

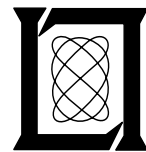
**Project Report
ATC-268, II**

**Lincoln Laboratory Evaluation of
TCAS II Logic Version 7 -
Appendices – Volume II**

B. Chludzinski

13 December 1999

Lincoln Laboratory
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
LEXINGTON, MASSACHUSETTS



Prepared for the Federal Aviation Administration,
Washington, D.C. 20591

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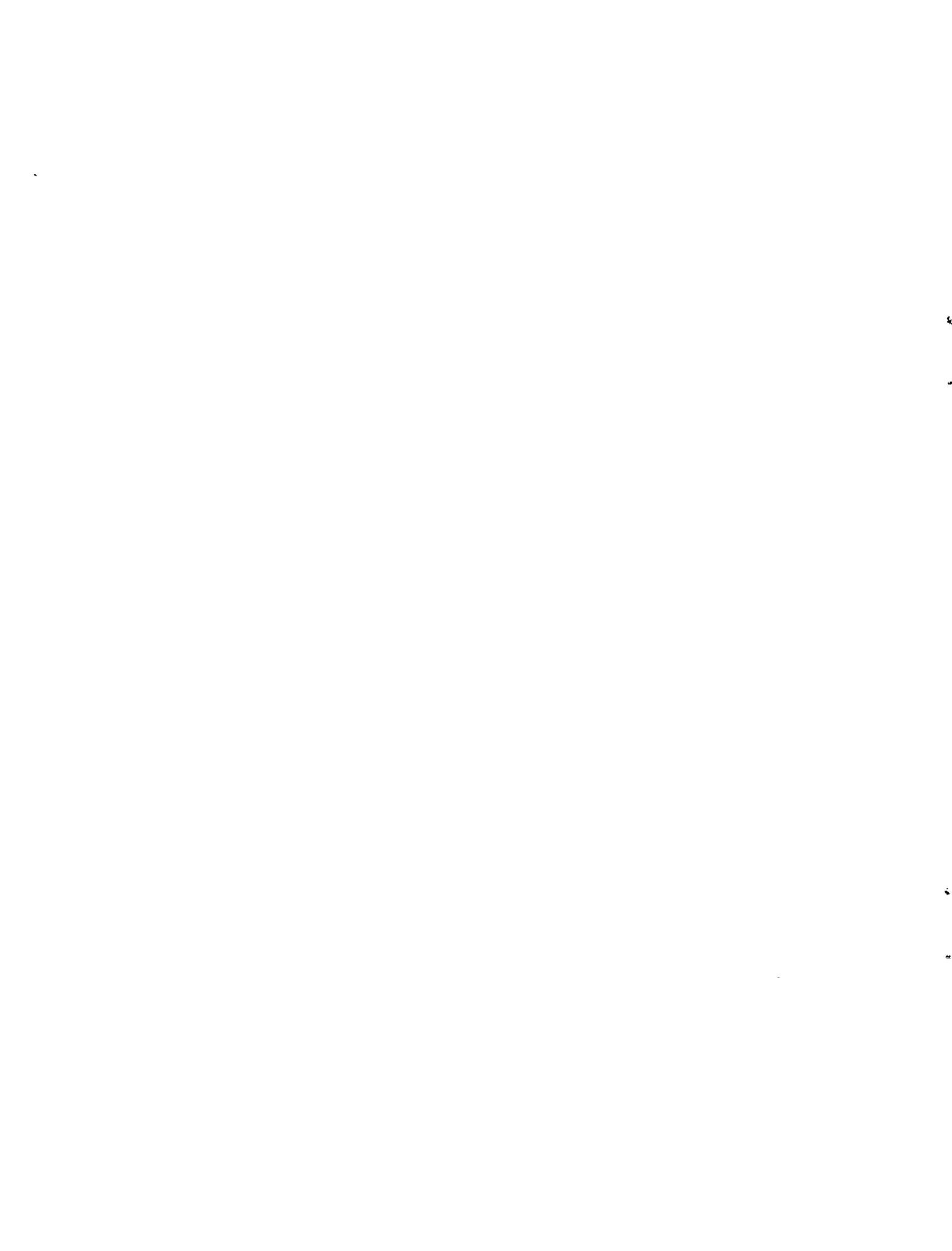
TECHNICAL REPORT STANDARD TITLE PAGE

