV	H50	ISA+7	79	19R	98,200	11,600	1+12	16,500	73	0	T/O

Remarks: None.

ATTACHMENT 2

America West Airlines
Quarterly Takeoff Weight Averages at KSNA
1991 and 1st Quarter 1992

A/C +SLOT	1ST-91	2ND-91	3RD-91	4TH-91	1ST-92
737 E	93700	95400	96575	94900	93900
737 AA	97900	99000	98900	98300	97800
737 A	100200	101400	98600	97600	100300
757 AA	165500	164700	170200	176300	179300
757 A	NO-OP	208400	203200	187200	173900



TWA

RECEIVED

Trans World Airlines, Inc.
Flight Operations
P.O. Box 10236
Lambert Field
St. Louis, MO. 63145

MAY 12 1993

ORANGE COUNTY EMA
ENVIRONMENTAL PLANNING
DIVISION

07 May 1993

Ms. Kari Rigoni
Environmental Planning Division
County of Orange
Santa Ana, CA 92702

Dear Ms. Rigoni:

I have always believed that a person never has a second opportunity to make a good first impression, so I have made it my personal policy to attempt to meet someone on a face to face basis as opposed to the starkness of a written communication. Time constraints do make this letter necessary; however, I would enjoy meeting you personally in California, and since I now am involved in the SNA noise challenge. I am confident we will meet soon.

I have just, very recently, acquired John Wayne Airport as one of my assignments and will be replacing Captain Wenzel Williams who has moved to other duties. I hope I can do as well as he did, and I will certainly try.

Our position at TWA is as it always has been. That is to say, we are very excited about our new found hope for our future and are motivated to find a solution to the challenge we all face at TWA. We are very much aware of all the details, background and sincere emotions that encompass the airport and the Orange County Community. We have a concerted driving force to serve that community as the new TWA.

We do have some genuine concerns, however, that I feel confident can be successfully addressed and hopefully put to rest.

Prior to the test period of April 1992, we at TWA, on a voluntary basis, limited our maximum take off weights to 128,000 lbs. to avoid all of the negative ramifications of excessive noise. That was done solely so that we would be "good tenants," but the monetary cost of such action in today's economy is prohibitive for us. It would seem inequitable if we are now penalized because of these lower historic readings.

92

RECEIVED
MAY 12 1993
EMA

At the start of the test period and up to the present, our gross weights have been in the range of 130,000 to 134,000 lbs. That increase in gross weight means the difference between operating at a profit or a loss. If we are required to operate at the low senel value proposed, we would again be forced to limit our gross weights by blocking seats and denying travel to the community we are all trying to serve. A loss of that 6,000 lbs. of payload equates to between 3.3 million and 4.1 million dollars on an annual basis, considering passengers and cargo. If we want to be successful in our reorganization, and we do, we will not be able to absorb such a loss. 93

One possibility that we would hope to see would be to raise the senel limits at RMS 1 and 2 to 103.0 dB for the MD-80 or more specifically, long haul MD-80's. In actuality, there are relatively few long haul MD-80 events, and the difference between 101.5 and 103.0 is undetectable by the human ear. This would allow us to continue to operate at or near runway limit weights, as we have been, generally, during the test period. 94

As your data will credify, we had 491 events that operated between 129,000 and 134,000 lbs. between April 1992 and April 12, 1993. 467 flights were over the 101.5 dB value at monitors 1 and 2, 358 flights were over 102.5 dB and 271 were over 103 dB.

Our major challenge is that we have only two long haul daily events and adding another short segment to decrease the average senel reading may or may not adequately address our bottom line.

Regarding the quarterly noise average, we would like to see a four (4) to six (6) month average with no penalty assessed until the entire yearly average is available to help us with our high readings during the peak summer months. 95

We do sincerely desire to continue our operation at John Wayne Airport, and I feel certain that the airport understands our position relative to profitability.

Please extend our appreciation to all members concerned for their diligent efforts to find an equitable solution that will work for all of us and the community we serve.

I look forward to meeting you and to many more years of service at John Wayne Airport.

Sincerely,

Captain Thomas W. Higgins
Flight Manager - MD-80

TWH:dp

UNITED STATES MARINE CORPS
MARINE CORPS AIR BASES WESTERN AREA EL TORO
PO BOX 95001
SANTA ANA CA 92709-5001

IN REPLY REFER TO:
11131.8
AQ/TL1909
5 May 1993

Environmental Planning Division
Attn: Ms. Kari Rigoni
Environmental Management Agency
County of Orange
P.O. Box 4048
Santa Ana, CA 92702-4048

DEIR #546 AMENDMENTS TO JOHN WAYNE AIRPORT PHASE 2 ACCESS PLAN

Dear Ms. Rigoni:

In response to your memo of March 18, the Draft EIR for the above project has been reviewed and we have no comments at this time.

If you have any questions, please contact Ann Dotson at (714) 726-3702.

Sincerely,

D. P. PENDER
Colonel, U.S. Marine Corps
Community Plans and Liaison Officer
By direction of the Commander

APPENDIX G

RESPONSES TO COMMENTS

TABLE OF CONTENTS FOR RESPONSES TO WRITTEN COMMENTS ON THE DRAFT EIR

RESPONSES TO WRITTEN COMMENTS ON DRAFT EIR 546

COMMENTS FROM CASEY GRIFFIN

COMMENT #1:

I would ask that your agency give further consideration to acoustical mitigation guidelines. It is my opinion, that mitigation guidelines should be set to single noise event levels as opposed to cumulative noise event levels. The reason is obvious. It is the single noise event which either wakes you up in the morning or keeps you from sleeping in the evening.

RESPONSE #1:

This is a legitimate inquiry and request since, as the commentator correctly observes, the principal objective of a sound insulation project is to reduce interior noise levels which interfere with normal indoor residential activities, such as personal and telephone communications, watching television, sleeping, etc. However, as discussed below, "cumulative" and "single event" noise descriptors are not mutually exclusive; in fact, "cumulative" noise levels are the product of a series of single event noise levels. In addition, the fact that CNEL is used as the descriptor for measuring sound attenuation objectives in a sound insulation project is primarily the result of the fact that that approach is required (or in some cases suggested) by regulations and planning guidelines of various federal, state and local agencies of government.

The sound insulation "guideline" or design criteria of achieving an interior noise environment of 45 dB CNEL or less is based upon state guidelines and regulations which have been adopted and incorporated into the general plans of most cities and of the County of Orange. (See Draft EIR 546, Section 3.2.2). However, while CNEL is not itself a "single event" noise descriptor, it is based upon a single event noise descriptor (SENEL) with factors for frequency of events, and the time of day when the events occur, included in the formula for calculating CNEL values. (See also the discussion at page 56 of the draft EIR).

As part of the acoustical insulation program, the County has conducted simultaneous indoor/outdoor single event noise measurements on residences before and after acoustical insulation treatment. Those measurements are summarized in a December 28, 1992, report by the County's consultant, Wyle Research, entitled ***"Acoustical Insulation Program Applied to Dwellings in Santa Ana Heights, Orange County, California, Phase 2 Final Report."*** *The report provides the results of acoustical insulation completed for 416 rooms within 65 homes. The report documents an*

average Noise Reduction (NR) improvement of 7.9 dBA, and a resulting indoor/outdoor NR performance above 30 dBA for 393 of the measured rooms.

To determine the expected indoor "single event" noise level within homes throughout Santa Ana Heights (SAH) which have been acoustically insulated, we have reviewed the actual NR performance for three different homes in the community. For three different homes on Orchard, Redlands, and Anniversary, the average NR performance before acoustical insulation was 26.1 dB. Following the acoustical insulation of these homes, the average NR increased to 33.6 dB, an improvement of 7.5 dB. The 33.6 dB NR performance for these typical homes represents the degree of outside-to-inside noise control that will occur for each aircraft "single event" noise level. That is, with an outdoor "single event" noise level as high as 101.5 dB SENEL, the indoor noise level from that same aircraft overflight will be reduced by 33.6 dB to a level of 67.9 dB SENEL.

The new maximum permitted noise levels for the Proposed Project (Alternative 1), are shown in Section 3.1.4, Table 3-4 of the Draft EIR. At Remote Monitor Station (RMS) 1 in Santa Ana Heights, the proposed noise limits for Class A, Class AA and Class E aircraft operations are 101.5, 94.0 and 92.5 dB SENEL, respectively. For the other RMS locations, the new permitted noise limits are the same (RMS 2) or lower (RMS 3) than the RMS 1 limits. The following tables summarize the indoor "single event" noise levels expected within typical Santa Ana Heights homes before and after acoustical insulation:

		Typical Indoor Single Event Noise Level (SENEL)		
Santa Ana Heights	*Structure Attenuation*	*Class A*	*Class AA*	*Class E*
*Noise Reduction **Before** Insulation*	*26.1 dB*	*75.4 dB*	*67.9 dB*	*66.4 dB*
*Noise Reduction **After** Insulation*	*33.6 dB*	*67.9 dB*	*60.4 dB*	*58.9 dB*

*This table indicates that with the proposed project maximum permitted noise limits for aircraft departures, the Santa Ana Heights indoor "single event" noise levels will be at or below 75.4 dB SENEL for typical homes not acoustically insulated, and at or below 67.9 dB SENEL for typical homes which have received acoustical insulation. These "single event" levels represent the **indoor** SENEL value.*

In addition to SENEL, another single event noise descriptor commonly used for measuring and describing speech interference, sleep interference, and other similar noise effects is the "maximum noise level" described as "dBA." The typical maximum

noise (dBA) level during aircraft flyover is 10.0 dB ***less*** *than the SENEL value. Accordingly, the maximum indoor noise level would be at or below 65.4 dBA for typical Santa Ana Heights homes not acoustically insulated, and at or below 57.9 dBA for typical homes which have been acoustically insulated. Maximum noise levels of 58 dBA are not normally considered sufficient to cause significant interference with indoor activities such as conversations, telephone use, watching television, listening to music, or other similar activities. For example, most people would tune the volume on their television sets to a level higher than 58 dBA (as measured at the listener's ear) even without interference from other noise sources.*

An important objective of the sound insulation project is to reduce noise levels which may interfere with normal indoor conversation, telephone communication, watching television, and sleeping. The County believes that the acoustical insulation program will accomplish the objective of the proposed mitigation measure to reduce any single event aircraft noise interference with normal indoor residential activities.

COMMENTS FROM THE CITY OF TUSTIN

COMMENT #2:

After review of the Notice of Preparation, we feel that more detailed information regarding expected noise levels must be specified prior to our determination of significant impacts to the City of Tustin resulting from the proposed project.

RESPONSE #2:

This was a comment submitted by the City of Tustin in response to the Notice of Preparation (NOP) for EIR 546. It was inadvertently omitted from the Draft EIR, Appendices B and C. The County has included this comment so that it is appropriately acknowledged and receives a response.

Sections 3.1 and 3.2 of the Draft EIR contain the requested detailed information on expected noise levels. See also Draft EIR, page 8, footnote 10.

COMMENT #3:

It is unclear in the Notice of Preparation whether the higher permitted noise levels would affect the types of aircraft that would be classified as Class A, Class AA, or Class E.

RESPONSE #3:

See the response to Comment No. 2.

One of the two principal objectives of the proposed project is to ". . . preserve the operational capacity at JWA contemplated by the Phase 2 Access Plan . . . ." (Draft EIR, page 26). The maximum permitted noise levels recommended by the proposed project, and by Alternative 2, are based upon extensive acoustical analysis of relevant variables prior to the noise level demonstration (i.e., prior to April 1, 1992) and during the noise level demonstration. One objective of this analysis was to allow Class A, Class AA and Class E operations to continue to be conducted at pre-demonstration weights while remaining within the respective noise classifications. The County does not expect that the recommended maximum permitted noise levels will result in a noise classification restructuring of the various commercial aircraft types using JWA.

However, for a number of aircraft types (e.g., 737-300/400 and 757), the primary factor determining whether a specific aircraft can operate in any noise class is its gross takeoff weight. The air carriers have had in the past, and will maintain, the ability to have some aircraft operate in a lower noise level classification (i.e., Class AA or Class E) by controlling the aircraft's takeoff weight. There are two primary methods available to the air carriers to accomplish this objective: (i) by limiting the "stage length" (i.e., the "non-stop" distance) of the flight, thereby reducing the weight of the required fuel; or (ii) by deliberately limiting the number of passengers on board the airplane below its actual capacity (a practice known as "seat blocking"). Both practices were used by various air carriers before the noise level demonstration and may be used by them in the future.

Nevertheless, to the extent that noise measurement technology and analysis permits, the proposed project should maintain the pre-demonstration operational status quo with respect to specific aircraft types operating in specific noise classes.

See also the response to Comment No. 69.

COMMENT #4:

The amendments include (1) an increase in the maximum permitted noise levels for departures for aircraft taking-off south of the airport and (2) the addition of noise monitoring stations for those areas under the departure flight pattern (commonly referred to as (Santa Ana Heights). The amendments are being proposed in anticipation of the FAA initiative to standardize noise abatement departure procedures which will increase air safety. As I understand it, the current Phase 2 Access Plan departure requirements would not be in conformance with the new initiative, hence the need for the proposed amendments.

RESPONSE #4:

See the response to Comment No. 2.

The commentator's understanding of the need for the proposed amendments to the Phase 2 Access Plan is essentially correct.

COMMENT #5:

Although the amended departure procedure will primarily affect aircraft departing south from the airport, should the departure be reversed due to "Santa Ana" conditions (aircraft departing north from the airport) we believe there will be a negative effect upon the City of Tustin. Noise sensitivity pertains to both approaches and departures as can be documented by the number of noise complaints received regarding aircraft approaches over the City of Tustin.

RESPONSE #5:

See the response to Comment No. 2.

The conclusion assumed by this comment is incorrect. The proposed project will not affect or change departure procedures used by the scheduled air carriers when Runway 01L is in use (i.e., northerly departures). Because residential communities north of the airport are so far from the airport, use of "close-in" noise abatement departure procedures for northerly departures on Runway 01L would be counterproductive and would probably result in greater single event noise levels in Tustin than has historically been the case. In other words, the airlines have never used the "special" or "deep cutback" procedures for Runway 01L departures as they did during Runway 19R departures. The County does not expect Runway 01L departures procedures to change as a result of the proposed project; and the County does not, therefore, expect the proposed project (or any of its alternatives) to result in any increases in noise levels north of the airport during Runway 01L departures.

COMMENTS FROM M.C. HORNING, SR.

COMMENT #6:

I reside at 2182 Mesa Drive, Santa Ana Heights, and am troubled by reported official discussions concerning proposed takeoff procedures, which suggest trading higher noise levels for Santa Ana Heights residents (separate and above minimum mandated

requirements) in exchange for lower noise levels for the "downstream" Newport Beach area.

Aside from the minimum climb-out altitude safety level required by the FAA, every effort for noise abatement should be directed toward easing the burden upon all affected, rather than relieving it for some at the expense of others.

Historically, the effort and goal has been to lessen the noise problem for all. Those of us in Santa Ana Heights already carry a disproportionately heavy burden by being most proximate to the airport and directly under the flight path. To add to that burden by extending the takeoff power pattern beyond mandated safety requirements is patently unfair, and I suggest that any such contemplated noise level adjustments, which do not protect all "downwind" residents, are contrary to law and constitute a taking of property.

I trust that any future modification of existing takeoff procedures will not sacrifice my community and property in order to enhance existing benefits enjoyed by more distant neighborhoods.

RESPONSE #6:

As correctly summarized by this comment, the proposed project discussed in the EIR, together with the alternative identified in the EIR as "Alternative 2," present the basic policy questions for decision by the Orange County Board of Supervisors. The opinion of this commentator appears to favor adoption of "Alternative 2" rather than the proposed project (identified as "Alternative 1" in the Draft EIR), and the commentator's preference is acknowledged.

The policy issue raised by the choice between Alternative 1 and Alternative 2, however, is more complex than simply making a choice between different neighborhoods south of JWA in terms of expected noise levels. Preserving reasonable operational capacity for the airport, a stated project objective, is also an important consideration in this choice. The industry commentators have suggested that Alternative 2 is inadequate to meet this project objective. (See Comment Nos. 33-48).

Another factor of significance is that the proposed project is responsive to an initiative and proposed action by FAA to standardize noise abatement departure profiles across the nation. JWA has a limited ability to insist that the air carriers tailor one of their two permitted noise abatement departure procedures specifically to their JWA operations. Although the County has acted aggressively to preserve the operational status quo at the airport in the face of the proposed FAA policy change, and at the same time has expended considerable resources in an attempt to minimize the adverse noise effects of FAA's action on communities south of the airport, the fact that millions of other

people in the United States will also be affected by the choices made by the airlines regarding their two permitted noise abatement departure procedures cannot be ignored entirely. As observed in the Draft EIR, the Santa Ana Heights community has what may be a unique location relationship with the airport in the sense that at most air carrier airports in the country, much of Santa Ana Heights would be on airport property.

The Community Noise Equivalent Level (CNEL) values expected at each Remote Noise Monitoring Station (RMS) are presented in Section 3.1.4.2, Table 3-6 of the Draft EIR. That table shows the expected project related CNEL values for the no project Alternative, Alternative 1, and Alternative 2. Table 3-7 of the Draft EIR presents the CNEL changes from the no project case which are expected for Alternative 1 and Alternative 2. The following table summarizes the range of noise level changes in the Santa Ana Heights (SAH) area, and in the areas south of Santa Ana Heights, for the two alternatives assuming a level of air carrier operations characterized in the Draft EIR as "Scenario A."

Alternative	***Area South of JWA***	***CNEL Change***
1	*Santa Ana Heights (RMS 1, 2, 3)*	*2.3 dB to 4.0 dB*
2	*Santa Ana Heights (RMS 1, 2, 3)*	*2.0 dB to 3.0 dB*
1	*South of SAH (South of RMS 3)*	*-2.1 dB to 0.5 dB*
2	*South of SAH (South of RMS 3)*	*-1.1 dB to 1.1 dB*

This table shows that CNEL levels are expected to increase in the Santa Ana Heights area under either Alternative 1 or Alternative 2. Alternative 1 results in an insignificant 0.3 dB to 1.0 dB CNEL greater increase compared to the expected CNEL change for Alternative 2. This table also shows that south of Santa Ana Heights, the CNEL will decrease or increase at particular RMS locations, also for both Alternative 1 and Alternative 2. However, most locations south of Santa Ana Heights are expected to have a CNEL decrease under either alternative.

The County believes that the CNEL differences between Alternative 1 and Alternative 2 are relatively minor. As discussed at page 15 of the draft EIR, the difference between Alternative 1 and Alternative 2 in terms of the flexibility of airport operations, and the ability to provide a reasonable level of service to the Orange County community, is significant.

Selection of either Alternative 1 (the proposed project) or Alternative 2 would not be "contrary to law" and would not "constitute a taking of property." It is not insignificant that under either alternative, the proposed project would still result in CNEL contours inside the contours predicted in EIR 508/EIS. it is also significant that the airport CNEL contours, both before and after implementation of the proposed project, will still be significantly smaller (i.e., "quieter") than historical CNEL levels in Santa Ana Heights and other areas south of JWA. The Santa Ana Heights community has historically been a significant beneficiary (perhaps the principal beneficiary) of the early introduction of an all Stage 3 fleet into service at JWA, County regulatory limits on aircraft operations to control noise levels, and the significant efforts which the air carriers have historically made to reduce noise levels to the maximum feasible extent. The impact of the proposed project is not to eliminate those benefits. Rather, the FAA's policy change will result in slightly less noise reduction benefits than the community enjoyed prior to the noise level demonstration.

Finally, one of the factors relevant to the selection between Alternative 1 and Alternative 2 is the fact that only Santa Ana Heights communities would be eligible for the recommended land use mitigation programs.

COMMENT #7:

Lastly I request that this letter be made a part of the record for the related environmental impact study which is reportedly underway.

RESPONSE #7:

The commentator's letter will be made a part of Final EIR 546.

COMMENTS FROM EDWIN C. HALL
(CONCERNED HOMEOWNERS OF SHERWOOD ESTATES)

COMMENT #8:

We believe the Project is subjective, because noise data derived from aircraft demonstration tests did not adhere to departure flight tracks illustrated in Exhibit 3-3. Even though take-off procedures were conducted no differently than in the past, we nonetheless experience and perceive these flyovers and/or flybys to be "orchestrated departures," defined as: "An intentional flight deviation after lift-off from JWA - 19R runway; thereby directing the aircraft in a circuitous manner (that) would cause the flight to track over or to the West of Remote Monitoring Station (RMS) 2, and then continuing from the apex of this involuted curvature in order to align with the

prescribed 175 degree magnetic departure flight track heading that is well beyond RMS 3, and the dog-leg turn."

Note: Passive Surveillance Radar (PASSUR) system admits: "Each aircraft will deviate from the reference flight track to some degree (Sec. 9 Appendix D)." Since RMS 2 is located 939 feet at 90 degrees (WLY) from the extended flight path centerline, where flyovers and/or flybys routinely occur, then "some degree" accounts for an excessive tolerance for the PASSUR tracking system, or it is meaningless trade jargon.

RESPONSE #8:

The flight tracks shown in Exhibit 3-3 represent a generalized description of the flight tracks used by aircraft operating at JWA. Flight tracks are not like railroad tracks, in the sense that aircraft do not and cannot follow these tracks with the kind of precision that is implied by drawing the flight track as a fine line. Rather, aircraft are dispersed on both sides of the flight tracks shown in Exhibit 3-3. The deviations (distance from the generalized tracks) from the tracks will vary for different aircraft and for different flights.

The noise level demonstration included flight track monitoring in order to: (i) quantify the location of aircraft during the demonstration; and (ii) to ensure that aircraft location variations did not mask the differences in takeoff procedures being evaluated. Tables 11, 12, and 13 in Appendix D show the flight track information collected during the noise level demonstration. In addition, the statistical summary of noise measurement data is provided. The data provided for each aircraft includes the distances from the aircraft to each microphone, the altitudes at 3 points in the departure corridor, and the deviation from the referenced flight track at 3 points down the bay. The noise data provided in these summary tables represents the noise levels for the flight tracks as described by the tracking data.

There were no "orchestrated" flights or intentional deviations introduced during the noise level demonstration. In fact, the tracking system was utilized to ensure flight track deviations did not adversely influence noise data collected during the demonstration.

The phrase "to some degree" was intended to convey the concept described above: that an aircraft does not fly a flight track as a train rides on a railroad track; rather, aircraft will deviate to 'some degree' from these flight tracks. The degree of deviation varies by aircraft and airline. The precise degree of deviation is provided in Tables 11, 12, and 13 of Appendix D, as described above.

The PASSUR specifications indicate an accuracy of plus or minus 500 feet. This is not an excessive tolerance and is based on the inherent accuracy of the air traffic control

radar system. Because PASSUR eavesdrops on the FAA radar system, it can only be as accurate as the FAA radar system. The accuracy of the PASSUR system is not related in any way to the distance between the referenced flight track and RMS 2. The comment that this distance constitutes an excessive tolerance incorrectly relates PASSUR accuracy to this distance.

COMMENT #9:

Normalized aircraft gross take-off weights used during demonstration tests are dubious inre: to runway length requirements (FAR); thereby affecting noise data dB levels, and contour configurations shown in all Project Exhibits. See Data Chart below:

AIR CARRIER COMPARISON DATA CHART

A/C TYPE	GEAR TYPE	NORMALIZED WTS USED IN TEST (LBS) *1	RUNWAY STRENGTH FAA RECORD (LBS) *2	RUNWAY STRENGTH JWA RECORD (LBS) *3	A/C OPT MAX TAKE-OFF WT LIMIT (FAR) (LBS) *4	LANDING FLD (FAR) LENGTH (FT) *4	LANDING FLD (JWA) LENGTH (FT) *5
B-757	Dual Tan-dem	222,000	180,000	234,000	240,000	6,400 to 7,760	5,700
B-737	Dual	120,000	95,000	140,000	135,000	6,360	5,700
MD-80	Dual	132,000	95,000	140,000	140,000	7,250	5,700
A-320	Dual	146,000	95,000	140,000	145,503	5,630	5,700
BAe 146	Dual	86,000	95,000	140,000	93,000	4,950	5,700

CHART SOURCE:

*1 - DEIR 546, Sec. 14 Appendix D
*2 - FAA Western-Pacific Regional Adm. Schellenberg, ltr. to CHOSE, dtd. 11-6-92.
*3 - JWA Phase 2 Access Plan, Sec. 2, 26
*4 - Modern Commercial Aircraft by Green-Swanborough-Mowinski, 1987 - Crown Pub. Inc.
*5 - DEIR 546, Sec. 16.3.1 Appendix D.

RESPONSE #9:

The weights provided in Exhibit 8b of Appendix D are those weights that were used to normalize the data from the noise level demonstration for the specific and limited purpose of making comparisons between specific demonstration procedures used by

the airlines. Noise level demonstration data for a given procedure reflects noise data for the weights flown. Weights varied from procedure to procedure because different airlines flew different procedures; therefore, the differences in measured noise levels reflect not only the differences due to different procedures, but also the differences due to different weights. By normalizing the noise data to a common weight, procedures can be compared based solely on noise differences. The specific weight used to normalize the data is not critical so long as the same weight is used for each aircraft type. The importance in these figures is the differences between procedures.

The weights used for Exhibit 8b of Appendix D to the draft EIR were made based on a worst case assumption, i.e., the heaviest that an aircraft can takeoff on the JWA runway on a standard day (85°F, no wind). The noise limits are not necessarily intended to accommodate those weights; nor were those weights used for generating the noise contours presented in other sections of EIR 546. Weight assumptions for different contour scenarios are described in the draft EIR for each scenario.

The weight information provided in the comment columns labeled "Runway Strength FAA Record" and "Runway Strength JWA Record" is irrelevant to this analysis because it relates only to runway strength and not to aircraft maximum weights for a given runway length. The data provided in the comment column labeled "A/C Opt Max takeoff wt Limit (FAR)" is irrelevant because this data applies to airports with longer runways and does not account for the short runway at JWA where weights must be lower. The last 2 columns in the table are irrelevant because they reflect runway landing length requirements and are not related to takeoff length requirements and limitations.

See also the response to Comment No. 69 for a further discussion of aircraft weight related information as applied to determine the project recommended noise limits.

COMMENT #10:

Based upon DEIR projections, Santa Ana Heights area could receive noise increases up to 3.5 dB Community Noise Equivalent Level, and Single Event Noise Exposure Level increases up to 5.7 dB; while noise for communities to the South would be reduced. We reject any proposal that would cause this to happen. As stated in Aaron vs the City of Los Angeles: "Some individuals should not be asked to pay more for the public good than others."

RESPONSE #10:

The 5.7 dB SENEL increase referenced in this comment would be for Class E aircraft at RMS 1 (5.6 dB SENEL at RMS 2). While, in relative terms, this is indeed a significant

single event noise level increase, it should be recognized that the revised proposed maximum permitted noise level for Class E aircraft at RMS 1 and 2 is 92.5 dB SENEL. This is 9.0 dB below the proposed maximum permitted noise level for Class A Aircraft (101.5 dB SENEL) at RMS 1. To the average human observer, this means that Class E aircraft operating at RMS 1 at 92.5 dB SENEL would be perceived as approximately 1/2 as loud as a Class A aircraft operating at RMS 1 at 101.5 dB SENEL.

As discussed in Draft EIR 546, the principal factor defining the CNEL levels south of JWA are operations by MD-80 aircraft. (Under the Scenario A assumptions, the other aircraft types contribute 1.0 dB CNEL or less to the total CNEL level increases at RMS 1, 2 and 3 (see Table 3-7 in the Draft EIR). The differences are less under the other Scenario assumptions.) The MD-80 series aircraft all operate as Class A aircraft, and the increases in maximum permitted noise levels are the smallest for Class A category aircraft (0.7, 0.1 and 2.0 dB SENEL at RMS 1, 2 and 3, respectively). These noise levels assume that the MD-80 would perform an 800 foot power reduction procedure, the minimum permitted cutback altitude within the parameters of the new FAA policy. Short of eliminating the MD-80 from service at JWA, (a related but less drastic mitigation measure was considered in the draft EIR [see Section 3.1.5] and rejected as presently infeasible), the projected CNEL increases are, for all practical purposes, as low as they can be and still realize the project objectives.

In fairness, it should also be recognized that past County encouragement for the lowest possible noise levels in the Santa Ana Heights area (RMS 1, 2 and 3) has resulted in higher noise levels (single event and cumulative) than would have otherwise been the case for residents further south of Santa Ana Heights. To some extent, this will continue to be the case if either Alternative 1 (the proposed project) or Alternative 2 is selected by the Board of Supervisors.

Inevitably, the County is faced with the difficult policy choice of structuring a noise control program knowing, as is virtually always the case, that any policy will result in more noise in some neighborhoods and less noise in others. The fact that the County can implement effective land use mitigation measures as recommended in the draft EIR only in Santa Ana Heights because of FAA funding criteria is a factor in considering the necessary policy issues.

Finally, the reference in the comment to a 3.5 dB CNEL increase in Santa Ana Heights is apparently based upon Table 1-2 of the draft EIR. That entry is a typographical error, and should be 3.6 dB CNEL (the value is correctly identified in Table 3-7 of the draft EIR). The final EIR will be corrected accordingly. The typographical error in Table 1-2 did not affect the analysis in the EIR or any of the responses to comments on the draft EIR.

COMMENT #11:

Project proposes to reroute *VOR 25 Airway from the coastal area to the inland Santa Ana Heights area; thereby availing air carriers on departure from JWA - 19R runway, a climb-out altitude from the present 3,000 foot ceiling to an increased climb-out altitude of 5,000 feet or more. This will further benefit residents of the coastal area, and at the same time, place a greater burden on the residents of the Santa Ana Heights area by rerouting aircraft from other airports that will be ascending or descending during fly-overs.

Presently, **VOR 23 Airway already passes over the Santa Ana Heights area, and that route along, impacts the area with more than enough disturbing noise levels throughout the late evenings and early mornings. We reject any proposal to reroute VOR 25 Airway, and we believe the FAA will too, because it is extremely dangerous to sandwich this Airway between VOR 23 Airway and ***VOR 64 Airway. To needlessly reroute aircraft over populous inland areas, so as to benefit the coastal areas, further evidences why: "Some individuals should not be expected to share a greater portion of a public burden, in order for some individuals to be favored by receiving a lesser share."

*VOR 23 Airway as of 4-1-93, originates at San Diego (Lindberg), proceeds to Camp Pendleton (MCAS) and passes directly over the Santa Ana Heights area enroute to Los Alamitos (AAF), and then on to Los Angeles (LAX).

**VOR 25 Airway as of 4-1-93, originates at San Diego (Lindberg), and proceeds along the coast to Los Angeles (LAX).

***VOR 64 Airway as of 4-1-93, originates at Blythe, proceeds to Hemet, Perris, and passes 6 miles North of the Santa Ana Heights area enroute to Los Alamitos (AAF), and then on to Los Angeles (LAX).

Note: If VOR 25 Airway is rerouted, it would originate at San Diego (Lindberg), proceed to Camp Pendleton (MCAS), El Toro (MCAS), and would pass 3 miles North of the Santa Ana Heights area enroute to Los Alamitos (AAF), and then on to Los Angeles (LAX). In other words, VOR 23 already passes over SAH area, VOR 25 would pass within 3 miles of the SAH area, and VOR 64 already passes within 6 miles of the SAH area.

RESPONSE #11:

This comment does not reflect an accurate understanding of the referenced route change. First, the route change was not an element of the proposed project, but was analyzed as a potential cumulative impact of the project evaluated in Draft EIR 546. The route change was an FAA project, and only FAA has regulatory authority over airspace use and modifications.

The route changes that have been made in connection with the proposed project were the subject of an environmental assessment ("EA") and finding of no significant impact ("FONSI") prepared by the FAA pursuant to the requirements of the National Environmental Policy Act (42 USC §§4321-4370) and its implementing regulations (40 CFR §§1500-1508) and relevant implementing orders of the FAA, including FAA orders 5050.4A and 1050.1D. The EA analyzed the potential environmental effects of the proposed route change within the air space and jurisdictional boundaries of the cities of Santa Ana, Laguna Beach, Irvine, Newport Beach, Huntington Beach, Orange, Villa Park, Costa Mesa and Long Beach. The FONSI was issued by FAA on March 5, 1993.

The route changes modified two existing air routes for jet and propeller aircraft making instrument approaches in the vicinity of JWA on their descent into Long Beach, Fullerton and Los Alamitos Airports. This modification required the existing departure ceiling of 3,000 feet, mean sea level, on southbound departures from JWA to be raised to 5,000 feet mean sea level. In order to accommodate the change in altitude restrictions from 3,000 feet to 5,000 feet, it was necessary to reroute aircraft that have historically operated at 4,000 and 5,000 feet along the coast line in the area immediately south of JWA.

Contrary to the commentator's statements, no air route was moved to the Santa Ana Heights area. In fact, aircraft that were previously crossing over or just south of Newport Bay in an east to west direction between JWA and the coast that were descending for approach to Long Beach, Fullerton, or Los Alamitos were rerouted to a location ***north of JWA.***

COMMENT #12:

Even though the Project is noncommittal at this time inre: to extending 19R/O1L runway 750 feet and/or 1,000 feet to the North by engineering study and scenarios; is nothing more than a waste of time to start with. First, the distance from the North end of 19R/O1L runway to the 405 Freeway is approximately 1,580 feet. Next, FAA requires 1,000 feet (FAR Part 139) of that distance for a clear zone area at the end of the runway. Finally, the remaining 580 feet would be further reduced by Freeway right-of-way requirements; therefore, leaving approximately 500 feet or less for possible runway extension to the North.

Question: Why did the 750 foot and 1,000 foot runway extension theory receive so much unwarranted discussion in the Project, when the improbability was so obvious?

RESPONSE #12:

This possible mitigation measure was discussed and analyzed in the Draft EIR because the County wished to identify and analyze all feasible mitigation measures which might reduce the necessary noise level increases which would result from implementation of the proposed project (or Alternative 2). However, the County did not "count" or take "credit" for the proposed feasibility study as a mitigation measure because its ultimate feasibility cannot be determined until the study is completed.

As reflected in Table 3-13 of the Draft EIR, the principal benefits of this possible mitigation measure would be realized in the Santa Ana Heights area. (See the response to Comment No. 10). Therefore, the EIR recommends that a feasibility study be conducted to determine if the runway could be extended (for purposes of takeoff - landings would not be affected because of the clear zone issue).

We appreciate the commentator's input on the feasibility of this possible mitigation measure. However, while we agree that there are significant engineering issues which require study (most of which are not identified in this comment), we do not agree that the comment accurately identifies limitations on the feasibility of the possible extension of the runway. The principal point of disagreement is the commentator's suggestion that the 1,000 foot clear zone requirement would be applicable to the extension. As discussed in the Draft EIR, the landing point of Runway 19R would not change if the runway is extended, resulting in a "displaced threshold" which meets all current FAA clear zone requirements. The comment would be accurate only if the County were proposing to move the landing threshold to the north as part of any runway extension - which it is not.

See also the response to Comment No. 50.

COMMENT #13:

Purchase Assurance Program is an ineffectual measure for voluntary mitigation, because: (1) It does not take into account for disproportionate property injury caused by jet aircraft operations. (2) Makes third appraisal mandatory. (3) Requires unnecessary carve-outs and fees.

Remedy: (1) Offer #full fair market value. (2) Eliminate mandatory requirement. (3) Eliminate carve-outs and fees.

RESPONSE #13:

The AC 91-53A Residential Purchase Program (RPP), as currently planned, is similar to the earlier Purchase Assurance Program. The RPP will provide for up to three appraisals to ensure a mutually-agreed upon value. As with any appraisal, the surrounding environment - including airport operations - will be taken into account. To the extent that this comment implies that the County should somehow offer the property owner more than the fair market value of the property in its current condition, the County finds no basis for providing an economic windfall to any property owner under the RPP program.

The first two appraisals involve no obligation on the part of the property owner, except for the cost of the second appraisal. If the owner and County agree on a purchase price in accordance with either of the first two appraisals, a land-sale transaction will be completed and, of course, no further appraisals will be necessary. If, however, an agreed upon purchase price cannot be reached and the property owner still wants to participate in the RPP, a third appraisal must be undertaken; although whether to proceed to a third appraisal is a voluntary choice of the property owner. The third appraisal may be undertaken only after the property owner and the County have signed an acquisition contract - a contract which makes the third appraisal binding on both parties. In addition, the County will offer the services of a relocation specialist and will reimburse the property owner for eligible relocation costs.

Beyond these provisions, the transactions will be conducted in a manner very similar to a land transaction between two private parties; therefore, the County will not impose any special administrative fees.

COMMENT #14:

Acoustical Insulation Program does not offer a full measure, because: (1) It is not of equal trade-off value for air rights received. (2) Program has no provisions for mitigating noise impacted outside-property amenities. (3) Previous insulation performance has not been adequate to reduce inside noise level to 45 dB CNEL in all habitable rooms.

Remedy: (1) We argue that air rights are not marketable properties, then why should deeded avigational easements be required? (2) *British Airport Authority in London (Heathrow), provided property owners who opted for acoustical insulation, a sum equal to one half of the cost to insulate. (3) Insulation quality and thoroughness needs to be improved.

*Source: "Some Projected Effects of Jet Noise on Residential Property near Los Angeles International Airport by 1970," by: Paul T. McClure, April 1969, P-4083.

RESPONSE #14:

Property owners who choose to participate in the Accelerated Acoustical Insulation Program (AAIP) will have their homes acoustically insulated under the direction of an acoustical engineering consultant under contract to the County. In exchange for the acoustical insulation, the property owner must grant the County an avigation easement over their property which is defined to a specific CNEL level. The County is not under a specific legal obligation to provide an acoustical insulation program in Santa Ana Heights. The Board of Supervisors made the decision to implement the program in 1985, and Draft EIR 546 recommends accelerating the program, in an effort to provide the best possible acoustical environment in residential areas of Santa Ana Heights for those property owners who choose to participate in the program - not because the County was under a legal compulsion to do so.

The principal reason why the County insists on receiving an avigation easement in return for the public funds expended on private properties is to define for the owners - and for subsequent purchasers of an acoustically treated residence - the fact that the property has been acoustically treated; and to define both for the County and the property owner their respective expectations regarding the specific noise environment for which their properties have been treated. Unlike many other similar programs, the County does not require an unlimited avigation easement permitting the airlines to make any amount of noise they may wish over Santa Ana Heights. Rather, by defining the easement in terms of the CNEL levels anticipated in EIR 508/EIS, the rights of the property owners have been protected if, in the future, greater levels of noise are generated in Santa Ana Heights. At the same time, the legal rights of the County and of the FAA (which will provide much of the necessary public funding) have also been defined at a specific CNEL level. If this were not done, an owner or subsequent purchaser of an acoustically treated property could accept the benefits of acoustical insulation accomplished with public funds, but still proceed (in legal proceedings or otherwise) as if the County and the FAA have not in fact paid for significant noise reduction construction.

The AAIP program is voluntary. If any property owners feel that the proposed transaction (acoustical insulation for a defined avigation easement) is unfair, they need not participate, and they may pursue whatever other remedies or courses of action they wish in dealing with aircraft noise related issues.

Avigation easements are also appropriate to ensure that residential properties which have been acoustically treated are considered "compatible" in accordance with the State Noise Standards.

It is true that acoustical insulation benefits only enclosed, treated spaces; there is no known means to "acoustically insulate" an outdoor area. However, one of the main objectives of the proposed project is to limit to the extent reasonable and feasible the

total amount of outdoor noise generated by aircraft departing JWA on Runway 19R. This is accomplished by setting stringent noise limits at the remote monitoring stations south of JWA at levels which permit only the quietest available aircraft (i.e., "Stage 3" - and not even all of those) *to operate at JWA, even with the new FAA mandated limits on permissible departure procedures. Therefore, the presence of airport noise limits in residential areas south of JWA does, in fact, help to mitigate outdoor noise as much as possible within the parameters of reasonable, feasible and acceptable levels of airport operations at JWA.*

Follow-up data from the homes which have been acoustically insulated indicates that the program objectives were met for almost every participant. Program objectives included reducing interior noise levels to 45 dB CNEL or less, or realizing a minimum interior noise improvement of 5 dB regardless of pre-existing noise levels. According to the December 1992 summary report prepared by Wyle Laboratories, the acoustical consultant in charge of the program, an average noise reduction of 7.9 dB was realized in all of the rooms of the homes that were insulated. Survey responses from program participants indicate that all but one of the participants responding to the survey perceived the interior noise environment of their homes to be improved or much improved after completion of the insulation project.

COMMENT #15:

Data base is subjective . . . . . Proposals are conjectural . . . . . Remedial mitigating measures are flawed. Otherwise, "an interesting, yet complex report." We suspect the DEIR 546 Project is faulty.

RESPONSE #15:

We acknowledge but respectfully disagree with the opinions of the commentator.

COMMENTS FROM THE BLUFFS HOMEOWNERS COMMUNITY ASSOCIATION

COMMENT #16:

Since action of the Federal government is essentially forcing those who live near JWA to contend with a noisier airport, we consider it important that those citizens so situated receive some assurance that the impact of aircraft noise upon them will be moderated and/or limited in the future. We thus make the following recommendations concerning Draft EIR 546:

That the term of the existing 1985 Settlement Agreement (Stipulation) be extended from Dec. 31, 2005 to Dec. 31, 2015.

RESPONSE #16:

The Draft EIR has recommended as project mitigation that the County negotiate with the City of Newport Beach regarding an extension of the "settlement agreement." (Draft EIR, Section 3.1.5). However, the scope of the issues which would be discussed in any such negotiations is broad and exceeds the scope of the specific issues addressed in the Draft EIR. In addition, any extension of the "settlement agreement" would require its own environmental documentation and process. Depending upon the terms of any extended "settlement agreement," that environmental documentation could be a substantial EIR.

In the context of the project proposed and analyzed in EIR 546, there is no direct causal nexus between the proposed amendments to the Phase 2 Access Plan and the term of the existing settlement agreement; nor would an extension of the settlement agreement, in and of itself, act as mitigation for the proposed project.

COMMENT #17:

That the PASSUR radar system, installed for the departure noise demonstration program, be retained by the County, and utilized to ensure compliance with the long established noise abatement departure route from JWA.

RESPONSE #17:

The County plans to continue use of the PASSUR system, or a system with equivalent capability, for the indefinite future to monitor aircraft operations arriving and departing at JWA. This system will continue to monitor the aircraft transponder code, flight path, altitude, and ground speed.

It should be emphasized that the County does not have regulatory authority to control use of the national airspace or to direct the operation of aircraft in flight. Therefore, the County does not plan to use the PASSUR system to enforce any aircraft operation procedures. The enforcement of aircraft operation procedures is provided by the aircraft operator and the FAA. The FAA directs and monitors all airport arrival and departure operations at JWA. As the Airport Proprietor, the County sets noise limits which must be met, but exercises no direction or control over aircraft operation procedures. However, PASSUR has proved valuable to the County in identifying airlines or aircraft types which, for one reason or another, are not operating on flight paths as

close to the Standard Instrument Departure path off of Runway 19R as other aircraft or airlines. Generally, after communicating with the relevant aircraft operator, the County has received the voluntary cooperation of the operators in correcting any procedures which are causing significant and repeated deviations from the expected departure track.

COMMENT #18:

That the noise abatement performance of departing aircraft be closely monitored over the coming year, and the proposed noise limits for the project case be refined to the lowest levels possible before being finalized in a long term agreement.

RESPONSE #18:

The County does plan to continue the noise level demonstration data collection through 1993. The analysis of this additional data will allow the County to determine whether further modifications to the maximum permitted noise limits for Class A, Class AA or Class E aircraft operations are appropriate. This plan to continue data collection and analysis is more fully discussed in Section 2.3.5 and Section 3.1.5 of the draft EIR, which contain the two subsections entitled: "Extended Noise Demonstration Period" and "Limitation on Access Plan Amendments, and Continuation of the Noise Level Demonstration."

COMMENT #19:

That the project include measures to ensure those residents impacted by the project, and its changing noise limits and exposure, be treated fairly through viable, and funded, "buy-out" and acoustic insulation programs.

RESPONSE #19:

As noted in Draft EIR 546 (Section 3.2.6.2), mitigation measures are included to implement the Accelerated Acoustical Insulation Program and AC 91-53A Residential Purchase Program in response to the proposed limits and associated new takeoff procedures. The County has specifically worked with FAA regarding funding for these programs. FAA has been extremely cooperative and helpful on the funding issues, and the County has been specifically advised by the appropriate FAA officials that the County is eligible for federal funding for both programs.

COMMENTS FROM RIVERSIDE DRIVE KENNEL OWNERS GROUP

COMMENT 20:

First of all, RDKOG understands that the County of Orange (OC) is attempting to commit an unlawful act through the EIR #546. State of California, California Administration Code Title 21, Public Works, Division of Aeronautics, Subchapter 6, Noise Standards, Article 2, Airport Noise Limits Sect. 5010 PURPOSE; clearly states . . . . ."the purpose of these regulations is to provide a positive basis to accomplish resolution of existing noise problems in communities surrounding airports AND TO PREVENT THE DEVELOPMENT OF NEW NOISE PROBLEMS." It should be obvious to you that your own Document 546 states beyond any doubt that JWA is in fact developing NEW NOISE PROBLEMS since allowing jet carriers access to it and in and during the specific period of testing from late March 1992 to the present.

RESPONSE #20:

The County, as the proprietor of JWA, currently has a variance from the California Noise Standards (California Code of Regulations, title 21, Sections 5000 and following), the regulations referred to in this comment. Nothing in the proposed project is inconsistent with the terms of that variance.

Immediately prior to commencement of the noise level demonstration, the County was prepared to submit a request for a determination by the Division of Aeronautics that JWA had a "zero" "Noise Impact Area" (as defined in the regulations) based upon then current noise levels and the County's land use mitigation programs in Santa Ana Heights. The increases in noise levels required that that request be delayed until the impacts of the change in FAA policy on noise abatement departure procedures could be resolved and its effects quantified. The County now believes that, with implementation of the land use mitigation measures recommended in EIR 546, that it will again be able to request this determination at some time in the foreseeable future.

It has long been express County policy to achieve full compliance with the California Noise Standards as soon as economically and technologically feasible, and that continues to be County policy today. At JWA, unlike most other commercial air carrier airports in California, that is a realistic objective, and the County, as noted above, had virtually achieved that objective prior to the FAA initiative requiring consideration of amendments to the Phase 2 Access Plan.

The thrust of this comment appears to be that the commentators believe that the County should, or is legally required to, adopt the "no-project" alternative discussed in EIR 546. The County is not legally required to adopt the no-project alternative under the provisions of the Noise Standards, CEQA, or any other law or regulation. The Draft

EIR discusses the reasons why it recommends against selection of the no-project alternative by the Board of Supervisors.

Finally, the County is limited in its ability as the airport proprietor to control aircraft noise. Nevertheless, the County has exercised its regulatory authority more completely and aggressively (and at an earlier date) than any comparable air carrier airport in the United States. If the proposed project will create "new noise problems" within the meaning of Section 5010 of the Noise Standards (and that is a debatable interpretation of Section 5010), it is a direct result of regulatory action by the FAA, acting within the scope of its pervasive federal regulatory authority over aircraft operations, and only indirectly the result of the need for action by the County to take action to accommodate the FAA's safety initiative.

COMMENT #21:

Second, under the same Article 2 of Title 21 Sect. 5011,(f) refers to "Development of a compatible land use within the noise impact boundary." RDKOG simply cannot imagine a land use more compatible than 14 commercial kennel businesses. The noise of all the dogs of all the kennels barking simultaneously are totally overwhelmed by the single event of all but Class E aircraft departures.

RESPONSE #21:

State and County standards consider non-residential uses to be compatible with the noise impact zone. The operation of commercial kennels within the noise impact zone is therefore considered to be compatible. The Riverside Drive area properties also contain residential uses. As discussed in Draft EIR 546, mitigation is proposed in the form of the AAIP and the RPP to allow residential property owners an opportunity to achieve land use compatibility consistent with the state and local standards. Both of the programs are strictly voluntary.

COMMENT #22:

Third, still Article 2 of Title 21 Sect. 5014 compatible land uses within the noise impact boundary have deemed (a) "AGRICULTURAL, as a compatible land use." The reason I would bring this to your attention is the fact that Tract 2581 was zoned A-1 (agricultural) until the adoption of the land use district regulations adopted October 15, 1986; Chapter IV of the Santa Ana Heights Specific Plan (SAHSP). RDKOG, at all meetings of the Orange County Planning Commission (OCPC) and Orange County Board of Supervisors (OCBOS), vehemently objected to this zoning change. It has, in fact, created and been an enormous hardship. Commercial bankers see us as a residential

community and S & L's see us as commercial businesses. It is very hard and extremely difficult to sell property when there are no willing lenders.

RESPONSE #22:

This project does not propose any changes to existing zoning designations in Santa Ana Heights. Rezoning of the Riverside Drive area to RK "Residential Kennel" as part of the Santa Ana Heights Specific Plan was done to recognize the area's unique characteristics and to ensure the preservation of existing residential kennel uses. RK district regulations also aid property owners by clarifying the permit process if an owner wishes to expand or remodel their kennel.

See the response to Comment No. 26 regarding rezoning of the Riverside Drive area.

COMMENT #23:

Tract 2581 is situated approximately four hundred feet at the nearest and about nine hundred fifty feet at the greatest distance to RMS 1 on a line of about two hundred twenty five degrees or almost due south/west. Normal departures seem to parallel this angle with a turn of about forty five degrees to the south that must be close to due south (180°). Because of this we are bombarded with copious amounts of aircraft noise. Sometimes departures are extreme, turning due west over our homes (as happened April 1, 1992) and Santa Ana Wind conditions make for some interesting arrival aerobatics. Sometimes late arrivals will make our homes rattle when reverse thrust is applied. It would seem that in the later hours, the sound is carried by the gentle breeze that blows from inland out to sea. This happened most recently on the evening of April 22, 1993. Apparently commercial flights were delayed because of a "wheels up landing" of a small general aviation type aircraft. RMS 1 must have registered between 90 to 100 dB on at least one of those commercial carriers. We have also noticed a marked increase in the number of commercial carrier repairs that are typically carried out in the wee small hours of the morning. Often the jet engines are run up and down for hours on end and usually from 2330 to 0400 hours. No doubt this noise also registers on RMS 1, and it also violates the curfew.

RESPONSE #23:

This comment does not raise any issues directly related to the proposed project. However, as a courtesy to the commentator, the County provides the following information:

Typical aircraft departures to the south from JWA on Runway 19R follow the runway heading before making a turn. Commercial aircraft depart JWA on Runway 19R using the Standard Instrument Departure (SID) route. The SID follows the runway heading to one nautical mile from the DME (approximately one mile south of the airport), then turns left to 175 degrees magnetic and continues to the coastline. This flight path routes the commercial aircraft generally between RMS 1 and RMS 2 and over RMS 3, and then down the Upper Newport Bay. General Aviation aircraft also depart to the south, and are typically directed by the FAA to turn left or right shortly after leaving the airport boundary.

"Reverse thrust" events are not relevant to the proposed project. If this commentator wishes to obtain information on specific events, he should contact the JWA Noise Abatement Office at (714) 252-5185 for further information.

"Engine runup" issues are also not relevant to the proposed project. However, as a courtesy to the commentator, we will provide the following information: From time to time, air carriers find it necessary to perform aircraft engine run-up maintenance before departing JWA in order to meet FAA safety and maintenance requirements. The Airport has specific rules and regulations for the coordination, location and timing of engine run-up maintenance by an air carrier. Each air carrier is required to request and schedule their engine run-up with a representative of the Airport. For commercial aircraft, engine run-ups are permitted only in the isolation area (near the southwest corner of the airport property), or in the apron area near the old passenger terminal. Engine run-up maintenance in the isolation area is permitted only between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

The Airport Operations staff representatives closely monitor the commercial carrier engine run-up maintenance activities for compliance with these procedures. During 1993 there have been fewer than six occasions when engine run-up maintenance has occurred at JWA, and all have been in accordance with the Airport's requirements.

Noise levels from engine run-up maintenance are occasionally recorded at RMS 1 as well as RMS 2. A review of the 1993 noise level data for these RMS locations does not indicate any engine run-up noise during the late night or early morning hours.

COMMENT #24:

First, we are concerned with the OC mitigation measures that include 3.2.3 LUCP Mitigation Programs, Purchase Assurance and Acoustical Insulation (PA), (AI). Those programs were doomed at their inception with RDKOG. I tried to explain our reasons to Rich Adler in the mid 1980's when he was in charge of the Project Area, long before the SAHSP was being written. The majority of our homes had already been insulated, dual lass windows installed and many had air conditioning. According to note 89 page

129 of EIR #546, a maximum of $32,500.00 for Al improvements plus engineering services of $5,000.00 for a total of $37,500.00 per residence is the typical OC expenditure for the avigation rights of that specific owners property. As far as PA, RDKOG had no use for it because we have the only commercial kennel property in OC that is zoned in such a way (at that time A-1 Agricultural) and now RK which gives us the best of both worlds. Unlike Kermore Lane, Jackson Street, Bativa, Collins, etc., we are able to pull permits to improve both our homes and businesses. When RDKOG inquired about remuneration for our expenses and effort, OC turned us down cold. When we inquired with reference to the purchase of our avigation rights by OC in lieu of Al/Pl, once again OC turned us down cold. Though the percentage of real estate would be a fine line in the real estate pie, there are numbers of dog fanciers and dog breeders that would consider our RDKOG something "to die for." We are considered the BelAir of all kennels in the Southern California Area. We are in fact situated in the middle of a highly educated, affluent and knowledgeable clientele. Our Tract 2581 is in a geological area that has not, and never will suffer flooding, such as the Huntington Beach Area of the Santa Ana River Flood Plan. We have geologic stability and will never experience seismic puddling as has been predicted along much of the OC coast. We have a typical southwesterly breeze off the ocean almost every day through the hot months and seldom suffer the smog conditions found inland. We own our own water company. We have sidewalks, curb and gutter, paved street, sewer, phones, electricity, natural gas and cable tv, and all in good repair. Although the OC, to initiate their redevelopment agency, were forced to put the label "Blighted area" on RDKOG, I can assure you that we are anything but "blighted." In fact, the OCBOS paid $28.14 per square foot for 3.1 acres of the worst part of the area, "Lang Drive," and considered that price to be fair market value. OCBOS paid a total price of three million eight hundred thousand dollars, plus, the cost of removing existing structures and tons of junk and trash just to clear the property. There are still over seven thousand yards of dirt that were dumped there illegally by the prior owner of the Lang Drive Property that must be dealt with.

RESPONSE #24:

As described in section 3.2.6.2 of Draft EIR 546, the County will offer both programs on a strictly voluntary basis to eligible property owners. The installation of improvements pursuant to the AAIP will be provided under the supervision of a private acoustical consultant. This will ensure a high level of quality and consistency in the improvements. No other mechanism exists for obtaining limited avigation easements. See also the response to Comment No. 14.

Cost reimbursements are not available for acoustical improvements done by residents independent of the County's acoustical insulation program.

As the comment notes, the Riverside Drive area was rezoned from A1 "General Agricultural" to RK "Residential Kennel" with the adoption of the Santa Ana Heights Specific Plan in 1986. The goal was to create regulations tailored specifically to the unique characteristics and needs of the property owners along Riverside Drive. The intent of the RK regulations was (and is) to address specific regulatory needs of the residential/Kennel uses, clarify the criteria for processing changed plans and use permits, and to ensure this unique use could continue well into the future as a permitted use.

The dumping of dirt on Lange Drive is not related to the proposed project. This issue is being addressed separately by County staff.

COMMENT #25:

Second, RDKOG is concerned with the constant threat that, because of the noise levels experienced in our area, we are candidates for condemnation under the guidelines of Title 21 Section 5012. Airport Noise Criteria. At the Project Area Committee (PAC) meeting held the evening of December 3, 1992 in Airport Conference Room #1 of the Airport Operations/Security Office, Proctor for JWA (Michael Scott Gatzke) made it clear that, based upon the response to the questionnaire sent out to Santa Ana Heights in general by EMA, he would make a recommendation to the OCBOS. Mr. Gatzke stated that he might have to "inform the OCBOS that it is time for them to bite the bullet and buy us out." The State of California has enacted laws that make it necessary for the owner or seller of a property to disclose any abnormalities that a buyer may encounter in the purchase. I refer specifically to the fact that RDKOG properties have become entrapped by the recent testing being conducted at JWA. I personally had my home and commercial kennel business listed with Westgate Properties for over a year. Each time my home and business were shown and the disclosure made with regard to JWA and possible condemnation, the potential buyers were lost. They simply "did not wish to become involved in litigation with potential loss of home and commercial kennel business." It was always a "let us know when the airport thing is straightened out." I took my house and business off the market April 1, 1992 to wait out a test that was to have terminated December 31, 1992. JWA then extended the test and here it is, almost May of 1993 with no decision. Here I am, spending hundreds of hours studying documentation and just as involved as I ever have been when I had hoped to be retired and out of here several years ago. The OCBOS are finally going to have to make a decision, and rather quickly. While I do not know the finer points of the law, I am aware that the JWA has and does entrap us. We are unable to market our homes and businesses. This is against the law. We have received no "Just Compensation" from JWA for this "taking of our property for the purpose of noise tests which have now exceeded one calendar year." It is my understanding that precedents have been set in law that require "Reasonable Time," "Time of the Essence" be observed. In other words, OCBOS are going to have to make a decision right away. If not, you will force us into a position wherein the court will make the decision for you. We hereby declare that we

refuse to wait for any further tests or studies to be done and furthermore we will not tolerate waiting another five to fifteen years for a possible El Toro Project. If it is your intent to condemn us, condemn us. Do it now. Let us get on with our lives. Thank you.

RESPONSE #25:

The Draft EIR does not recommend any mandatory acquisitions (i.e., "condemnation") actions in Santa Ana Heights as mitigation for the proposed project (or for any other reason). In fact, at pages 155-56, the Draft EIR expressly rejects mandatory conversion of land uses (by condemnation or otherwise) in the Riverside Drive area.

There was a concern by County staff and special counsel before and during the noise level demonstration that the noise level increases which might be required by the FAA initiative on noise abatement departure procedures could possibly cause single event and cumulative noise levels to rise so high that continued residential use in some areas of Santa Ana Heights might be inappropriate (although not generally in the Riverside Drive area). Rather, those areas where there was a concern about the extent of the noise increases ultimately necessary to accommodate FAA's policy initiative were certain areas of the Pegasus Tract closest to the flight track (in the vicinity of RMS 1) and in certain areas of the Anniversary Tract under the nominal flight track (in the general vicinity of RMS 3). The point of the meeting with the Santa Ana Heights Project Area Committee on December 3, 1993, was to brief them on the status of the noise level demonstration, the issues which appeared to be arising from the demonstration data, and to receive input from the PAC on specific issues of concern to the Santa Ana Heights community, and possible solutions for those concerns.

One of the steps taken during the EIR process was to provide questionnaires to all Santa Ana Heights residents requesting their views and preferences with respect to land use mitigation measures which might be considered or instituted as part of the proposed project. Based upon the responses to those questionnaires (which did not indicate significant community support for forced land use conversion), and based upon the final analysis of the noise levels necessary to accommodate the new FAA power cutback policies, the County has concluded that forced land use conversion in Santa Ana Heights - by condemnation or otherwise - is not necessary, and it is not recommended as part of, or mitigation for, the proposed project.

We are, however, somewhat concerned (and confused) regarding certain factual assertions made in this comment. This commentator references a meeting which occurred on December 3, 1992. The commentator says that he "... took [his] house and business off the market [on] April 1, 1992 ...." He says also that when his home and kennel business was listed for sale "for over a year" (presumably prior to April 1, 1992 when the property was "taken off" the market) he made "disclosure" regarding "possible

condemnation" relating to JWA which caused a number of potential buyers to stop considering the property because they did not wish to become involved in litigation or possible loss of their home and business. The commentator claims that these potential buyers generally responded that he should "let [them] know when the airport thing is straightened out."

The problem with this assertion is that, although the Santa Ana Heights community first learned about a possible change in noise levels as early as July 1991, the noise level demonstration did not begin until April 1, 1992, and then only for limited numbers of aircraft. The demonstration was not fully implemented until July 1, 1992. If this commentator had his property listed between April 1991 and April 1992, there would have been no reason or basis for him making any "disclosure" during that time to a potential buyer of a possible "condemnation" action by the County since no one in (or associated with) the County had made any statements to this commentator, or any other member of the public, regarding possible mitigation measures for a project which had not yet even been defined. Certainly there was no basis for making any such "disclosures" between April 1991 and April 1992 based upon this commentator's understanding of a communication occurring on December 3, 1992, (the date of the referenced Santa Ana Heights PAC meeting).

We respectfully disagree with the commentator's legal opinions and arguments. However, again: the Draft EIR ***does not*** *(and* ***never has****) recommended condemnation, or any other form of forced land use conversion, for this commentator's property (or any other property in Santa Ana Heights);* ***all*** *land use mitigation measures proposed in the EIR are voluntary in nature; County staff has* ***no reason*** *to believe that the Orange County Board of Supervisors intends, wishes to, or will even consider condemnation actions in Santa Ana Heights for any purpose related to the proposed project; and the County never has officially or unofficially proposed condemnation actions in Santa Ana Heights as land use mitigation related to any airport project.*

COMMENT #26:

Third, if it is your intent to leave us to our homes and businesses, let us know in a written statement to that effect. We would then expect OCBOS, in good will and faith, to zone us back to A-1 Agricultural. This would eliminate the hardship of dealing with S & L's and commercial bankers and also exempt us with Title 21 Section 5014(a) which would automatically make our land use compatible with the activities of JWA. We would also demand that Section g. SPECIAL REGULATIONS be totally eliminated from the SAHSP. That entire section is ludicrous considering the intent of EIR 546.

RESPONSE #26:

Based on the analysis in Draft EIR 546 (Section 3.2.6.1), the County has concluded that there is no reason to condemn the properties along Riverside Drive or to otherwise change the existing zoning in Santa Ana Heights. As a separate and unrelated project, there may, however, be merit in examining the efficiency of the "Residential Kennel" district regulations.

However, rezoning the RK "Residential Kennel" area back to A1 "General Agricultural" is problematic for a number of reasons. Commercial kennels in conjunction with a single-family residence are now permitted in the RK zone subject to approval of a use permit. Rezoning the area back to A1 "General Agricultural" could jeopardize the allowance of this unique use and impose unreasonable site development standards (e.g., four-acre minimum building site areas) for future redevelopment of the area.

In addition, rezoning the area to a less intense use, such as A1, could be considered "downzoning" by certain parties. Such an action has the potential to adversely impact property values and to create hardship for the affected property owners.

COMMENT #27:

Last, we are having a hard time accepting the Appendix D, Noise Technical Appendix, as presented in the EIR #546 by Mestre Greve Associates. In the SENEL Contours, the RMS are set to monitor all commercial departures, but few of the general aviation departures. I do not believe the CNEL averages are accurate because of this. I have personally monitored private aircraft over my home that are will above 85dB. I was shocked at several twin engined departures that I call "Sky Kings" (maybe that radio show was before your time)) that went over 92 dB on my meter. The all time noise maker is a twin-boomed thing with a puller engine in front and a pusher engine in the rear of the central fuselage. That thing hit 109 dB on six touch and go's. I finally called Noise Abatement and complained. Noise Abatement returned my call and stated that a student pilot had the manifold pressure set at 135 pounds and corrected the problem. I have enclosed Exhibit 12 with General Aviation departures marked as we see them day in and day out. It would seem reasonable to me that the 65 CNEL impact area should be extended to the south/west to include the greater portion of the Lang Drive Project. Even though Exhibit 12 says April 1991 - March 1992, I believe it should depict Exhibit 15a, with the exception that the 60 dB contour line would be in fact the 65 or 70 dB CNEL contour line. In any case I just can not buy the Mestre Greve projected data of Exhibits 15a, 15b, and 15c.

RESPONSE #27

We acknowledge but respectfully disagree with the opinions of this commentator. In addition, we note here that there is no information available to the County which would indicate that this commentator has any special or particular acoustical expertise, or that he is in any other way qualified to review, comment upon, or criticize the analysis by Mestre Greve Associates in connection with this project and EIR.

John Wayne Airport continuously monitors noise levels at nine permanent Remote Noise Monitoring (RMS) locations: at three RMS's north of the airport and six RMS's south of the airport. All typical commercial and general aviation departures to the south are monitored by RMS locations 1 through 6. In addition, since initiation of the noise level demonstration, additional temporary monitoring stations were installed south of JWA and the data collected from those stations was an important component in the acoustical analysis of the noise level demonstration and the proposed project.

The Community Noise Equivalent Level (CNEL) measured at each RMS is dominated by air carrier operations. However, each private aircraft operation which produces a noise level above the threshold is also measured to determine the overall aircraft CNEL. In particular, private aircraft which generate noise levels above 85 dBA, twin engine departures over 92 dBA, and "puller engine pusher engine" aircraft levels of 109 dBA at any RMS location are all monitored and included as part of the total aircraft CNEL at that location. However, most general aviation piston driven aircraft make only a small contribution to the CNEL at each RMS. This is evidenced by noise level data for the recent six month period from July 1992 through December 1992. During this time period at JWA there were 228,211 general aviation operations, and all but 55 of these operations met the General Aviation Noise Ordinance (GANO) limits.

Exhibit 12 in Appendix D "Noise Technical Appendix" of Draft EIR 546 presents the 65 dB CNEL contour south of JWA for the one year period April 1991 through March 1992. The location of this contour is determined from continuous measurement at each RMS, together with computer modeling analysis used to accurately match the noise level defined at each station. Using the monitoring results from RMS 1, RMS 2 and RMS 3, CNEL contours are developed by the NOISEMAP computer model to fit the measurement findings. For the year-long monitoring period ending March 1992, the measured noise level at each location from all aircraft operations was as follows:

RMS	*MEASURED CNEL*
1	*64.4 dB*
2	*63.3 dB*
3	*63.0 dB*

This information shows that the aircraft CNEL value at RMS 1 was slightly below 65 dB, while the CNEL values measured at RMS's 2 and 3 were well below 65 dB. With the actual aircraft noise levels defined by this data, the computer modeling analysis accurately located the 65 dB CNEL contour just north of RMS 1 and farther north of RMS's 2 and 3.

The precision of the Exhibit 12 65 dB CNEL noise contour location is dependent upon the field noise measurement accuracy and the computer model matching of the noise level data. While general aviation aircraft do turn both left and right from the SID (as described in the Response No. 25 above), and some of these operations may fly over the Riverside Drive Kennel Owners Group area, the impact of these operations have been entirely accounted for by the noise level data collection. Further, since the air carrier operations tend to dominate the CNEL values in this area, the general aviation operations which do occur result in only a small contribution to the overall CNEL, and have, at best, a minor impact on the location of the 65 dB CNEL contour.

The Draft EIR 546, Appendix D "Noise Technical Appendix," Exhibits 15a, 15b, and 15c represent a computer modeling analysis of the changes expected in the JWA noise contour locations following potential extensions of runway 19R. Each exhibit assumes the Base Case Operations Scenario (described in Draft EIR 546, Section 3.1.4). For Exhibit 15a, the current runway 19R length was assumed. For Exhibits 15b and 15c, potential extensions of runway 19R to the north by 750 feet and 1000 feet, respectively, were analyzed.

Using the same NOISEMAP model which matched previous measured findings, Exhibits 15a, 15b, and 15c were produced to identify the effects of changing only one variable in air carrier operations at JWA: the point on runway 19R where commercial air carriers begin aircraft roll (the break release point, abbreviated BRP) was shifted to the north by zero feet, 750 feet, and 1000 feet; this BRP shift also shifts the point of aircraft rotation north on runway 19R and positions the aircraft altitude higher over Santa Ana Heights. All other noise model inputs previously used to match measured CNEL data were unchanged in the analysis of CNEL contour effects from the change of this one variable. The three exhibits show, as expected, that the projected future 60 dB, 65 dB, and 70 dB CNEL contours shift to the north somewhat for the potential 750 foot BRP change, and shift farther to the north for the potential 1000 foot BRP change. Draft EIR 546, Section 3.1.5, Table 3-13, presents the CNEL values expected at each RMS for these three Brake Release Points. The table also indicates the expected noise level decrease from the potential 750 foot and 1000 foot changes. See, however, the response to Comment No. 12.

COMMENTS FROM THE CITY OF COSTA MESA

COMMENT #28:

The City is concerned about noise impacts to sensitive receptors such as day care centers, schools, congregate care centers, as well as residential areas.

According to Section 3 of the Draft EIR, none of the project alternatives would impact sensitive receptors in Costa Mesa. The 65 CNEL contour (a threshold of significance) for any of the alternatives would not encroach into the City's residential areas. However, the portion of Santa Ana Heights, west of Irvine Avenue in the City's Sphere of Influence, would be significantly impacted by either Alternate 1, (1,500 foot power cut-back) or Alternative 2 (800 foot power cut-back), although slightly less so for Alternative 2. The No Project alternative (no amendments to Phase 2 Access Plan) and Alternative 3 (maintain existing 65 CNEL contour) are environmentally superior although neither meets the project objectives.

RESPONSE #28:

The comment is acknowledged. The comment is, essentially, an accurate summary of the points addressed. The City of Costa Mesa's sphere of influence covers all land west of Irvine Boulevard in Santa Ana Heights, with the exception of a portion of the Newport Beach golf course (See Exhibit 2-2 in the draft EIR).

COMMENT #29:

On page 47 in Section 2.6.7, the document says that the City adopted a revised General Plan in 1981. This is true, however, the General Plan was updated again in March of 1992. A Growth Management Element was added the following month.

RESPONSE #29:

The Final EIR has been revised to reflect the fact that the City of Costa Mesa's General Plan was updated in March 1992 and a Growth Management Element was added in April 1992. See the revision on page 47 of Final EIR 546.

COMMENT #30:

Secondly, on top of page 48, the Draft EIR says that Costa Mesa has a policy which encourages "retention of current capacity limitations on JWA." This is not on the list

of General Plan policies attached to the City's letter (see Appendix B). Please clarify where this language was found.

RESPONSE #30:

We have revised Draft EIR 546 at page 48 to accurately reflect that the City of Costa Mesa's General Plan policies do not include a policy which encourages "retention of current capacity limitations on JWA."

COMMENT #31:

Lastly, also on page 48, third paragraph, the Draft EIR says that the "City's policies relating to the airport are included in Chapter 4." This is the chapter on alternatives. Do you mean Appendix B or perhaps Section 3.2, Land Use?

RESPONSE #31:

The comment is correct. The City of Costa Mesa's policies relating to the airport are included in Section 3.2, Land Use. Draft EIR 546 has been revised at page 48 to reflect this fact.

COMMENT #32:

The City of Costa Mesa will need to update the Noise Element of the General Plan based on the project alternative approved by the Orange County Board of Supervisors. Please forward a copy of the Final EIR to me for this purpose. If possible, may we have a clear copy of the CNEL contour exhibits showing existing and ultimate (year 2005) contours? The exhibits in the Final EIR may not reproduce well.

RESPONSE #32:

The County encourages the City to continue using the EIR 508/EIS noise contours as the basis for its general plan policies. For planning purposes, the EIR 508/EIS noise contours still represent essentially a "worst case" depiction of the long-term future noise environment surrounding JWA. The CNEL noise contours predicted by any of the project alternatives for the project evaluated in EIR 546 will not exceed the EIR 508/EIS noise contours. Therefore, the City should not anticipate a need to update its General Plan noise element. The County will provide the City with a copy of Final EIR 546 and original-quality exhibits, if needed.

COMMENTS FROM AMERICA WEST, AMERICAN, ALASKA, CONTINENTAL, DELTA, NORTHWEST, TRANSWORLD, UNITED, USAIR, BOEING, FOKKER AND MCDONNELL DOUGLAS

COMMENT #33:

The nine airlines and three airframe manufactures [America West, American, Alaska, Continental, Delta, Northwest, Transworld, United and US Air - Boeing, Fokker and McDonnell Douglas] agree with the Draft E.I.R. #546 objectives of maintaining the pre-demonstration (April 1, 1992) aircraft and airport capacity capabilities, and avoiding the use of an SNA specific noise abatement departure profiles. These objectives can not be met if the maximum noise levels of the "No Project," or "Alternative 2" are implemented.

Either of two variations of "Alternative 1" which we call "Version A" and "Version B" would be an excellent compromise in everyone's interest and would resolve the current significant differences of interpretation in noise levels between all interested parties.

RESPONSE #33:

The only difference between Alternative 1 and Alternative 2 is the altitude at which power cutbacks are initiated for non MD-80 type aircraft. The noise limits for Alternative 1 and 2 are based on the results of the noise level demonstration. For both Alternative 1 and 2, the noise data were analyzed using accepted statistical methodology, and the noise levels for each alternative were estimated for each aircraft type. The weights used to determine the noise limits for each alternative were the same. The weights used were as follows:

Aircraft	*Class A Weight*	*Class AA Weight*	*Class E Weight*
MD-80	*128,000 pounds*		
B757		*184,000 pounds*	*172,000 pounds*
B737		*104,000 pounds*	*92,000 pounds*

Theoretically, there is no difference in the weight capacity for Alternative 1 and 2 at the specified cutback altitudes. There certainly are differences between Alternatives 1 and 2 in terms of the potential effects on an airline's system wide operations. The proposed AC limits airlines to a maximum of two NADPs per aircraft type at all domestic airports. If Alternative 2 noise limits are selected instead of Alternative 1 noise limits, airlines may have to limit weight to less than that assumed in the noise level demonstration analysis if they do not have an NADP available for JWA operations. Alternative 2 provides the airlines with much less flexibility than Alternative 1, although if an airline has an appropriate NADP available for use specifically at JWA, there is no difference in weight capacity between the two alternatives.

COMMENT #34:

For the past six months, the SNA air carriers and basically three airframe manufactures, Boeing, Fokker and McDonnell Douglas, have spent many hours at numerous meetings with the SNA airport staff reviewing the noise database developed from the flight demonstration program which commenced on April 1, 1992. During these meetings a very large difference of opinion developed between the airport staff and the industry about interpretation of the proposed class "A" and "E" noise limits required at noise monitor numbers 1, 2, and 3 in order to preserve the pre-demo level of airplane capacity.

All during our discussions with the airport staff, the airlines have emphasized that it was not our intent, nor desire to increase the number of allowable "A" class operations at SNA. The airlines' desire has been simply to operate as close as possible to runway limited weights in order to carry as many passengers on a given flight as possible thereby improving the economics of the operation.

RESPONSE #34:

Draft EIR 546 acknowledges that there is a difference between the County and McDonnell Douglas and at least some of the MD-80 operators regarding the increases in maximum permitted noise levels at RMS 1 and 2 for Class A aircraft necessary to maintain the pre-demonstration operational status quo; and the Draft EIR proposes measures to allow that issue to continue to be examined by the interested parties (see Draft EIR 546, Section 3.1.5). The County and its consultant have continued to review the MD-80 noise data, particularly the noise levels generated by the longer haul flights for which the MD-80 is used. The consultant and airport staff continue to believe that 101.5 dB SENEL is adequate at RMS 1 and 2 to accommodate pre-demonstration missions by the MD-80. However, we also acknowledge that recent noise level and weight information for TWA's St. Louis flights continue to indicate that this is a close issue and should be monitored through the remainder of the current plan year, as proposed in the Draft EIR.

The only Class E issue which has arisen in discussions with the airlines occurred in a meeting with the airlines and manufacturers during the public comment period. During that meeting, the County was presented with information which, after further analysis, indicates that the maximum permitted Class E noise level at RMS 1, under Alternative 2 (and only under Alternative 2), should be raised by .8 dB SENEL (from 90.0 to 90.8 dB SENEL - see Table 3-4 in the Draft EIR). See the response to Comment No. 42 for the County's discussion of this specific issue.

We understand that it is the desire of the airlines "to operate as close as possible to runway limited weights in order to carry as many passengers on a given flight as

possible, thereby improving the economics of the operation." However, to the extent that this objective would provide increased operational capacity by raising the maximum permitted noise levels, it is not an objective of the proposed project. Rather, the objective of the proposed project is to "preserve" the pre-demonstration operational capacity of JWA while accommodating FAA's safety initiative on noise abatement departure procedures. Therefore, the EIR does not propose to raise noise levels in any of the three aircraft noise classes to provide ***additional*** *operational capacity, but rather to* ***preserve*** *the pre-demonstration capacity of the carriers' operations at JWA. Nevertheless, we recognize the general rule that it is environmentally desirable to move the maximum number of passengers with the fewest possible flights (i.e., to encourage high load factors for the airlines, where possible). Based upon the information presently available to the County, we believe that the proposed noise level increases at RMS 1, 2 and 3 are adequate to achieve the project objectives and provide the airlines with reasonable profit opportunities in all three aircraft noise classes (subject to the discussion and recommendations reflected in the response to Comment No. 42).*

COMMENT #35:

The Draft E.I.R. fails to recognize the further changing market place that is occurring in the air transportation system due to many factors, including a depressed domestic economy which has resulted in the United States' airlines losing approximately Ten Billion dollars during the past three years.

RESPONSE #35:

While we are sympathetic to the economic circumstances in which the airlines find themselves, under the requirements and provisions of CEQA, it is not the function of an EIR to solve the economic difficulties of the airlines, but rather to address the potential environmental impacts of the proposed project.

The stated project objective is to maintain the pre-demonstration operating status quo for all aircraft types and operators using the airport prior to initiation of the noise level demonstration. The objective of the proposed project does not include minimizing the financial impact that the changes in departure procedures at JWA may have on the airline industry.

COMMENT #36:

If the "Alternative 1" maximum noise levels are implemented it is quite apparent that TWA will have great difficulty meeting the quarterly noise average requirements. This is because TWA is operating only two MD-80 departures per day, both to St. Louis, at

close to runway limited takeoff weights, that is, 130,000 lb. to 133,000 lb. Alaska Airlines also has a high probability of problems with its Seattle MD-80 operation. Changing market strategies, such as the recent American Airlines announced reduction of service at San Jose, and more long-haul flying at SNA with MD-80's to Seattle raises the specter of similar problems occurring with them.

RESPONSE #36:

See the response to Comment No. 34.

The County has recognized that the MD-80 weight requirements is an important issue. TWA and the other airlines with long distance markets (ORD, DFW, STL) have historically operated below 128,000 pound average weights with MD-80 series aircraft. There is relevant history behind the figure of 128,000 pounds gross takeoff weight ("GTOW") for the MD-80 aircraft.

At the time the MD-80 was first introduced into service at JWA (1981 - see County EIR 253), the County had and enforced a maximum GTOW restriction for dual-gear aircraft such as the MD-80 of 95,000 pounds based upon the rated strength of the runways and taxiways at JWA (See Board Resolution 7096 and Final EIR 253 at p. 3-57). The FAA had advised the County in writing that it should not allow premature deterioration of federally funded pavements at the airport and, that if it did so, the County would be responsible for repairing the pavement surfaces. However, the MD-80 is not capable of operating at a GTOW as low as 95,000 pounds, yet the aircraft clearly offered superior noise characteristics over the air carrier aircraft then using the airport (Boeing 737-200 and DC-9-10/30/50 series aircraft). Therefore, when EIR 253 was certified by the Board of Supervisors (Board Resolution No. 81-780 [May 26, 1981]), the Board authorized the MD-80 to operate at JWA at a maximum GTOW of 128,000 pounds, the operational weight proposed for the aircraft's use at JWA by the proposed operator (AirCal) and McDonnell Douglas. This, in turn, resulted in the development of a noise level "history" at JWA for the MD-80 based upon the operational use of the aircraft at JWA during and after 1981. This noise level "history" then defined "Class A" aircraft in various regulations and "access plans" adopted by the County prior to February 1985 (as compared to the older, Stage 2, "Class B" aircraft - which are no longer permitted to operate at JWA), when the County adopted the 1985 Master Plan and certified EIR 508/EIS. The Phase 1 Access Plan, adopted as a mitigation measure of EIR 508/EIS, continued this definition of "Class A" aircraft and ADDs based upon actual experience with the noise levels necessary for the MD-80 to conduct its operations at JWA.

A review of American Airlines data for the period of August and September, 1990, when American Airlines operated MD-80's on a regular basis to Dallas-Ft. Worth, indicates that American Airlines did have numerous MD-80 flights with weights over 128,000 pounds. However, the average weight for the Dallas-Ft. Worth, MD-80 flights

was 127,100 pounds - less than the 128,000 pounds that was the basis for determining the Class A noise limit. During the same period the American Airlines Orlando MD-80 flights averaged over 130,000 pounds, however there were only 2 of these flights. It is not clear that, prior to the noise level demonstration, any airline operated an MD-80 within the JWA noise limits with weights over 128,000 pounds.

We do not understand the remarks concerning Alaska Airlines. A review of historical weight data for Alaska airlines (all of 1992, and to date in 1993), indicates that Alaska's MD-80 weights were in a range between 119,000 pounds and 124,000 pounds, well below average 128,000 pounds GTOW which forms the current (and historical) basis for the current and proposed new Class A noise limits.

COMMENT #37:

The flight profile demonstration testing from April 1, 1992 to Sept. 30, 1992, provided a very useful database. However, a majority of the noise data was provided for short haul missions, at substantially less than runway limited takeoff weights. There was, in general, a lack of noise data for the high takeoff weight case. It wasn't until October 1992 that the longer mission higher takeoff weight noise levels were generated in quantity by the two TWA departures to St. Louis.

When the TWA data, along with historic American Airlines takeoff weight data for August and September 1990, (a time period when American Airlines operated MD-80s to Dallas/Fort Worth and Chicago) and MDC noise qualification data are carefully analyzed, the industry reaches the conclusion that perhaps the selection of either of two modified versions of "Alternate 1" would best serve everyone's interest. We propose "Alternate 1, version A" and "Alternate 1 Version B" described below:

<u>"Version A"</u>

Since the industry and the airport staff still have significant difference of opinion on the interpretation of the MD-80 demonstration noise database, we would like to offer a concept where "Alternate 1" noise levels are selected, but the MD-80 operation be exempt from penalties for nine months starting July 1, 1993. During this time the airport staff will continue to add to the noise database, giving all concerned an opportunity to better understand the noise impact/benefit trade that is occurring in the airport communities. It is hoped that at the end of the additional nine months of data collection, all parties would accept the noise limits inherent in the data, and close this chapter for the remainder of the access plan.

"Version B"

If the airport/communities are unwilling to accept the "Version A" concept, the EIR's "Alternate 1" should be implemented with the maximum noise levels at monitors #1 & 2 raised to 102.5 dBA SENEL. The Airlines desperately need some flexibility in the operation to serve the market place. The price of this flexibility is about 1.0 dBA increase if the "Alternate 1 Version B" maximum noise levels are implemented.

RESPONSE #37:

It is true that prior to October 1992, the 800 foot cutback data was limited with respect to weights above 125,000 pounds because TWA, the only current operator that regularly operates at such weights, did not use the 800 foot procedure until October 1992. Data analysis completed to date (through March 1993), however, includes substantial data for weights above 125,000 pounds.

It is also true that since October 1992, TWA weights have increased to an average of approximately 131,000 pounds (TWA weights increased when they consolidated 3 MD-80 flights per day into 2 MD-80 flights per day). Statistical analysis of the more recent higher weight MD-80 data, however, still supports the Class A limit of 101.5 dB SENEL for an assumed weight of 128,000 pounds. The data, through March 1993, indicates that a higher Class A limit is not warranted unless a heavier MD-80 is to be accommodated within the Class A limits. Further data collection as proposed in "Version A" of the comment, should help resolve the differences between County staff and the airlines on this issue. Nevertheless, we emphasize again that the objective of the proposed project is to preserve the pre-demonstration status quo; and that the noise level demonstration was not intended as a capacity enhancement project for JWA.

COMMENT #38:

We further believe that implementation of either "Alternate 1 Version A" or "Alternate 1 Version B" is consistent with our formal understanding from the FAA Associate Administrator of Flight Standards that the adoption of AC91-53A would not be permitted to have adverse impact on any air carrier or manufacturer and that operating missions after implementation of AC 91-53A should be no less that those flown before. FAA informed SNA staff of its intention. We believe that limiting the MD-80 or any other airplanes' capability form SNA would violate the provisions of Federal Aviation Regulation (FAR) Part 161 established by the Airport Noise and Capacity Act of 1990.

RESPONSE #38:

Again, the stated project objective is to maintain the pre-demonstration operating status quo for all aircraft types and operators using the airport prior to initiation of the noise level demonstration.

As discussed in the Draft EIR, a condition of adoption of the proposed project is an appropriate written agreement between the County and FAA acknowledging that adoption of the project would not be inconsistent with any obligations of the County under the Airport Noise and Capacity Act of 1990 (ANCA), FAR Part 161, or any other federal aviation rule, regulation or policy; and that adoption of the project would not jeopardize or invalidate in any way the status of the County's regulatory programs for JWA as "grandfathered" under relevant provisions of ANCA and FAR Part 161.

COMMENT #39:

We believe that the SNA staff recommendations for class "A" airplanes at monitors 1 and 2 rely too much on a "snapshot" database taken during the third quarter demonstration at SNA while ignoring the broader MD-80 current and probable future mission requirements. The SNA staff recommendations reflect lack of flexibility for airlines to be able to operate the MD-80 profitability over historically longer missions as market demands. Weight restrictions on the order of 4000 lbs. could occur which represents approximately 20 passengers. This is an unwarranted penalty.

RESPONSE #39:

See the response to Comment No. 37.

We now have data through March 1993. There is no historical record of MD-80 operators operating at quarterly average gross take-off weights over 128,000 pounds and meeting JWA noise limits prior to the noise level demonstration. Staff believes that accommodating MD-80 departures which **average** *as high as 128,000 pounds preserves pre-noise level demonstration capacity; and the preliminary data for TWA indicates that they can meet these limits (although just barely) even with the reduction in their operations to only two daily flights, each of which is non-stop to St. Louis. Nevertheless, we again acknowledge that this may impose a slight weight penalty (but not 4,000 pounds) for an operator such as TWA that has only 2 flights, both to St. Louis, and does not have a short distance market destination that it can use to reduce its average weight (and, therefore, its average Class A MD-80 noise levels). There is no evidence in the data to suggest that any other operator would incur any weight penalties based upon historical weight data and market patterns for MD-80 operations.*

We should point out that the County does not now, and has not in the past (at least since the County's "perimeter rule" was invalidated in the early 1980s), dictate to the airlines what aircraft equipment they should buy or use at JWA (so long as the aircraft meets the applicable noise limits), nor to dictate scheduling, market or route decisions to the airlines. It is not clear, however, that it would be a productive noise control measure to have TWA add an additional MD-80 flight to a short haul destination in order to produce a net lower average weight. Such a measure would in fact appear counterproductive, since it would encourage an increase in operations of the airports noisiest aircraft type. These issues have been a continuing subject of discussion not only between the County and the airlines, but between the County and the affected communities as well. The continuing collection of noise level data under the current procedures for the remainder of the current plan year should assist in reaching an ultimate resolution of special long-haul MD-80 issues, such as those presented by TWA's particular circumstances.

COMMENT #40:

Implementation of either "Version A" or "Version B" noise limits would preclude single event noise levels in Santa Ana Heights that are perceivably different to humans than those in the past. Moreover, the MD-80 airplane altitudes, when power is reduced at 800 ft instead of 500 ft, would be higher south of Santa Ana Heights producing lower noise than before.

RESPONSE #40:

Staff agrees with this comment. However, we observe again that the MD-80 defines the CNEL contours south of the airport for all practical purposes. While the single event differences may not, on a single event basis, be significant, the ***cumulative*** *effects of the increases as described in CNEL could be significant if higher Class A noise levels were permitted than those identified in the proposed project (Alternative 1) or Alternative 2. Compare, for example, the CNEL data in the draft EIR regarding the "NOP Case."*

COMMENT #41:

The industry is very concerned about the potential impact on the SNA operation if "Alternative 2" or "No Project" is implemented. The issue of concern is that the Low Load carrying capability associated with the "Alternative 2" or "No Project" Class E noise limits for many airplane types will have the effect of not allowing the airlines to move into Class "E" since they will be unable to carry sufficient passengers to make a profit.

RESPONSE #41:

See the response to Comment No. 33.

There is no theoretical difference in GTOW capacity for Alternative 1 and 2 if the aircraft are operated with the assumed cutback altitudes and procedures used during the noise level demonstration test. We feel constrained to point out that, for the most part, the procedures used during the noise level demonstration were designed by the airlines and aircraft manufacturers.

Class E noise limits are discussed in detail in the response to Comment No. 42.

COMMENT #42:

The community agreed to the 8.4 map so noise limits should be adopted that allow growth (primarily in Class E) to that number of passengers. The airport will find that with "Alternative 2" and "No Project," it will be impossible to grow to the 8.4 million passenger cap because the airlines will be impeded from increasing the "E" class operations. The "Alternative A or Version B" would minimize this adverse impact.

A good example of this impact can be demonstrated with the America West B737-300 Class "E" operation. Pre-test history reveals that a B737-300 with CFM56-3B2 Engines were capable of takeoffs at 103,000 lb. This equated to carrying 95 to 105 passengers on a one hour stage length. This capability was achieved by reducing thrust at 1000 feet above field elevation, to a power level that would provide a negative 3% climb gradient with one engine failed. Impending amendment to Advisory Circular 91-53 prohibits power reductions below positive 1.2% gradient settings. For two-engine aircraft this factor alone adds to the minimum noise levels the aircraft is capable of producing. To perform 90.0 SENEL levels as proposed at monitor 1, takeoff weights must be limited to approximately 93,000 pounds. This 10,000 lb. lower weight equates to approximately 72 to 77 passengers.

RESPONSE #42:

While the "community" did agree in 1985 to an 8.4 MAP service level at JWA, they certainly don't view that agreement as overriding the County's simultaneous agreements regarding maximum permitted noise levels for Class A, AA and E aircraft. Nevertheless, we acknowledge and agree that increases in the maximum permitted noise levels for Class E aircraft are important in order for all parties to the 1985 Settlement Agreement to realize the "benefit of the bargain" they reached in light of FAA's policy initiative on noise abatement departure procedures. The proposed increases in maximum permitted noise levels are the greatest in the Class E category because of factors discussed in the

draft EIR and elsewhere in these responses to comments; and those increases are necessary to preserve the pre-demonstration operational capacity of JWA.

As discussed in the response to Comment No. 33, the Class E quarterly average weight for the B737 was assumed to be 92,000 pounds. It is clear by reviewing the historical records and data supplied by America West that this weight is too low. America West, the principal B737 Class E operator, has provided the following historical weight data (the noise data is from JWA quarterly reports for the same period):

America West Boeing 737-300 Class E Operations			
Quarter	**Class E Average Weight**	**RMS 1 Noise Level**	**RMS 1 Noise Limit**
1st 1991	93,700	86.7	86.8
2nd 1991	95,400	86.8	86.8
3rd 1991	96,576	87.1	86.8
4th 1991	94,900	86.7	86.8
1st 1992	93,900	86.8	86.8

It is clear that America West was able to meet the Class E noise limits at weights higher that the 92,000 pounds assumed in EIR 546. America West was able to operate in Class E compliance at weights up to 95,400 pounds (2nd Quarter of 1991). The Alternative 2 noise limits proposed for Class E should be adjusted to accommodate a weight of 95,400 pounds, a weight 3,400 pounds greater than that used in EIR 546. Statistical analysis of the noise level demonstration data indicates that the B737, using an 800 foot cutback procedure, has a noise/weight coefficient of 0.22 dB per 1000 pounds. Under this formula, a weight increase of 3,400 pounds would require an increase in the Alternative 2 Class E noise limits at RMS 1 of 0.75 dB.

It should be noted that America West never operated a Class E flight with a quarterly ***average*** *weight of 103,000 pounds. 103,000 pounds was the* ***maximum*** *single flight weight operated by the airline during the relevant period as a Class E Aircraft. However, this high weight was balanced out with numerous departures at lower GTOW in the Class E category in order to ensure an average weight over a quarter that would produce a quarterly noise level within the maximum permitted noise limits, as indicated in the table contained in this response. Since the County has always enforced the maximum permitted noise levels on a quarterly average basis, it would be inappropriate*

to establish the Class E noise limit at RMS 1 (or any other station) based upon the ***highest*** *single departure weight operated in any past quarter by an airline conducting Class E operations.*

However, based upon the analysis performed for this response to comment, County staff will recommend to the Board of Supervisors that, if Alternative 2 is selected by them as the project, the maximum permitted noise level for Class E Aircraft be set at 90.8 dB SENEL at RMS 1 rather than 90.0 dB SENEL as recommended in the draft EIR. No adjustments are required at other monitoring stations, and no adjustments are required if the proposed project (Alternative 1) is selected by the Board of Supervisors as the project to be implemented. Because this change is limited and extremely small, and because it would be made only for the quietest class of aircraft operating at JWA, this change will have no effect on the CNEL contours prepared for the draft EIR or any other analysis contained in the draft EIR. Since this comment and response will be part of the final EIR, no direct text amendments to the final EIR are required. However, this issue will also be brought to the attention of the Board of Supervisors, the Planning Commission and the Airport Commission by appropriate staff reports during the decision making process.

COMMENT #43:

And so, the issue of concern is how to accommodate future passenger growth. If "Alternative 2" is implemented, some airplanes will require blocked seats just to meet the noise limits, so future passenger growth will not be accommodated by simply filling empty seats. Furthermore, additional flights to carry the additional passengers will be unlikely since Class "A" & "AA" slots cannot be increased and Class E flights will be impractical as previously discussed. So future passenger growth might not be viable under "Alternative 2," whereas the "Alternative 1" would allow at least moderate growth by filling a few of the unused seats and by expansion into Class E. "Alternative 2" and "No Project" will cost the carriers many millions of dollars in terms of revenue left standing at the gates. Neither the airlines nor John Wayne Airport can afford this many denied boardings, and consequent lost revenue.

RESPONSE #43:

See the responses to Comment Nos. 35 and 42.

COMMENT #44:

Also in September 1991 the Fokker 100 qualified as an Class "E" aircraft using 400 ft cutback altitude. Although the aircraft was not operated at the airport during the noise

trials, Fokker has done enough flight testing to be able to estimate the effect of changing the cutback altitude. Based on data presented to the Noise Assessment Working Group, the revised limits required to maintain the qualified weights would be:

M1	91.3 to 94.8 dB SENEL
M2	91.1 to 94.6
M3	87.0 to 94.1

The lower values would be for an 800 ft. cutback, the higher for a 1500 ft cutback. It is obvious that "Alternate 2" would further limit the operating weight of the Fokker 100 by approximately 15 passengers and make Class "E" Operation not economically viable for the operators. The "Alternate 1" numbers would permit reasonable Class "E: payloads and give the airlines some flexibility in choosing cutback altitude.

RESPONSE #44:

See the response to Comment No. 42.

The Fokker 100 has been operated as part of a limited demonstration at JWA both by Fokker and by American Airlines. However, all of the Fokker departures, and at least some (if not all) of the American departures were conducted with procedures (e.g., a 400 foot power cutback) which would not be permitted under proposed AC 91-53A. Nor has the County "qualified" or "certified" the Fokker 100 as a Class E Aircraft under the required test procedures in the Phase 1 or Phase 2 Access Plans. American was specifically told, in writing, after its demonstration of the aircraft that Class E certification had not been granted for that aircraft as a result of the demonstration, and that there was additional information American needed to provide to the County as part of the certification process: specifically, the required written approval by an appropriate FAA official certifying that the procedures used by American during the demonstration were legal, complied with all FAA rules, regulations and directives, and were approved for regularly scheduled commercial use. American never provided this information to the County, and the aircraft was never certified as a Class E Aircraft under the terms of the access plan.

The County invited both Fokker and American Airlines, which has taken delivery of and operates a number of Fokker 100 aircraft, to include the Fokker aircraft in the noise level demonstration at JWA. Neither Fokker nor American chose to accept that invitation. As a result of that decision, there is no noise data specific to the Fokker 100 aircraft in the noise level demonstration data base which would have allowed an analysis to be performed in the draft EIR (or Appendix D to the EIR) specifically for that aircraft. Therefore, the effects of the proposed changes in maximum permitted noise levels for RMS 1, 2 and 3 on operations by the Fokker 100 cannot be predicted by the County with the same level of accuracy as for aircraft which did engage in regularly

scheduled service at JWA during the noise level demonstration. Which class that aircraft will be able to operate in, and in which markets, if it is ever introduced into service at JWA, cannot be known with precision at this time, and the proposed project does not attempt to address maximum permitted noise levels specifically in the context of the Fokker 100. The County, of course, hopes that the Fokker 100 will eventually qualify as a Class E Aircraft at JWA and that, if it does so, it is introduced into regularly scheduled service.

We also note here that representatives of Fokker have been invited to, and have attended many (if not all) of the meetings held with the carriers and manufacturers during the noise level demonstration.

COMMENT #45:

The airport staff has requested that the airlines declare what future noise abatement procedure they intend to use in order to comply with Advisory Circular 91-53A, by no later than May 24, 1993. We believe that's "putting the cart before the horse."

The airlines' position is that the airport should set the allowable noise levels at the various noise monitors. Neither the airport or community should dictate the details of the takeoff procedure, such as the altitude at which power reduction is initiated. The airlines will develop the appropriate procedures as we have done in the past, to meet the maximum noise requirements, and be consistent with the criteria of Advisory Circular 91-53A.

RESPONSE #45:

The County agrees (and it has always been County policy) that the airlines should define the specific NADPs which are permitted under proposed AC 91-53A, and that the County should not, and it does not intend to, dictate specific aircraft operational procedures. However, under the proposed project (Alternative 1), the proposed maximum permitted noise level increases are based upon procedures developed by Boeing Airplane Company and the carriers and represented by Boeing and the carriers operating 737 and 757 aircraft at JWA as the "optimum" procedure for reducing noise levels south of a line defined by TMS 21 and 22.

It is not the intent of the County under this project to provide significant operational capacity enhancement for the airlines beyond that existing under pre-demonstration conditions, and no EIR has been prepared for any such project. The County expects that, consistent with the representations made to the County by Boeing and the airlines, NADPs will be developed which are substantially consistent with the basic premises under which Alternative 1 (the proposed project) was proposed for adoption. If the

airlines choose instead to - in effect - "appropriate" the difference in maximum permitted noise levels between Alternative 1 and Alternative 2 for their own economic benefit by performing minimum altitude power reductions under proposed AC 91-53A, then the County will have the discretion under the proposed project review (at the end of the current plan year) to make appropriate adjustments in the maximum permitted noise levels. (See Section 3.1.5 of the Draft EIR). Therefore, while the County does not wish to, and will not, dictate specific departure or operational procedures, it does have appropriate flexibility to adjust the maximum permitted noise levels at the end of the current plan year to match the operational choices made by the airlines in developing their NADPs.

COMMENT #46:

In 1985, Orange County entered into a settlement agreement with the City of Newport Beach and two community groups. Inherent in this settlement agreement was a 65 CNEL contour representing the level of airline operation contemplated in the 1985 master plan which covered the time period through year 2005.

Since 1985, the airlines have produced yearly 65 CNEL contours that were smaller than the base line contour of the 1985 master plan. This was in large part achieved primarily by the introduction of quieter aircraft in the "A" category, such as the B-757 substitution for the MD-80. Note that the present 39 "A" slots are occupied by 14 MD-80 departures, with the rest being occupied by quieter aircraft. Because of this, the industry believes that the Draft E.I.R. #546 places too much emphasis on the operational scenario of 39 MD-80 "A" category departures. This is not a scenario that appears to have any degree of probability of occurrence.

Draft E.I.R. #546 shows numerous future 65 CNEL contours based on the "N.O.P.," "Alternative 1" and "Alternative 2" operational scenarios. Changes in impact areas are then developed by comparison with pre-demo actual operation. The industry believes this comparison is erroneous. The real comparison should be made against the 1985 Master Plan 65 CNEL contour. The projected adverse impacts will be much less.

It is unfortunate that the E.I.R. along with the airport staff, and the communities, do not give the airlines any credit for past noise reduction achievements that were beyond those required.

RESPONSE #46:

Airport staff agrees that the airlines have operated at noise levels which have, so far, generated CNEL contours smaller than predicted in the 1985 Master Plan and associated environmental documents. However, this comment reflects certain misunderstandings

regarding the 1985 Settlement Agreement, the Phase 2 Access Plan, EIR 508/EIS and other matters.

Neither the 1985 Settlement Agreement, the Phase 2 Access Plan, nor EIR 508/EIS are predicated upon a specific CNEL value at any location. The County's noise regulations have been based upon single event noise levels (averaged quarterly for regularly scheduled operators), not CNEL levels. The County has never proposed regulating by the CNEL or "bucket of noise" method of allocating operating capacity. In fact, this issue was evaluated, discussed and rejected as unreasonable and infeasible as "Alternative 3" in Draft EIR 546. The EIR 508/EIS CNEL contour projections have been used by the County for land use compatibility planning and mitigation, but they do not define the essential terms of the 1985 Settlement Agreement. The EIR does provide comparisons to the EIR 508/EIS project case 65 dB CNEL contours, but that is not a sufficient analysis to comply fully with the requirements of CEQA. For that reason, Draft EIR 546 also provides comparisons to existing conditions. In addition, EIR 508/EIS made certain fleet mix assumptions which have since become questionable or obsolete. For example, the EIR 508/EIS CNEL contours assume a fleet mix of 50 ADDs operated by Boeing 767 aircraft; an operational scenario which, under current circumstances, is not likely to occur in the foreseeable future.

The "Scenario B" analysis in the draft EIR is specifically described as an artificial "worst-case" analysis since the County also does not foresee future operations by MD-80 aircraft at a level of 39 ADDs. However, unless the industry is now saying that it would accept the mitigation measure suggested by the City of Newport Beach and others regarding limiting the maximum permitted number of MD-80 operations to 14 or less ADDs (see Draft EIR 546, Section 3.1.5, at page 112 and following), the County still believes that, although not required by CEQA, performing the "Scenario B" analysis was helpful to the environmental process, and that it provides the decision makers with some useful information.

Finally, the County will certainly express its appreciation - again - to the air carriers and the aircraft manufacturers for the numerous, significant and productive efforts they have made, at significant expense, in assisting the County in minimizing the effects of aircraft noise at JWA, to the extent reasonable and feasible. The County has attempted to provide appropriate "credit" for these efforts whenever circumstances warranted or permitted. We cannot, of course, speak for "the communities" on this issue, but the County would hope that they also recognize the significance of those efforts and the substantial benefits they have realized as a result. The County does believe that the level of cooperation which the community has provided during the noise level demonstration, and their support for the proposed project, is substantial evidence that they are aware of, and do appreciate, the efforts the airlines have made in the past to control aircraft noise levels.

COMMENT #47:

The industry concludes that the "No Project Option" and "Alternative 2" would not meet the Draft Environmental Impact Report objectives, that is:

1. Maintaining pre-demonstration airplane capability.

2. Avoiding airport specific noise abatement departure profiles.

A failure to not conform with 1 & 2 above would, we believe, put the airport in non-compliance with F.A.R. Part 161, and possibly jeopardize the airport "Grandfather" status.

RESPONSE #47:

We acknowledge the opinions of these commentators. We do not specifically agree with each of the opinions reflected in this comment, but we reaffirm again the basic objective of the proposed project, which is to maintain pre-demonstration operating capacity at JWA while accommodating the FAA initiative on noise abatement departure profiles. However, as concluded in the draft EIR, we certainly agree that the no-project alternative could not realize the project objectives.

COMMENT #48:

The industry recommends the support of "Alternative 1, Version A or B" which we feel wold be a good compromise between the communities, local businesses, the airlines, and the flying public. The safety of the operation will be enhanced through operational standardization action, and the resultant economic improvements will benefit all concerned.

RESPONSE #48:

The views and opinions of the industry are acknowledged.

COMMENTS FROM STEINER INVESTMENT COMPANY

COMMENT #49:

As impacted residents, located at 389 Seawind, Newport Beach, Cal., we have read EIR #546 and believe it is inadequate or incomplete as to the following items:

No study of alternative sites for Class A, and noisier, flights to depart Orange County. We believe El Toro to be an ideal site for a new O.C. airport, for all Class A, etc. flights in and out of O.C.

RESPONSE #49:

The suggested "project alternative" (or "mitigation measure") for "Class A" aircraft is unreasonable, impractical and infeasible for a number of reasons. First, an alternative airport site analysis is far beyond the scope of the proposed project. The County is ***not*** *proposing to build a new airport, or to significantly expand facilities or operations at JWA.*

Second, "El Toro" currently operates as a Marine Corps Air Station (MCAS El Toro) for which the Department of Defense and the Department of the Navy have consistently rejected "joint use" proposals. Although MCAS El Toro has been recommended for closure by the Department of Defense, it will not be known until later this year whether the station will ultimately be closed. Even if it is, the base reuse process contemplates a study of a full range of possible civilian uses of closed military facilities. While a possible civilian airport at MCAS El Toro ***may*** *eventually be part of such a study, there can be no present guarantees that a civilian airport will eventually be constructed and operate at the base. Even assuming that governmental agencies with priority elect to use MCAS El Toro land and facilities for a civilian airport, it would require years of planning, construction and other activities before the station could be ready for use. Therefore, the objectives of the project cannot be realized, and certainly cannot be realized in a timely manner, by proposing to shift all Class A operations by the JWA air carriers to MCAS El Toro.*

In addition, this suggestion is impractical and infeasible for economic reasons. The airlines are currently under substantial financial stress, and some are operating under bankruptcy. The commentator's proposal would require the airlines to finance terminal and other support facilities at MCAS El Toro solely to support their "Class A" flights now operating at JWA. This would mean that the airlines would have to finance the capital improvements, and support the fixed operating expenses, of two stations to serve Orange County at airports which are located less than ten miles apart. There is no present interest by the airlines in incurring those unnecessary expenses, and such a proposal would probably insure that their Orange County operations would become unprofitable. This could, in turn, result in a reduction in service.

This proposal would also adversely affect the revenue generated at JWA which is used to maintain the facility and to pay the interest and other obligations on the bonds issued to finance the new facilities at JWA,which were completed less than three years ago.

COMMENT #50:

Runway lengthening study and it's effect on all noise at John Wayne.

RESPONSE #50:

See the response to Comment No. 12. In addition, Draft EIR 546 does not propose to extend Runway 19R as a direct or immediate mitigation measure for the proposed project. Rather, the document describes the County's belief that a northerly extension of Runway 19R could reduce aircraft noise south of JWA and its intention to evaluate the technical feasibility of such a project.

The runway extension is not being proposed as a direct mitigation measure for the proposed project. Rather, the County has made a commitment to complete a feasibility study so that a complete analysis of the benefits and impacts of this possible means of further reducing permitted noise levels can be reviewed and discussed by all interested parties. The County has selected a qualified consultant to perform the feasibility study of the runway extension. If, after review of the consultant's report on the feasibility study, the Board of Supervisors determines that the County should further pursue a possible extension of the runway, a separate environmental analysis would be conducted for that project.

COMMENT #51:

Study completely disregards all Class E, general aviation. Of particular concern to us, are the following: No regulation of any flights between 10:00 p.m. and 7:00 a.m., daily. This has led to increased night noise over surrounding homes. There are no controls to monitor dangerously low aircraft, flying directly over homes. There are no tracking controls to steer general aviation flights away from surrounding homes, as there is for Commercial planes. No monitoring of increasing noisy night flyers who avoid being identified by flying after 10:00 p.m. We feel all night flights that break the monitor levels for allowable night time noise, should reduce the allowed daytime noisiest flights by the same number.

RESPONSE #51:

Again, the proposed project does not propose to: (i) change any maximum permitted noise levels applicable to general aviation aircraft, "Class E" or otherwise; (ii) change existing departure procedures or practices of FAA controllers in routing aircraft; or (iii) change any existing airport regulation restricting flights between 10:00 p.m. and 7:00 a.m. (8:00 a.m. on Sundays).

In addition, this comment is both inaccurate and reflects significant misunderstandings regarding the operation of JWA. First, to state that there is "[no] regulation of any flights between 10:00 p.m. and 7:00 a.m., daily" is fundamentally inaccurate. The County has had and enforced nighttime operations restrictions ("curfews") for over two decades, and it continues to do so. Only aircraft which can operate below 86.0 dB SENEL (on a single event basis) at any departure monitoring station may depart during those hours. The County is not aware of any more effective (or more restrictive) nighttime restriction at any comparable air carrier airport in the United States.

Second, the flight tracks and procedures used by general aviation aircraft are dictated by the Federal Aviation Administration under its sole and exclusive authority to regulate the operation of aircraft in flight. The County has no authority to define and enforce "flight patterns," "flight paths" or "flight tracks" of general aviation or any other class of user. General aviation aircraft are frequently directed by FAA to make an early right turn when departing off Runway 19R in order to maintain separation between the generally slower general aviation aircraft and the faster commercial aircraft. (General aviation ***jet powered*** *aircraft, however, usually do use the commercial departure paths on departure from Runway 19R because their speed can match the commercial aircraft). The vast majority of these aircraft routinely generate noise levels significantly below 86.0 dB SENEL in all residential areas south of JWA.*

Third, departures by commercial ***and*** *general aviation aircraft which occur after 10:00 p.m.* ***are****, contrary to the assertion made in this comment, "monitored" and identified. The County is generally successful in identifying any "curfew violators" and takes appropriate enforcement action against any such operators.*

The party who should be penalized for a curfew violation, if one occurs, is the party committing the violation, not some other operator lawfully conducting daytime operations within the scope of the County's noise regulations. To the extent that this comment is intended to suggest as a project mitigation measure that daytime operators be prohibited from conducting certain operations if another operator commits a curfew violation, the County rejects the proposal as outside the scope of the project, unreasonable, impractical to enforce, and infeasible to implement on any equitable (or - perhaps - lawful) basis.

COMMENT #52:

Study does not allow for future errors in take-off tracking by all Commercial flights. County has no control over pilot's take-off tracking, however, to date they have voluntarily tried to follows tight tracking for the current EIR studies. In the future, do to either County being lax in monitoring tracking, or pilot's resistance to same, the CNEL projected by the EIR, could actually be much wider than predicted. This would put bordering homes within the 65 CNEL, that are now projected to be just outside same.

RESPONSE #52:

The noise level demonstration includes all of the effects of existing flight track dispersion. To the extent that future flight track dispersion is represented by existing patterns, then future flight track dispersion effects are accounted for in the study. This comment, as well as previous comments, imply that flight track dispersion is a flight tracking "error." However, the reality is that aircraft cannot follow precise single line tracks as trains follow railroad tracks. Some dispersion will inevitably occur for various reasons, many of which are beyond the control of the pilot(s) or the airline(s).

The departure flight path used by commercial air carriers at JWA is an FAA designed and published "Standard Instrument Departure" ("SID"). Information describing this route is published by the FAA and followed by each air carrier. The SID used at JWA for normal departures by air carrier aircraft has been established for many years, and during that time the general flight path has remained unchanged. The County has no reason to believe that the FAA has any plans to make any significant changes to the SID used at JWA any time in the foreseeable future. If it did so, and if the change was one which could result in environmental impacts, FAA would have environmental obligations under the National Environmental Policy Act ("NEPA") to first prepare an appropriate environmental study, the nature of which would depend upon the specific change being made.

The SID used by commercial air carriers follows the runway 19R heading to one nautical mile from the DME (approximately one mile south of the airport), then turns left to 175 degrees magnetic and continues to the coastline. The left turn occurs over the Upper Newport Bay and the flight path to the coastline generally follows the length of the Bay and passes over Balboa Island. The FAA directs and monitors all commercial air carrier departures along the SID.

Before and during the Noise Abatement Departure Procedure (NADP) Demonstration Program, the County monitored the departure flight paths followed by commercial air carriers using the PASSUR radar flight tracking system. The County observed there was minor flight track dispersion on both sides of the SID reference line before the noise level demonstration began. During the noise level demonstration, and as a result of the fact that the airlines changed departure procedures they had traditionally used at JWA for purposes of the demonstration, the County observed some additional flight track dispersion beyond what would normally be expected. The County has spoken with the commercial air carriers about these observations. In most cases, the cause of the dispersion was identified and corrected. In certain cases, the County is continuing to work with the carriers to identify the most effective means to correct their problem, and believes that future flight tracks will more closely approximate the earlier minor dispersion, especially after each air carrier selects its NADP for JWA and their air crews gain experience with execution of those procedures.

The air carriers have been cooperative in virtually all County efforts to address dispersion issues, and they generally perform as well or better at JWA in adhering to the expected flight track than at any other airport with comparable noise abatement turn procedures. The air carriers continue to expect that future flight track dispersion at JWA will be minimal.

The suggestion of possible future changes in dispersion patterns because of "lax" monitoring by the County, or deliberate "resistance" by the pilots is nothing but sheer speculation - particularly in light of the strong record of the airlines in cooperating with the County and FAA on this issue. Therefore, the County expects that the future 65 dB CNEL contour location resulting from implementation of NADP's at JWA is accurately represented by Exhibit 3-8 through Exhibit 3-16 in Section 3.1.4 of Draft EIR 546, and a speculative analysis in the EIR regarding unsupported assertions of possible future changes is not necessary, would be misleading to the decision makers, and is not required by CEQA.

COMMENT #53:

Possible error to projected 65 CNEL contours do to distance between Monitors #3 and #4 on the West side of the bay. Even temporary #22, was spaced where there may have been two monitors, (as there was on the East side of the bay).

RESPONSE #53:

The location of the noise monitors have no direct effect on the development of the projected 65 CNEL contours. Future noise cannot be measured, it must be estimated from computer noise models. The computer noise model computes noise levels at 1000 foot intervals around the airport and from these data the noise contours are plotted. The computer noise model uses many more computational points than there are noise monitoring sites. Noise measurement data is used to verify for existing operations that the computer model produces correct results at specific locations on the ground; and that analysis has been performed and incorporated into the draft EIR.

The precision of the projected future location for the 65 dB CNEL contour in Exhibit 3-8 through Exhibit 3-16 is based upon the validated modeling accuracy of the NOISEMAP computer model, and the data collected at the 14 measurement locations. This provides a significant level of professional confidence in the results. On the west side of the Upper Newport Bay, noise monitor locations 3, 22, 24, and 4 provide a substantial amount of data and insight into the CNEL contour location in this area. The accuracy of the modeled 65 dB CNEL contour location in this area is not diminished by the absence of additional noise monitor locations.

COMMENT #54:

Many homes such as ours, used to be outside the 60 CNEL contours, as they were before 1992. Such homes are now well within the 60 CNEL cont. but are projected to be just outside the critical 65 CNEL contours. As such, they do not qualify for the County's "insulation" or "purchase" programs. Yet, these homes are the most impacted by the new noisier take-offs. Many homes owners purchased their homes after 1985. Those people were counting on the "Agreement" for noise levels at John Wayne to remain the same until 2005. Some of the owners made large, expensive additions, based on the same premises. The EIR does not propose any mitigation for these people's reduced property values or damaged lifestyles, do to the proposed permanent increase in noise. There should be a "Hardship" program for people who purchased, and/or added on to their properties between 1985 and 1992, that are dramatically affected by the proposed new, noisier take-offs.

RESPONSE #54:

The 65 dB CNEL contour is used as the basis for the eligibility areas because it is critical noise threshold pursuant to State standards and County general plan policies. Therefore, the objective of the AAIP and RPP is to mitigate properties most impacted by aircraft noise as measured by the 65 dB CNEL noise contour.

Long-term CNEL contours as a result of new noise limits and associated new departure procedures indicate less impact than the CNEL contours anticipated in 1985 for the John Wayne Airport Master Plan (see EIR 508/EIS). Because the EIR 508/EIS projected noise levels were known subsequent to EIR certification in 1985, a hardship program is not warranted.

Finally, there is no evidence that fair market value of properties located in the vicinity of this commentators' residence are, have been, or could be adversely affected as a result of JWA operations. To the contrary, virtually all litigation against the County asserting such claims, usually by properties subject to substantially higher CNEL levels than are generated at the location of this commentators' residence, have resulted in jury verdicts in favor of the County. We cannot, of course, respond specifically to the claim of this individual commentator regarding the proposed project causing "damage" to their "lifestyle." We do note, however, that the California Noise Standards specifically determine by regulation that noise levels below 65 dB CNEL are acceptable to a reasonable person residing in the vicinity of an airport; and that most accepted land use planning guidelines have similar criteria for land use planning purposes.

COMMENT #55:

No studies of individual homes especially impacted by noise, i.e. certain homes face directly onto Irvine Ave. or directly face the Back Bay. Other homes are protected from aircraft noise by other homes or walls, etc. Second stories would be more impacted than single story homes. Different roofing materials or other construction may affect noise inside homes. Study ignores all noise levels inside the living area of homes.

RESPONSE #55:

The proposed eligibility area for the AC 91-53A Residential Purchase Program (RPP) and Accelerated Acoustical Program (AAIP) is based upon the 65 dB CNEL contour. It is true that structural differences between each individual home were not considered when defining an eligibility area for each alternative; nor would that be practical or feasible. Many people believe that they have a "unique" situation requiring "special" treatment in situations such as the mitigation program proposed in the draft EIR. That is why it is customary to use accepted noise level planning guidelines in developing land use mitigation programs related to aircraft noise. In any case, a proposed specific eligibility area cannot be fully defined until the County Board of Supervisors chooses one of the project alternatives.

Once an eligible property owner agrees to participate in the AAIP, a private acoustical consultant will conduct an initial noise audit, which takes into account the actual design and construction of structures, before recommending specific improvements.

See also the responses to Comment Nos. 1 and 14.

COMMENT #56:

No study of how sleep disruption caused by increasing general aviation or increased noise around the 60 CNEL contour proposed, would affect individuals. No study of different sensitivity to noise by certain individuals.

RESPONSE #56:

The proposed project does not contemplate or intend to alter in any respect the existing limitations on nighttime operations at JWA. There is no reason to believe - and this comment certainly suggests no facts to support - that the project would have any significant or definable effect on "sleep disruption" at the location of this commentators' residence, or anywhere else. In fact, a recent comprehensive study of airport related sleep disturbance conducted in England suggests that previous estimates of the effects

of noise on sleep - even during nighttime hours - may have been over described and that there is little, if any, statistically significant correlation between noise events and community reports of sleep disturbance. See, Oilerhead, et al., "Report of a Field Study of Aircraft Noise and Sleep Disturbance," December 1992.

Both "Sleep Disturbance" and individual noise sensitivities are discussed and analyzed in EIR 508/EIS (Section 4.15.2.2.3 and 4.15.2.2.6, respectively), which is specifically incorporated by reference in Section 1.7 of Draft EIR 546. As acknowledged there, and as we again acknowledge, different individuals will, on an individual basis, react differently to a given noise environment. Also, it is the County's experience in addressing aircraft noise issues that many people believe - sincerely - that their "case" is a "special case" requiring or justifying "special treatment." It is precisely because of this phenomenon that general planning and analysis guidelines have been established for environmental analysis and studies which cannot, as a practical matter, measure individual attitudes and individual circumstances of every individual property or person who might be affected by a large scale public or private project.

In part, the proposed purchase assurance mitigation program proposed in Draft EIR 546 (RPP) is a recognition that different individuals will react differently to the proposed increases in noise levels in the Santa Ana Heights area.

COMMENT #57:

Finally, we feel the EIR proposals may be prejudiced. The County may be reducing noise over the marginally affected residents well out of the proposed 60 CNEL contour, at the expense of the individuals that are at, or near the proposed 60 CNEL contour.

RESPONSE #57:

Draft EIR 546 clearly describes the noise effects of the proposed project and its alternatives. The Draft EIR also acknowledges the policy decision to be made between the proposed project (Alternative 1) and Alternative 2. Of course, the principal objective of the County in this particular process - given the circumstances under which the County has had to consider taking action - is not to reduce noise, but to control, to the maximum extent feasible, the increases in noise which will be a product of the FAA's policy decision regarding noise abatement departure procedures and, to the extent it cannot be controlled, to adopt and implement reasonable and feasible mitigation measures for the project.

Finally, there is no "prejudice" inherent in the proposed project or its alternatives. Rather, the County is attempting, to the best of its ability, to balance competing interests and considerations in an effort to achieve a result which serves the best

interests of the entire Orange County community, while recognizing that areas directly south of JWA are entitled to some special consideration in the policy making process because of their proximity to the airport.

COMMENTS FROM THE AIRPORT WORKING GROUP OF ORANGE COUNTY, INC.

COMMENT #58:

AWG is aware that the proposal to increase maximum noise levels is not the County's idea.[1] The County, as well as AWG and the rest of the community, are reacting to proposals by the FAA to modify departure procedures such that the procedures in use at JWA for years could no longer be used. Those long standing procedures were sanctioned by the FAA and AWG has seen no data which supports the proposed changes. In fact, while the FAA portrays the changes as having national significance, it is apparent that their main, if not only, impact would be at JWA.

RESPONSE #58:

The comment is acknowledged. It is not the County's purpose or role to argue the FAA's case for its proposed action. The FAA has made its statements regarding its purpose in considering proposed AC 91-53A in the Federal Register and, we assume, will have further statements when the final Advisory Circular (and any related documents) are issued by FAA. However, given FAA's exclusive regulatory jurisdiction over aircraft operational procedures, the County can only respond to FAA's policy initiatives in that area, not overrule them.

COMMENT #59:

Postpone adoption of project until FAA actions require adoption.

The County proposes to adopt specific increases in noise levels at the criterion noise monitoring stations in June of this year even if the FAA has not adopted the proposed Advisory Circular which would necessitate these changes. See pages 39, 102 and 104 of Draft EIR #546. The FAA has continually postponed adoption of the circular. We are not aware of a new target date for adoption. There is a new Administration in Washington but as of yet a new FAA Administrator has not been selected. Frankly, the

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[1] AWG has stated on several occasions, and will repeat here, that the County has implemented the Settlement Agreement in good faith and in full consultation with the settling parties. Were it not for the FAA proposal to change departure procedures, this Draft EIR would not have been produced and this whole controversy would not have occurred.

proposed FAA action has always had a political component. The whole notion of adopting the changes in departure procedures may be abandoned.

As acknowledged in the Draft EIR the noise environment in the area south of JWA will increase under either of the alternatives receiving serious consideration by the County. If these increases are sanctioned beyond the current test period as proposed by the County, they would tend to reflect a new status quo, or, in other words, acquire a life of their own. There is no justification for this except if the Advisory Circular is adopted by the FAA. It is AWG's position that the proposed increases in noise levels not be adopted unless the FAA takes action which necessitate that they be adopted.

RESPONSE #59:

In light of this comment, we advised FAA of AWG's concerns and have again inquired of FAA regarding their intentions with respect to adoption of a final AC 91-53A. We expect to have a response prior to the scheduled hearings before the Planning Commission, Airport Commission and the Board of Supervisors on the proposed project and EIR 546, and we will advise those bodies and the public of any information received by staff on this issue at or before those hearings.

The County agrees that in the absence of the new proposed Advisory Circular, it would not make permanent amendments to the Phase 2 Access Plan, as contemplated by the proposed project. However, mitigating conditions have been proposed and incorporated into the project which will continue to link the County's proposed actions to actual and effective implementation of AC 91-53A by FAA. See, for example, the discussion in the second paragraph on page 104 of the Draft EIR.

COMMENT #60:

AWG supports the 1500 foot power cutback

If the FAA does adopt the advisory circular, AWG supports specifying noise maximums based on an 800 foot power cutback by the MD-80 and a 1500 foot power cutback by all other jet aircraft.[2] This would result in fewer people suffering an increase in their noise environment. It also is more realistic to expect that carriers would adopt this procedure if the FAA does actually limit each carrier to two departure procedures per aircraft type. This reasoning is explained at pages 187 and 188 of Draft EIR 546 and we agree. Thus, at 800 feet above ground at most airports the aircraft would still be

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[2] The noise created by MD-80's is minimized by use of an 800 foot power cutback procedure according to the data AWG has reviewed. AWG agrees with the County that a 1500 foot cutback procedure should not be used by the MD-80.

over the runway. This means that carriers are less likely to choose the 800 foot procedure as one of the two which might be allowed since it would not afford noise relief.

RESPONSE #60:

The comment and preference of AWG is noted.

COMMENT #61:

AWG requests lower increases in maximum noise levels.

It must be observed that if the maximum noise levels are increased, the entire burden of absorbing the impact of the changes required by the FAA would fall on the community. Changes which would reduce the flight levels or require use of quieter aircraft beyond the power of the County to mandate due to the provisions of the Airport Noise and Capacity Act of 1990 ("ANCA"), 49 U.S.C. app. §2151 et seq. As a practical matter AWG would not expect the FAA to approve such changes. This makes it all the more important that the noise increases be the minimum necessary to accommodate the FAA actions. AWG believes, based on expert advice, that the noise levels at the various monitors can be lower and still maintain the service levels and capacity of JWA. We propose the following levels for Class A and Class AA aircraft:

	A	AA
RMS 1	100.5	93.5
RMS 2	100	94.0 (same as County)
RMS 3	99	90.5

RESPONSE #61:

The noise levels proposed in the comment represent noise levels that appear to allow for lower takeoff weights than were used to generate the proposed limits. The weights used for the proposed limits are described in the response to Comment No. 33. These are the weights historically flown by the heaviest operator for an aircraft type and class and successfully complied with JWA noise limits (with the exception of the case described in the response to Comment No. 42). This preserves that operators ability to continue to provide the same level of service as was done prior to the changes in the proposed AC. The noise limits proposed in the comment appear to represent the noise levels based on the fleet wide average weights for all operators at the airport, and not the heaviest operators. However, the County has always regulated access plan compliance based upon each individual aircraft type as used by each individual aircraft

operator. Only if AWG would support (and, to the extent necessary, consent) to modifying access plan enforcement to a system which averaged all operations by specific aircraft types regardless of which carrier operated them; or a system which averaged all Class A aircraft together, could these noise levels meet the project objectives.

It is true that the levels proposed in the comment would be the expected fleet wide noise average for the noisiest aircraft in the specified class. But the fleet wide average weight does not derive from numerous airlines flying with similar weights. The fact is that some airlines are heavier than others and average fleet weight is lower than weights flown by the heavier operators. The noise limits at JWA apply to specific operators and are not limits applied to the fleet. The noise limits must accommodate the historical capacity of those heavier operators that historically have operated within the JWA noise limits. The practical implications of this is that, in fact, most of the aircraft in each class, particularly those operating in short and medium-haul markets, will operate at or below the specific single event levels mentioned in this comment.

See also the response to Comment No. 68.

COMMENT #62:

Additional mitigation is necessary.

Again, because it is the community which suffers the entire burden of the increased noise, mitigation measures are critically important. In this regard, AWG disagrees with the conclusions of the Draft EIR that immediate implementation of reduced maximum noise levels for Class AA and Class E flights at monitoring stations south of RMS 3 are not necessary, reasonable, or feasible. AWG also disagrees with the same conclusion which the Draft EIR reaches concerning creation of a separate noise category for the MD-80. We do appreciate the County's willingness to continue discussing these issues but we request that the County reconsider the conclusions of the Draft EIR and adopt these mitigation measures as part of the proposed project.

In large part the reasons given in the Draft EIR for rejecting lower maximum noise levels down the bay for Class AA and Class E aircraft based on concern over changing the rationales upon which maximum noise levels were set as part of the 1985 Settlement Agreement and the implementing Access Plan. However, those rationales are undermined by the FAA proposal to require different departure procedures. While it may be necessary to preserve JWA's flight levels and capacity as allowed by the 1985 Settlement Agreement (to avoid problems under ANCA), it is also necessary to protect the community from increased noise. AWG, SPON and the City bargained for stable noise levels as part of the settlement. Mitigation measures which would reduce noise must receive serious consideration. Establishment of lower maximum noise levels at

RMS 21, 22 and 24 for Class AA and Class E aircraft would assure that the noise benefits of the 1500 foot power cutback procedure are achieved.[3] AWG has proposed the following maximums:

	AA	E
RMS 21	84.0	83.0
RMS 22	83.5	82.5
RMS 24	84.0	83.0

They are designed to assure reduced noise and yet preserve flight levels and capacity at JWA.

As regards the MD-80, AWG is of the opinion that maximum noise levels for Class A aircraft could be substantially lower if the MD-80 were not a Class A aircraft. If the County is correct in projecting reduced usage of that aircraft at JWA in the future, there seems to be little reason to have maximum noise levels based on an aircraft that is little represented in the "Class A pool." For example, AWG believes that maximum noise levels for Class A aircraft without including the MD-80 could be established as follows:

RMS 1	96.0
RMS 2	96.5
RMS 3	92.5

Thus, to serve the purpose of minimizing the noise increase which would be imposed on the community by the proposed project, the MD-80 should be placed in a different category than other aircraft currently deemed to be Class A.

RESPONSE #62:

The County did give serious consideration to these two proposed mitigation measures, and it reaffirms its willingness to discuss these issues further with the community. Also, as requested, the County has seriously reconsidered the analysis of these two proposed mitigation measures in the Draft EIR, considering not only facts and circumstances which existed when the Draft EIR was circulated for comment, but facts and circumstances which have occurred since then. Nevertheless, we continue to believe that the analysis and conclusions of the Draft EIR on these two issues are correct.

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[3] On page 111 of the Draft EIR it is stated that if alternative 2 is selected, lower maximum noise levels at RMS 21, 22 and 24 would not be necessary. AWG disagrees. A departing aircraft would reapply power after achieving 800 feet above ground level but before reaching RMS 21, 22 and 24 or the coastline. This would result in more noise than is appropriate. Specifying lower maximum noise levels at the down the bay monitors would prevent this from occurring.

We also acknowledge that the community did "bargain" for "stable noise levels" (within the range of what reasonably can be expected) in the 1985 Settlement Agreement. Except for the necessary changes at RMS 1, 2 and 3, this project does not propose any changes to the agreement bargained for by both sides. Further, the County is, in connection with this proposed project, further "stabilizing" Class A noise levels by adding monitoring stations south of RMS 3 to the definition of Class A Aircraft in the Phase 2 Access Plan, something for which the community did not bargain for in 1985.

Part of the agreement reached by the parties in 1985 was that 86.0 dB SENEL (the current definitional noise levels for Class E Aircraft, which will be modified by the proposed project only at RMS 1, 2 and 3) was a noise level below which direct regulation of aircraft operations was not warranted. It was also agreed that this would be the level at which general aviation aircraft would be deemed "curfew exempt." The County has no information, and none is provided in this comment, to suggest that regulation below 86.0 dB SENEL is now somehow necessary or appropriate.

The only rationale which the County can see for establishing lower regulatory noise levels would be to serve the purpose suggested in this comment, which is to more tightly constrain the range of options the carriers may have in defining the NADPs which they would use at JWA. The fact that this ***may*** *become appropriate (see the response to Comment No. 45) is one of the reasons that the County has indicated that it is willing to continue to evaluate noise data during the current plan year and to continue its discussions with the community on this issue.*

COMMENT #63:

AWG requests the addition of a mitigation measure. The PASSUR flight tracking system which is being used as part of the noise testing program should be made permanent. That system allows precise tracking of individual flights as they depart JWA. This is very helpful in determining if particular flights or carriers are not following agreed upon departure procedures. It also aids in monitoring whether flights adhere to departure routes down the bay which in turns allows for more accurate noise measurements because it can be determined whether flights are passing over the noise monitors as anticipated.

RESPONSE #63:

See the response to Comment No. 17.

The County did not claim "mitigation credit" for its decision to retain the PASSUR system since that decision was made prior to initiation of the noise level demonstration and was part of a planned upgrade to the County's noise monitoring system which is

budgeted for next year. The PASSUR system was leased early for the purpose of conducting the noise level demonstration, but it would have been added to the noise monitoring system eventually in any case.

COMMENT #64:

Finally, as regards mitigation measures, AWG strongly opposes the runway extension study. While denominated a mitigation measure, actual extension of the runway could result in more aircraft noise due to longer stage lengths or higher takeoff weights by aircraft already using JWA or noisier aircraft qualifying to use the airport. Also, the data AWG has reviewed suggests that the runway extension would have marginal noise benefits. Continued consideration of the runway extension creates unnecessary controversy since many believe that it would end up being used to enhance the capacity of the airport in a manner which will increase aircraft noise.

If the study proceeds, it must address more than the engineering feasibility of an extension. It must address whether there are mechanisms for assuring that a longer runway will not, at some time in the future, be used for more than noise mitigation as suggested in the previous paragraph. It must also describe what additional noise could be generated if the full length of the runway extension were to be used.

RESPONSE #64:

See the response to Comment No. 50.

AWG expresses two concerns regarding the possible runway extension. First, AWG suggests that additional noise would result from the extension and, second, that any noise benefits associated with an extension would be marginal. With respect to the first concern, the County states explicitly in Draft EIR 546 that, prior to implementing this potential mitigation measure, it would have to determine that "construction of a runway extension could be implemented in a manner which would reduce noise levels rather than increase them south of JWA" (Draft EIR 546 at page 109). Draft EIR 546 also examines the potential noise benefits associated with an extension of the runway. According to Table 3-13 of the draft EIR, reductions of as much as 1.8 dB CNEL may be achieved by construction of the runway extension. While AWG may view such reductions as marginal, residents of Santa Ana Heights may believe they are significant. Ultimately, whether these noise benefits are sufficient to warrant construction of the runway extension will be considered once the feasibility study is completed.

COMMENT #65:

On page 8, footnote 10, it is stated that the project will have no effect on arrival patterns and therefore no effect on noise levels in areas normally under the arrival path. This is not the case when wind or other conditions cause departures to be to the north. Under these circumstances, areas normally under the arrival path will experience the same increases in noise as do areas normally under the departure path.

RESPONSE #65:

See the response to Comment No. 5.

COMMENT #66:

On page 28 there is a discussion of the background of the noise testing program. It is noted that during Phase III the carriers were generally flying those departure procedures anticipated to be in the lower range of single event noise levels. AWG has reviewed some of the data generated during that time and observed anomalies where supposedly quiet procedures appeared to produce higher single event noise levels. This suggests the wisdom of continuing the noise tests in order to make adjustments in the maximum noise levels.

RESPONSE #66:

Without more specific information regarding the perceived anomalies, we cannot provide a more specific response. However, the County continues to share noise level data with AWG and the City of Newport Beach; and we acknowledge AWG's support for the recommendation in the draft EIR to continue the test through the current plan year.

COMMENT #67:

On page 32, footnote 39, it is stated that the Board of Supervisors adjusted maximum noise levels at RMS 1 and 2 because those monitors had to be moved. AWG, as well as SPON and the City, also concurred in these adjustments. The consent of these parties was necessary because the higher noise levels would otherwise have been in violation of the Settlement Agreement. Two points should be made. The Draft EIR does not give sufficient recognition to the role of the settling parties in describing the regulatory regime at JWA. And, the document does not acknowledge the good faith

cooperation these parties have given to the County in implementing and adjusting the Settlement Agreement.

RESPONSE #67:

The County does acknowledge both the role of AWG and the other settling parties in defining the 1985 Settlement Agreement, and the good faith cooperation of AWG, SPON and the City of Newport Beach in implementing and adjusting the 1985 Settlement Agreement to accommodate the relocation of RMS 1 and 2. The County will also acknowledge the fact that those parties have been cooperative and have acted in good faith in addressing the issues discussed in Draft EIR 546, and in discussing those and related issues with the County. If the draft EIR fails to make these points sufficiently, the County apologizes, and we correct that oversight with this response, which will be part of Final EIR 546.

As the comment implies, there is no single interest group or party, including the County, which can claim credit for the accomplishments achieved at JWA in controlling noise and still providing enhanced opportunities for air carrier service to the Orange County community. The air carriers also have made significant and substantial contributions to those two goals. See, for example, Comment No. 46 and the response to that comment. FAA has also played an important role by its implicit cooperation with the understandings reached between the County, the community and the users of JWA, by its past efforts to cooperate with the County and the community on a number of issues, such as the airspace modification mentioned in Draft EIR 546 and numerous other issues which have arisen since 1985, and by its significant efforts in specifically determine funding eligibility for the land use mitigation projects recommended by Draft EIR 546.

COMMENT #68:

On page 34 it is stated that an increase of up to 4.2 dB SENEL is necessary at RMS 1, 2 and 3 for Class AA aircraft. This is a large increase which, as determined by the Draft EIR, is above the level of significance for an increase in noise perceptible to human beings. The reasons for an increase this large should be explained. Further, the assumptions used for gross takeoff weights and stage lengths should be explained in comparison with actual takeoff weights and stage lengths under pre-test procedures for each aircraft in use at JWA. The public should be assured that the increases in maximum noise levels will not allow aircraft to qualify for a different class than they did under the old procedures. For example, a Class A departure under the preexisting rules should not become a Class AA under the new rules.

RESPONSE #68:

See the response to Comment No. 69.

COMMENT #69:

On page 34 the increase contemplated for maximum noise levels for Class E aircraft is in some instances even higher than for the Class AA situation discussed previously. The questions asked for Comment #4 above should be answered for this situation as well.

RESPONSE #69:

Since Comment Nos. 68 and 69 are closely related, we will answer the two comments together in this response.

The principal reason why the necessary increases in the maximum permitted noise levels for Class AA are greater than for Class A aircraft, and greater still for Class E Aircraft, is that these operations were the ones for which the FAA approved the "deepest" power cutback procedures prior to FAA's consideration of a possible policy change as reflected in proposed AC 91-53A. In other words, the impacts of AC 91-53A are proportionately greater for Class AA and Class E operations than for Class A operations.

The gross takeoff weights used to set the proposed maximum permitted noise limits at RMS 1, 2 and 3 are described in the response to Comment No. 35 and Comment No. 44. That information is summarized in the table contained on the following page, with indications of which operator flew the criterion gross takeoff weights, and during which period of time:

HISTORICAL QUARTERLY AVERAGE GROSS TAKEOFF WEIGHTS			
Aircraft	Class A Weight	Class AA Weight	Class E Weight
MD-80	127,000 pounds (TWA, 1st Qtr '92)		
Boeing 757		184,000 pounds (American Airlines 2d Qtr '92)	172,000 pounds (United Airlines qualification test)
Boeing 737-300		104,000 pounds (Continental 2d Qtr '92)	95,400 pounds (America West 2nd Qtr '91)

Table Notes:

1. Data after gross takeoff weights includes the airline code, quarter, and year that the weight was derived.

2. The B757 weight for Class E is the weight for which UA qualified the aircraft during tests at JWA.

3. The data shown for 2nd quarter 1992 were only used for aircraft that had not begun the demonstration program. While some aircraft began on April 1, 1992, the airlines and aircraft included in the above table did not begin demonstration procedures until July 1, 1992.

4. The destinations served for the above flights were generally a combination of destinations within each Class as follows:

TW Class A	STL (without Ontario flight)
AA Class AA	SJC, SMF and DFW
CO Class AA	DEN
UA Class E	SFO
AW Class E	PHX, LAS and SFO

The maximum permitted noise limits recommended by the proposed project (Alternative 1) or Alternative 2 will not allow an MD-80 to qualify as a Class AA or Class E aircraft. The B757 qualified as a Class E Aircraft prior to any public announcement of FAA consideration of a possible change in policy (i.e., the possible adoption of AC 91-53A). The B757 generally has a more automated cockpit than does the B737. The departure cutbacks required for E operations were not compatible with the B757 automation and required JWA specific training and procedures to implement a manual departure for the Class E operations. With the proposed AC minimums, the B757 automation features

are available and the B757 is a viable aircraft in the E Class using its capacity for automated departure procedures. Because of the precision and repeatability of the B757 automation and the very high climb capabilities of the B757, the B757 may prove to be equivalent or quieter than the B737 as a Class E Aircraft.

The A320 has operated both as a Class A and Class AA aircraft at JWA. It is not clear that an A320 would be able to operate under the proposed project as a Class E Aircraft. However, if it can, it will be because, under the regulatory regime being defined by the FAA through AC 91-53A, it would be able to operate at or below the noise levels of aircraft which have historically operated as Class E Aircraft at JWA. Since the County could not discriminate specifically against the A320 in its noise regulations, if the change in FAA regulatory policies results in an equivalency between the A320 and the Boeing 737-300, that would be beyond the County's control. The only means to exclude the A320 would be to create a regulatory environment under which the B737-300 could not operate as a Class E Aircraft, which would be inconsistent with the project objectives. Again, this does not mean that the A320 will become a viable Class E Aircraft in any particular market served from JWA. It simply means that by preserving the pre-demonstration operational capacity of the airport, it is necessary to use reference aircraft to establish the new limits which, in this case, have been the aircraft which actually qualified and operated in the specific noise classes prior to the noise level demonstration. The effects of the change in maximum permitted noise levels on other aircraft is a consequence of the project which the County cannot directly control.

During the first quarter of 1992, Northwest Airlines operated a Class AA A320 that nearly met the old Class E limits at a gross takeoff weight of 112,000 pounds. During the second quarter of 1992, America West operated a Class A A320 that nearly met the proposed Class E limits at a gross takeoff weight of 127,000 pounds. The pre-demonstration and demonstration A320 RMS 1 noise levels, and associated weights are summarized below:

Airline	*Quarter*	*Class*	*Weight*	*RMS 1 SENEL*
		Pre-Demonstration		
NW	*1st '92*	*A*	*135*	*92.2*
NW	*1st '92*	*AA*	*112*	*87.8*
AW	*1st '92*	*A*	*127*	*91.8*
NW	*2nd '92*	*A*	*135*	*92.0*

During the Demonstration

AW	*1st '93*	*A*	*130*	*93.3 (Procedure 1)*
NW	*1st '93*	*A*	*140*	*95.3 (Procedure 2)*
AW	*4th '92*	*A*	*128*	*92.5 (Procedure 1)*
NW	*4th '92*	*A*	*138*	*95.0 (Procedure 2)*
AW	*3rd '92*	*A*	*126*	*91.7 (Procedure 1)*
NW	*3rd '92*	*A*	*140*	*95.1 (Procedure 2)*

A320 operators have previously stated that, prior to the noise level demonstration, the old A320 cutbacks were in compliance with the proposed AC changes. If that is the case, it is possible that the A320 could qualify as an Class E Aircraft, at least at certain gross takeoff weights, although no operator has yet expressed an interest in qualifying the aircraft as a Class E Aircraft.

Given the wide number of variables inherent in the noise levels generated by a particular aircraft type, operated by a particular airline, with particular engines, and serving particular markets; and given the fact that the change in FAA policy reflected in proposed AC 91-53A may affect the noise characteristics and operating capabilities of different aircraft to different degrees, it cannot be said with certainty that some air carrier could never qualify a specific aircraft type in a noise class different than one the aircraft had been qualified in prior to the noise level demonstration. However, as discussed above, the County can only effectively establish maximum permitted noise levels by focusing on criterion aircraft; and the County has selected those aircraft types for the analysis and recommendations reflected in draft EIR 546 by focusing on the principal aircraft types used in each class (or which define the class limits in the case of Class A Aircraft) prior to the demonstration.

It is important to remember that the County may not, under federal law, "unjustly discriminate" against any of the specific commercial air carrier aircraft types using JWA. In practical effect, this means that the County must set maximum permitted noise levels for the various ***classes*** *of commercial aircraft, and how each* ***aircraft type*** *then qualifies in that noise class will depend on the aircraft's capabilities under the operational regime then in effect at the airport (including the limitations of proposed AC 91-53A) The County may not, for example, establish one set of Class AA noise limits for the Boeing 757 and a different set of permitted Class AA noise limits for the Airbus A320.*

COMMENT #70:

On page 35 it is stated that TMS 21, 22 and 24 would be made permanent to provide permanent regulatory stations for Class AA and E aircraft. These monitors would also set maximums for Class A aircraft. See page 101 of Draft EIR 546.

RESPONSE #70:

This comment accurately summarizes actions proposed in the Draft EIR.

COMMENT #71:

On page 102 it is stated that McDonnell-Douglas has not reached agreement with the County on maximum noise levels. Neither has AWG which believes, as pointed out elsewhere in this letter, that lower maximum noise levels than proposed by the County are appropriate in some instances. In this regard, on page 103 the County states that higher noise levels may be necessary based on further evaluation. These would be implemented for the 1994-95 Plan Year. AWG believes it just as likely that lower noise levels may be appropriate in some instances.

RESPONSE #71:

The comment is acknowledged. Mitigating conditions proposed in the draft EIR provide the County with the flexibility to respond appropriately in either case. See also the response to Comment No. 45.

COMMENT #72:

At page 196 of the Draft EIR it is stated that the FAA is studying making 5000 feet the permanent ceiling for departures from Runway 19R. AWG has been informed that the FAA has already made 5000 feet the permanent ceiling. Please confirm the status of this in the Final EIR.

RESPONSE #72:

The understanding of this commentator is correct. FAA prepared an Environmental Assessment for the necessary airspace actions and issued a "Finding of No Significant Impact" on March 5, 1993, after circulation of the draft EIR. The final EIR will note this action by FAA.

COMMENTS FROM THE DOVER SHORES COMMUNITY ASSOCIATION

COMMENT #73:

Dover Shores endorses the project, the alternate 1 departure procedure, as offering the best balance in noise impact for the communities affected by the John Wayne Airport as well as satisfying the requirements of FAA Draft Advisory Circular 91-53A.

Linked to recommendation #1 above is the requirement that the noise mitigation program for Santa Ana Heights and the Anniversary Tract be simultaneously established. It is vital to give all communities south of the airport assurance that all residents who are noise impacted are being treated fairly. The takeoff procedural change should not be put into effect until the mitigation measures program is in place and funded.

RESPONSE #73:

The County has been advised that it is eligible for federal funding for both the Accelerated Acoustical Insulation Program and the Residential Purchase Program (see the response to Comment No. 19). The mitigation programs will either be implemented so that all eligible properties can participate simultaneously or priority groupings will be made. Priority groupings would be proposed based on noise impacts as measured by CNEL contours and not by jurisdictional authority.

It is not practical or feasible to complete the land use mitigation programs prior to making the necessary changes to the Phase 2 Access Plan recommended in the draft EIR. These are necessarily and inevitably multi-year programs. However, the County does intend to implement the programs as rapidly as possible and to accelerate their completion to the earliest possible date.

COMMENT #74:

It is recommended that the proposed monitor sound limits be re-analyzed for reduction prior to adoption. Data in the Airport Noise Abatement Report for the last Quarter of 1992 indicates that the limits in some instances could be lowered for all classes of Air Carriers.

RESPONSE #74:

The data from the noise demonstration is continuing to be analyzed as more data are collected. None of the data collected since completion of the analysis reflected in the

draft EIR indicates a need to make corrections to the recommended maximum permitted noise levels, except as discussed in the responses to Comment Nos. 42 and 45.

Any person reviewing the data referenced in this comment must be careful not to rely too heavily on results from any one segment of the demonstration. It is also important to understand and recognize the difference between the data that are weight corrected (i.e., the noise level demonstration data) and the data that are not (i.e, the quarterly reports). The non-weight corrected data includes some airlines that only fly short haul destinations and are therefore quieter than another airline may be if they had used the same procedure and operated to the same market. However, because some carriers use identical aircraft to serve more distant markets, those aircraft will be heavier on takeoff and, therefore, all other factors being equal, noisier. As noted earlier, in order to meet the project objective of preserving the pre-demonstration operational capacity of the airport, the Phase 2 Access Plan noise limits must be set to accommodate the "worst case" operator in any class. The consequence of this, however, is that operators using the criteria aircraft in shorter-haul markets will generate lower noise levels than the maximum permitted noise levels; a condition which has generally been true throughout the 1980s and 1990-92.

In addition, the County's experience is that, throughout each year, there are differences in the quarterly average noise levels which result from weather conditions, passenger load factors, and other variables which change the average noise level for particular classes of operation and particular aircraft types. The several quarters of data collected and analyzed for preparation of EIR 546 provide a more reliable basis for new noise limit determination than a single quarter of noise level readings.

COMMENT #75:

It is recommended that the new procedure be implemented on the basis of a one year trial to gain experience with its characteristics and impact. Final endorsement at that time would follow analysis and review by all parties.

RESPONSE #75:

As mentioned in the response to Comment No. 74, the County does plan to continue noise level data collection through the current plan year. The analysis of this additional data will allow the County to determine whether further modifications to the maximum permitted noise limits for Class A, Class AA or Class E aircraft operations are appropriate. This plan to continue data collection and analysis is more fully discussed in the mitigation measures sections of Draft EIR 546. See, Section 2.3.5 and Section 3.1.5, which, respectively, contain the two subsections: Excluded Noise Demonstration Period and Limitation on Access Plan Amendments, and Continuation of the Noise Level

Demonstration. In short, the EIR already proposes that the amendments to the Phase 2 Access Plan be made initially only for the 1993-94 plan year.

COMMENT #76:

Since this change in takeoff departure is not advantageous to the County, the airport or nearby communities, and is entered into only at the direction of the Federal Government, it is recommended that the Settlement Agreement be extended from 2005 for another ten years.

RESPONSE #76:

See the response to Comment No. 16. We should note that the federal government is not a direct party to the 1985 Settlement Agreement.

COMMENT #77:

It is recommended the Passur Radar System be retained. It will be of material aid to the airport staff in monitoring and improving on the performance of the airlines in following the established noise abatement departure procedures, particularly over the Upper Bay regions.

RESPONSE #77:

See the response to Comment No. 63.

COMMENT #78:

The small reductions in noise level impact on communities resulting from the displaced threshold for takeoff are not considered to be sufficient to justify the expense involved in a runway extension. It is recommended that the study of this concept be terminated.

RESPONSE #78:

See response to Comment Nos. 50 and 64.

COMMENT #79:

While not discussed in the Draft EIR, it is urged that the 5,000 ' departure ceiling be supplemented with a requirement to delay the application of increased power to a 2 mile DME fix beyond the coastline. Compliance with this provision will materially reduce the impact of noise migrating aft from the departing aircraft towards the coastal and island regions of Newport Beach.

RESPONSE #79:

The proposed AC includes provisions to set minimum requirements for the so called "second segment" on an airline departure. This segment ends when the aircraft reaches 3000 feet altitude. The County does not have direct regulatory authority to require the airlines to implement the suggested procedure. Nor does the County believe that restricting the reapplication of power until two miles beyond the coast line is necessary to control noise, and there are substantial airspace management and economic issues which are related to the suggested procedure. However, the County will pursue with the airlines and FAA the possibility of delaying the reinitiation of power until the six DME point using existing navigational aids which, if feasible and capable of being implemented, should address the issue raised in this comment.

COMMENTS FROM THE UNITED STATES DEPARTMENT OF THE INTERIOR

COMMENT #80:

Our concerns relate to the federally listed endangered, or threatened species occurring in Upper Newport Bay (Bay) which include: the light-footed clapper rail, (Ballus longirostris levipes); peregrine falcon, (Falco peregrinus); brown pelican, (Pelecanus occidentalis); California least tern, (Sterna antillarun browni); California gnatcatcher, (Polioptila californica); and possibly least Bell's vireo, (Vireo bellii pusillus).

The proposed changes result from regulatory actions taken by the Federal Aviation Administration (FAA) to increase the safety for the operation of commercial aircraft. These changes include the limitation of each aircraft operator to no more than two noise abatement departure procedures, and a new minimum altitude standard for initiating thrust reduction. The DEIR states that the "areas which are affected by potentially greater aircraft noise levels are located within the unincorporated areas of Santa Ana Heights," and that "noise impacts on the Upper Newport Bay Ecological Reserve may actually decrease." Given this information, the Service believes that there will be little to no change in the noise impacts to the biological resources of the Bay.

RESPONSE #80:

One of the benefits of the proposed project is that, in many cases, and certainly on average, the single event noise levels of commercial aircraft will actually decrease from existing conditions south of Santa Ana Heights, primarily in areas of Newport Beach. Therefore, noise impacts on the Upper Newport Bay Ecological Reserve may actually decrease. See discussion at pages 181-82 of Draft EIR 546.

COMMENT #81:

Because of the lack of carefully controlled studies, and the difficulty of assessing the impacts of noise, the Service is unable to establish what the affects of current noise levels are, or to establish a threshold of significant impact. However, given the acoustic dependence of the species of concern in the Bay, it is unlikely that the effects of the aircraft noise are either neutral, or therapeutic. In view of the inadequacy of methods to assess noise impacts, it is clear that function could be affected even in birds that appear to be completely adapted to current conditions.

It may be of interest to the County of Orange that a recent workshop on The Effects of Noise on Birds was sponsored by CalTrans, and organized by Dr. Ann Bowles, a bioacoustician at Hubbs-Sea World Research Institute. An outstanding international panel of scientists attended the workshop, and presented research papers and compilations of the literature on a variety of topics. This information is being assembled and will be published in the form of a book, available within the next year. A unanimous conclusion of these scientists was that the dB(A) type of noise analysis is inappropriate for birds and other forms of wildlife. Instead, an unweighted one-third octave band analysis should be done whenever impacts to wildlife are to be assessed. Also, birds are not less sensitive to low frequency sound; they appear to be more sensitive. Dr. Me. Krsithan, of the University of Pittsburgh, has performed behavioral audiograms using cardiac conditioning methods and determined that several avian species are 200 times more sensitive to noise in the frequency range of 1 to 10 Hz At 50 Hz, birds are 20 dB more sensitive. The crossover point for audiograms of humans and birds, where hearing sensitivity is roughly equivalent is at 100 Hz. A diagram depicting these relationships is included. The point that needs to be resolved is the extent of cross-coupling between sound and vibration.

RESPONSE #81:

The data and comments provided in the letter from the Department of the Interior refer to noise with frequencies less than 100 hertz and is primarily noise that is technically called infrasound. If wildlife is more sensitive to infrasound, the A-weighted decibel will not adequately describe that noise, and the traditional A-weighted analyses will have

to be supplemented by ⅓ octave unweighted data. The County has no comment on the data provided showing infrasound response characteristics of the homing pigeon.

It is important to note that fixed wing aircraft noise does not contain infrasound components. Aircraft noise spectral characteristics drop off very rapidly at frequencies below 100 Hz. This is shown in a series of figures for jet and turbofan aircraft that are included in "Annoyance Caused by Advanced Turboprop Aircraft Flyover Noise," NASA Technical Paper 2782, March 1988. Copies of these figures are attached to the end of these responses to comments. The data show for several turboprop and jet aircraft that fixed wing aircraft are not sources of infrasound, and, therefore the comment of Department is not relevant to the changes in noise limits caused by the proposed changes in proposed AC 91-53A.

It is appropriate to comment that helicopters, particularly those with 2 blade rotors and slow rotation speeds, can be a source of infrasound. However, those type of aircraft do not typically operate over the Back Bay or the areas of the Ecological Reserve. Rather, helicopter operations at JWA are typically routed directly east or west from the airport (i.e., perpendicular to the extended runway center-line).

Also, the area behind an aircraft during landing where turbulent wing wake vortices intersect the ground may show higher components of infrasound (as well as potentially high velocity air currents). This would be limited to the area covered by the clear zone on the approach runway (i.e., within approximately 1000' of the landing threshold). This project does not affect aircraft approaches and therefore will not affect noise on landing.

COMMENTS FROM THE CITY OF NEWPORT BEACH

COMMENT #82:

The City Council has approved these comments with the understanding that the County is giving serious consideration only to Alternatives 1 and 2 under the base case scenario and scenario A. If our assumptions are inaccurate, we reserve the right to make additional comments.

RESPONSE #82:

It would, perhaps, be more accurate to say that Alternative 1 (the proposed project) and Alternative 2 are the only alternatives identified in the Draft EIR capable of achieving the project objectives, and that the no project alternative and Alternative 3 are not recommended in the Draft EIR for adoption for that, and other, reasons.

In addition, as acknowledged in the Draft EIR, the "Scenario B" analysis is an artificial "worst-case" analysis and does not represent, in the County's view, a reasonable or realistic assumption regarding future fleet mix situations at JWA. However, all issues considered, discussed or analyzed in the Draft EIR were considered, discussed or analyzed seriously.

COMMENT #83:

Proposed Increases in Class AA and Class E Noise Levels. The primary purpose of the project is to allow the County to establish new maximum permitted noise levels to "preserve the operational capacity at JWA contemplated by the Phase 2 Access Plan . . . ." The City understood, and made this position known to staff and special airport counsel, that preservation of the operational capacity meant that aircraft qualifying as A, AA or E departures under pre-test conditions would continue to operate within those classes under modified noise thresholds. However, the noise levels suggested by EIR 546 appear to allow certain aircraft, such as the B737-300+ and B757, to qualify as Class AA or Class E aircraft at significantly higher gross take off weights than permitted under pre-test conditions.

The proposed AA and E thresholds are based upon noise generated by aircraft under test program conditions. During the testing program, air carriers were not required to reduce aircraft noise by reducing gross take off weight. As the County notes, carriers have historically "blocked seats" to reduce gross take off weight and allow aircraft to increase stage length within class or qualify as a quieter aircraft. Accordingly, the proposed noise levels for AA and E aircraft are significantly higher because the gross take off weights have increased and carriers are no longer permitted to use "extraordinary" noise abatement departure procedures to qualify within certain classes.

The County contends that "seat blockage" is inefficient and simply generates unmet demand. The counter to that argument is that seats were blocked on aircraft which neither the County nor the City assumed would qualify within AA or E categories (at certain gross take off weights) given the noise levels established in 1985. The proposed revisions to AC 91-53(a) should not be the trigger for authorizing aircraft to depart at higher gross take off weights. We believe the noise levels proposed should be adjusted downward to maintain the pre-test status in terms of the gross take off weight of aircraft within Class AA and E categories.

RESPONSE #83:

See the response to Comment Nos. 68 and 69.

The noise limits proposed as part of this project were estimated from the noise demonstration data using historical (i.e., pre-demonstration) weight data. The only adjustment to the noise levels indicated by the analysis reflected in the draft EIR and Appendix D to the draft EIR was to round up fractional decibel levels to the nearest .5 dB, providing an appropriate margin of safety and enhancing the enforceability of the proposed limits. Similar procedures have been used in the past in translating historical noise data to regulatory noise limits at JWA. Except for this round-off, no additional "weight capacity" has been included in the proposed noise limits.

In addition to the information provided in the response to Comment Nos. 68 and 69, we note here that the previous Class E limit was met by an airline using an FAA approved procedure which involved a power setting which corresponded to a ***negative*** *3 percent engine-out climb gradient. To accommodate the* ***positive*** *engine-out climb gradient of 1.2 %, which is the minimum climb gradient permitted under proposed AC 91-53A, the noise limits for Class E Aircraft had to be increased the most in order to maintain the pre-demonstration operational capacity of the airport.*

COMMENT #84:

There is another good reason for ensuring that increases in noise thresholds are no greater than necessary to simply account for modifications in noise abatement departure procedures. The noise thresholds proposed in the EIR would increase Class E flights by 20 ADD. While the noise levels are temporary, we find it difficult to envision a scenario where the County is able to return to the pre-test status quo by eliminating these departures. The County has acknowledged that it would be extremely difficult to reduce departure noise levels if that action would reduce airport capacity. Since the proposed numbers are to be temporary and enforcement of the Settlement Agreement will be stayed for the indefinite future, there is simply no need to increase permitted AA and E noise levels to avoid the need for seat blockage or other methods of reducing gross take off weight.

RESPONSE #84:

The 20 "additional" Class E flights do not result from the proposed increases to the maximum permitted noise levels of the Phase 2 Access Plan, but were included in the analysis simply to account for the number of ADD's needed to increase the current 6.0 MAP level to 8.4 MAP, as provided for in the 1985 Settlement Agreement. In other words, the "Base Case Scenario" analyzed in the EIR assumes a current operational level at the airport, which is sufficient to serve approximately 6.0 MAP. With or without AC 91-53A, there would eventually be an increase in the number of Class E flights in order to take the airport to its Settlement Agreement capacity of 8.4 MAP. That scenario (ultimate utilization under the 1985 Settlement Agreement) is characterized and

analyzed in the draft EIR as "Scenario A." This is discussed in detail in Section 3.1.4.2, (pages 86 and 91) of the draft EIR.

In fact, if the GTOW of Class A and Class AA flights could be increased (resulting in increased noise levels beyond that proposed by the project), some or all of the predicted additional 20 ADD's would not be operated and the County could still serve 8.4 MAP. However, the County has, and continues to assume enhancing the operational capacity of Class A and Class AA Aircraft by raising further the maximum permitted noise levels for those classes of aircraft is not the City's preferred means of dealing with the impacts of AC 91-53A.

COMMENT #85:

Noise Analysis. While the noise analysis of the proposed project is extensive, there is a scenario which is discussed, but not evaluated. The City of Newport Beach and others have expressed concerns based upon the County's inability to mandate a particular NADP. Assuming the County selects the proposed project (alternative 1), air carriers nonetheless have the right to select an 800 foot cutback as the close-in NADP, and meet noise thresholds while significantly increasing the gross take off weight of the aircraft. The City acknowledges the County has faithfully complied with and implemented provisions of the Settlement Agreement, but we also recognize that air carriers have historically taken advantage of all available opportunities and there is no reason to expect them to do otherwise in the future. The County acknowledges that, under such a scenario, "the noise reduction south of RMS 21 and 22 expected from the use of a 1500 foot power cut-back procedure would not be realized." (EIR 546 at page 110). However, we believe that, with the dramatic increase in Class E noise levels, there is a significant potential for an increase in noise as compared to the current condition. CEQA requires a comparison of the proposed project to the current conditions rather than adopted plans or earlier predictions. We appreciate the County's willingness to continue to discuss the possibility of establishing modified "downstream" noise levels and we assume that this possibility will be fully explored with the FAA.

RESPONSE #85:

The comment is noted and the County is willing to fully explore all relevant issues with FAA. See the response to Comment No. 45.

COMMENT #86:

Runway Extension. We believe the County should reject runway extension as a mitigation measure. The County concedes that the feasibility and impact of any

northerly extension of the runway has yet to be determined. More importantly, any potential noise reduction from a runway extension could be immediately offset by increases in gross take off weight or the use of aircraft which generate noise at the upper end of any classification. The City is concerned that identification of the runway extension as a mitigation measure could lead to some reduced level of environmental analysis if and when such a project is proposed.

RESPONSE #86:

See the response to Comment No. 50.

If and when the County chooses to pursue construction of a runway extension, the County would fulfill any and all environmental requirements defined under the California Environmental Quality Act and, if necessary, NEPA.

COMMENT #87:

Continued Noise Level Demonstration. The County proposes, as a mitigation measure, to continue its collection and analysis of noise level data. We assume this means the County will maintain the passive radar system and temporary noise monitoring stations for the remainder of the 1993 calendar year and beyond if questions persist as to appropriate noise levels. In this regard, we note that this mitigation measure does refer to a desire to "preserve the pre-demonstration operational status at JWA." (EIR at page 104).

RESPONSE #87:

See the response to Comment Nos. 17 and 63.

The draft EIR proposes to permanitize some of the temporary noise monitoring stations and to monitor indefinitely at those locations. Prior to commencement of the Noise Level Demonstration program, and beginning in January 1992, the County installed eight temporary noise monitoring stations (TMS), to be used together with the existing six permanent remote noise monitoring stations (RMS) for a total of 14 monitoring stations south of JWA. The County believes that sufficient noise level data has been collected at these stations to justify removal of seven stations, leaving a total of seven permanently in place.

In the first quarter of 1993 the County removed TMS 23, 25, 26, and 27. During May 1993 the County sent a letter to the City of Newport Beach indicating its intention to

remove TMS 28 after July 1, 1993, unless the City or some other party chose to pay the cost of equipment purchase and installation for this station. The County believes that the noise level data at TMS 28 correlates well with RMS 6 data, and therefore TMS 28 is not required for County use.

Finally, Draft EIR 546 indicates that the County proposes to remove RMS 4 and RMS 5 sometime after establishing permanent installations at TMS 21, TMS 22, and TMS 24, planning for a period of "side-by-side" monitoring with RMS 4 and 5 still in place so that data can be collected establishing a correlation between RMS 4 and 5 and the stations intended to replace them.

COMMENT #88:

Santa Ana Heights Impact. The City Council is concerned about the potential impact of the project on those significantly noise-impacted residents of Santa Ana Heights and the Anniversary tract. These residents will experience additional noise which we believe would be significant under either alternative. Obviously, the greatest impact results from the MD-80s and noise levels for these aircraft are identical under either alternative. However, the additional noise generated by AA and E aircraft cannot be ignored. Accordingly, the Council supports full and timely reactivation and funding of the noise insulation and purchase assurance programs.

RESPONSE #88:

The Council's concern is noted. Draft EIR 546 has addressed noise impacts of Class A, AA and E aircraft and mitigation in the form of the AAIP and RPP. The City's support is appreciated. See the response to Comment No. 19.

COMMENT #89:

Postponed Adoption of Project. The City acknowledges that this draft EIR would not have been necessary but for the FAA proposal to modify AC 91-53. The City wishes to compliment the County on their involvement in the process and efforts to ascertain the impacts of compliance. We also wish to acknowledge the County's full and good faith implementation of the Settlement Agreement. However, we support AWG and others who suggest that adoption of the project, and certification of the EIR, be postponed until the FAA adopts the revised Advisory Circular.

RESPONSE #89:

See the response to Comment No. 59.

COMMENTS FROM AMERICA WEST AIRLINES

COMMENT #90:

America West strongly supports the Proposed Project, believing it to be the only option which would allow us to operate a financially sound service at Orange County's John Wayne Airport (JWA) and meet the County's objective of establishing new noise levels in order to preserve the operational capacity at JWA contemplated by the Phase 2 Access Plan and accommodate the safety concerns expressed by the FAA over proliferating noise abatement departure procedures. Any other alternative would have a highly negative impact on our operations at JWA and, in our view, not meet the above mentioned objectives.

America West first began service at JWA on April 1, 1985. At that time America West was allocated 1 Class A ADD and 2 Class AA ADDs. With the use of environmentally sensitive Class E ADDs, America West has been able to craft an economically viable service pattern and grow to become the second largest carrier at JWA. Under the current plan allocation America West has been allocated 1 Class A ADD and 7 Class AA ADDs. With this limited allocation America West will once again rely on Class E ADDs to maintain and expand upon our current operations at JWA.

The draft EIR #546 lays out three alternatives for consideration. The first has been labeled the No Project Alternative. Under this proposal the noise limits currently in place at and around JWA would remain so. Prior to this project America West was operating B737-300 with CFM56-3B2 engines capable of takeoffs at 103,000 pounds and in conformance with the established noise limits, which equated to carrying 95 to 105 passengers on a one hour stage length. This was achieved by reducing thrust at 1,000 feet above field elevation to power levels that would provide a negative 3% climb gradient with one engine failed. Recent amendments to FAA Advisory Circular 91-53 prohibit power reductions below positive 1.2% gradient settings. This factor adds to the minimum noise levels the aircraft is capable of producing. To perform 86.8 SENEL levels at monitor 1 in a manner conforming with FAA Advisory Circular 91-53 would not allow the Class E ADD to be economically viable for America West.

Similarly, the proposal labeled Alternative 2 would severely constrict, if not eliminate, the economic viability of the Class E ADD for America West. To perform 90.0 SENEL levels as proposed at monitor 1, takeoff weights must be limited to approximately 98,000 pounds. This equates to approximately 72 to 77 passengers on a one hour stage length. Additionally this noise level is based on an 800 feet above field elevation

power cutback. Because of recent FAA directives, this would require America West to adopt an 800 feet cutback as a noise abatement procedure for the entire county. Because of the variety of conditions in terms of altitude, temperature, and obstructions existing at the airports nationwide at which America West operates, we would be extremely reluctant to adopt such a procedure as it could well ental operational limitations for other airports.

America West finds the proposal labeled as the Proposed Project (also labeled Alternative 1) to be the only one consistent with the County's stated objective as well as our objective and we strongly support its adoption. Included with these comments as Attachment 1(A-H) is an engineering analysis of each of the four routes flown by America West out of JWA. This analysis reviews the performance characteristics of the current noise levels using the now proscribed departure profile, the Proposed Project noise levels, and the Alternative 2 noise levels. While the resulting figures are averages which may not be applicable to all or even most flights, they are useful for comparative purposes. This comparison clearly demonstrates both the questionable viability of the Class E ADD under Alternative 2 and the superior benefits to be derived from the Proposed Project. While the Proposed Project still results in significant payload restrictions for America West, it does retain a viable Class E ADD which is in conformance with FAA requirements and provides for limited expansion of lift capabilities at JWA, as market conditions permit.

RESPONSE #90:

See the response to Comment No. 42. An adjustment to the Alternative 2 Class E limit at RMS 1 will be recommended by staff if the Board of Supervisors selects Alternative 2 as the project to be implemented.

COMMENT #91:

In addition, America West believes that the data used to establish aircraft take-off weights upon which the allowable noise limits are based is skewed. For a variety of reasons not within either America West's or the airport's control the test data used weights that are, by historical standards, somewhat low. Attachment 2 to those comments contains historical data which more accurately reflects pre-test takeoff weights. We would respectfully request that the information found within Attachment 2 be factored in prior to the finalization of draft E.I.R. #546 and its accompanying permitted noise levels.

RESPONSE #91:

See the responses to Comment Nos. 42 and 90.

COMMENTS FROM TRANS WORLD AIRLINES, INC. (TWA)

COMMENT #92:

Prior to the test period of April 1992, we at TWA, on a voluntary basis, limited our maximum take off weights to 128,000 lbs. to avoid all of the negative ramifications of excessive noise. That was done solely so that we would be "good tenants," but the monetary cost of such action in today's economy is prohibitive for us. It would seem inequitable if we are now penalized because of these lower historic readings.

RESPONSE #92:

See the response to Comment Nos. 37, 39 and 69.

COMMENT #93:

At the start of the test period and up to the present, our gross weights have been in the range of 130,000 to 134,000 lbs. That increase in gross weight means the difference between operating at a profit or a loss. If we are required to operate at the low senel value proposed, we would again be forced to limit our gross weights by blocking seats and denying travel to the community we are all trying to serve. A loss of that 6,000 lbs, of payload equates to between 3.3 million and 4.1 million dollars on an annual basis, considering passengers and cargo. If we want to be successful in our reorganization, and we do, we will not be able to absorb such a loss.

RESPONSE #93:

See the response to Comment Nos. 35, 37, 39 and 69.

The County acknowledges that TWA is currently operating MD-80 gross takeoff weights which average over 130,000 pounds. However, the average weights only reached this level after October 1992, when TWA adjusted its schedule, consolidating three Class A MD-80 flights into two MD-80 flights. The three flights consisted of two flights to St. Louis and one flight to Ontario which then flew to St. Louis. The consolidated flights are both direct flights to St. Louis. The following are the TWA average quarterly weights during the noise demonstration:

1st quarter '92	*120,000 pounds*
2nd quarter '92	*121,400 pounds*
3rd quarter '92	*120,900 pounds*
4th quarter '92	*126,000 pounds*
1st quarter '93	*131,000 pounds*

A close examination of the data from the first quarter of 1992 for the two flights to St. Louis show that one flight to St. Louis averaged 127,000 pounds, and the other flight averaged approximately 125,000 pounds. The shorter flights (i.e., Ontario) averaged 105,000 pounds.

Douglas Aircraft Company and TWA provided weight data for the months of July, August, and November 1991. During this time, TWA operated three flights per day, all to a longer destination (such as St. Louis), (i.e., there was no "short-haul" flight to bring the average weight down). During those three months of 1991, TWA's average GTOW was approximately 125,600 pounds (125,300 pounds for Runway 19R departures and 130,600 for Runway 01L departures).

COMMENT #94:

One possibility that we would hope to see would be to raise the senel limits at RMS 1 and 2 to 103.0 dB for the MD-80 or more specifically, long haul MD-80's. In actuality, there are relatively few long haul MD-80 events, and the difference between 101.5 and 103.0 is undetectable by the human ear. This would allow us to continue to operate at or near runway limit weights, as we have been, generally, during the test period.

As your data will credify, we had 491 events that operated between 129,000 and 134,000 lbs. between April 1992 and April 12, 1993. 467 flights were over the 101.5 dB value at monitors 1 and 2, 358 flights were over 102.5 dB and 271 were over 103 dB.

Our major challenge is that we have only two long haul daily events and adding another short segment to decrease the average senel reading may or may not adequately address our bottom line.

RESPONSE #94:

While the statement that the difference between a Class A noise limit of 101.5 db SENEL and 103.0 dB SENEL is not detectable to the human ear is correct, it must be noted that Class A MD-80 operations are the dominant aircraft in establishing the

location of the 65 dB CNEL contour. With the 103 dB SENEL limit, the MD-80 is the dominant aircraft in defining the critical CNEL contours, with the next noisiest aircraft having a contribution to the CNEL contours which is 3 dB CNEL below the MD-80. With a 101.5 dB SENEL Class A limit, the next noisiest aircraft is within 1.5 dB CNEL of the MD-80 contribution. (These data are for RMS 1 and a 1500 foot cutback for non-MD-80 aircraft. For the 800 foot cutback, the next contributing aircraft would be 5 dB CNEL and 4 dB CNEL down for the 103 dB SENEL and 101.5 dB SENEL limits, respectively). Thus, the 65 dB CNEL contour is very sensitive to the maximum permitted noise levels for Class A aircraft, and specifically MD-80 operations. Therefore, it is in the best interests of the County and the community (and, in terms of financing the necessary land use mitigation, the carriers and FAA as well) to proceed cautiously in setting Class A noise limits.

The statement that 467 of TWA's 491 events with weights over 129,000 pounds exceeded 101.5 dB SENEL, 358 over 102.5 dB SENEL, and 271 over 103 dB SENEL, is misleading. These data include all flights since April 1992. TWA did not begin flying the 800 foot procedure until October 1992. The procedure flown prior to October is not relevant to the current discussion as it was a distant procedure that was much louder than the 800 foot cutback procedure which is the basis for the recommended Class A noise limits. The appropriate data for October 1992 through March 1993 is as follows:

244 flights in database and RMS 1 noise levels (dB SENEL)

93 Flights over 101.5 dB SENEL (38%)
(52 Flights over 102.5)
(32 Flights over 103.0)

151 Flights below 101.5 dB SENEL (62%)

(Note: there were 93 flights flown during the referenced period that were not included in the above analysis. This was because 4 flights did not have valid weight data and 89 flights did not have RMS 1 noise data due to a temporary failure of the monitoring system computer).

It should also be noted that the linear regression of the TWA data for the period from October through March 1993 indicates that, when normalized to 128,000 pounds, the aircraft would produce an energy average noise level of 100.8 dB SENEL (no rounding). The actual average weight during this period was 129,000 pounds, which produced an actual energy average noise level of 101.3 dB SENEL.

See also the responses to Comment Nos. 36, 37, 39, 69 and 93.

COMMENT #95:

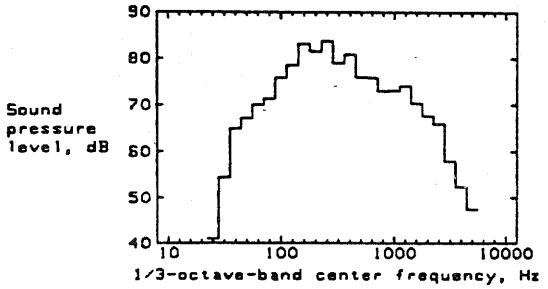
Regarding the quarterly noise average, we would like to see a four (4) to six (6) month average with no penalty assessed until the entire yearly average is available to help us with our high readings during the peak summer months.

RESPONSE #95:

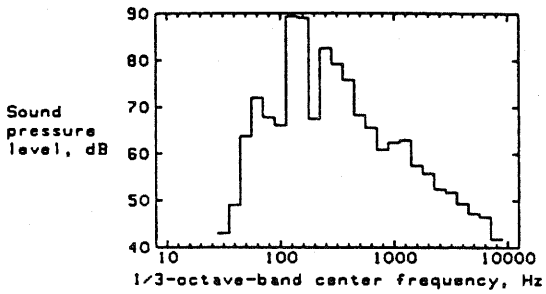
The comment and request is noted. However, a permanent change to the Phase 2 Access Plan as suggested by this comment would require independent environmental review and analysis since it is not part of the project proposed by, or analyzed in, the Draft EIR. Nor would the County favor assessing noise level sanctions only on an annual basis, although interim compliance periods other than calendar quarters might be appropriate for consideration at some time in the future.

We assume that most airlines would favor longer compliance periods. Whether there is a need or justification for longer compliance periods will be reviewed and considered as part of the continuing test proposed for the current plan year in the draft EIR. The suggested action would also require consent of the City of Newport Beach, SPON and AWG, the signatories to the 1985 Settlement Agreement, since the quarterly compliance period for maximum permitted noise levels is an element of the settlement stipulation and order.

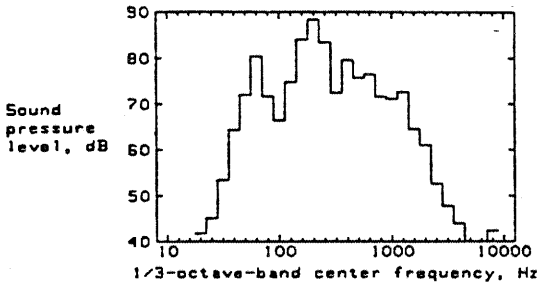
As noted in the draft EIR and elsewhere in these comments and responses to comments, there is a strong community interest in negotiating an extension of the 1985 Settlement Agreement; the Draft EIR recommends that such discussions occur as partial mitigation for the project; and the County will review this issue with the other settling parties during those discussions. The extent of the County's support for such a change to the settlement agreement will depend, in part, upon the County's assessment of the need for such a change and the relative advantages and disadvantages (if any) of the suggested change to the airlines and the communities, as determined by data which will continue to be collected during the current plan year.



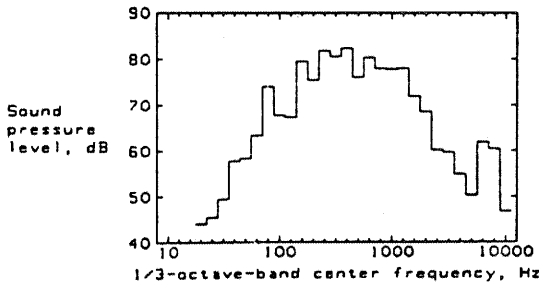
McDonnell Douglas DC-10 takeoff.



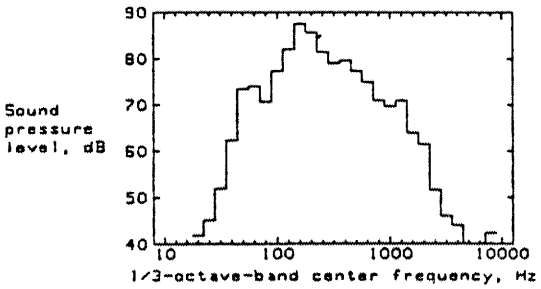
Shorts 330 takeoff.



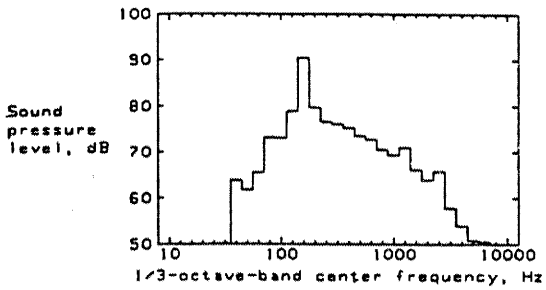
McDonnell Douglas DC-9 takeoff.



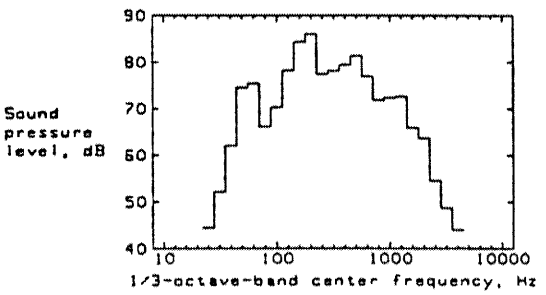
Nord 262 takeoff.



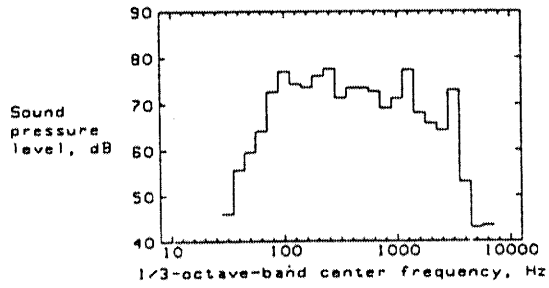
Boeing 727-200 takeoff.



de Havilland Canada DHC-7 Dash 7 takeoff.



Airbus Industrie A-300 takeoff.



Boeing 707 takeoff.

EXHIBIT IN RESPONSE TO COMMENT **81:**

EXAMPLES OF 1/3 OCTAVE DATA FOR SOME JET AND TURBOPROP AIRCRAFT

Source: 'Annoyance Caused by Advanced Turboprop Aircraft Flyover Noise,' NASA Technical Paper 2782, March 1988.