1. Report No. ATC-268		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle Lincoln Laboratory Evaluation of TCAS II Logic Version 7 – Appendices – Volume II				5. Report Date 13 December 1999	
				6. Performing Organization Code	
7. Author(s) Barbara Chludzinski				8. Performing Organization Report No. ATC-268	
9. Performing Organization Name and Address Lincoln Laboratory, MIT 244 Wood Street Lexington, MA 02420-9108				10. Work Unit No.	
				11. Contract or Grant No.	
12. Sponsoring Agency Name and Address Department of Transportation Federal Aviation Administration Systems Research and Development Service Washington, DC 20591				13. Type of Report and Period Covered Project Report	
				14. Sponsoring Agency Code	
15. Supplementary Notes This report is based on studies performed at Lincoln Laboratory, a center for research operated by Massachusetts Institute of Technology under Air Force Contract F19628-95-C-0002.					
16. Abstract Volume 1 described the analysis procedures and inputs. This volume presents tables and figures that were generated during the assessment to the TCAS Logic Performance.					
17. Key Words				18. Distribution Statement This document is available to the public through the National Technical Information Service, Springfield, VA 22161.	
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No of Pages 313	
				22. Price	

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APPENDIX A

SCENARIO DEFINITION FOR TCAS II TESTING

<u>CLASS</u>	<u>PARAMETER VARIED</u>	<u>RANGE</u>	<u>STEP SIZE</u>	<u>MULTIPLICATION FACTOR</u>
0,10	alt sep @ CPA	-750, 750 ft	250	7
	vertical rate 1	-400, 400 fpm	400	3
	vertical rate 2	0, 400 fpm	400	2
	alt a/c 1 at CPA	3700,7500 ft	3800	2
				<hr/> 84 * 26 = 2184
1,11	alt sep @ CPA	-750, 750 ft	250	7
	vertical rate 1	-400, 400 fpm	400	3
	vertical rate 2	1000, 5000 fpm	2000	3
	alt bins	-20, 20 ft	40	2
	alt a/c 1 at CPA	3700,7500 ft	3800	2
				<hr/> 252 * 26 = 6552
2,12	alt sep @ CPA	-750, 750 ft	250	7
	vertical rate 1	-400, 400 fpm	400	3
	vertical rate 2	1000, 5000 fpm	2000	3
	vertical accel 2	.05, .35 g	.1	4
	time vert accel 2	20, 30 sec	5	3
	alt bins	-20, 20 ft	40	2
	alt a/c 1 at CPA	3700,7500 ft	3800	2
				<hr/> 3024 * 26 = 78624
3,13	alt sep @ CPA	-1000, 1000 ft	250	9
	vertical rate 1	-400, 400 fpm	400	3
	vertical rate 2	1000, 5000 fpm	2000	3
	vertical accel 2	-.35, -.05 g	.1	4
	time vert accel 2	20, 30 sec	5	3
	alt bins	-20, 20 ft	40	2
	alt a/c 1 at CPA	3700,7500 ft	3800	2
				<hr/> 3888 * 26 = 101088
4,14	alt sep @ CPA	-750, 750 ft	250	7
	vertical rate 1	-5000, 5000 fpm	2000	6
	vertical rate 2	1000, 5000 fpm	2000	3
	alt bins	-20, 20 ft	40	2
	alt a/c 1 at CPA	3700,7500 ft	3800	2
				<hr/> 504 * 26 = 13104

5,15	alt sep @ CPA	-750, 750 ft	250	7
	vertical rate 1	-5000, 5000 fpm	2000	6
	vertical rate 2	1000, 5000 fpm	2000	3
	vertical accel 2	.05, .35 g	.1	4
	time vert accel 2	20, 30 sec	5	3
	alt bins	-20, 20 ft	40	2
	alt a/c 1 at CPA	3700,7500 ft	3800	2

$$6048 * 26 = 157248$$

6,16	alt sep @ CPA	-750, 750 ft	250	7
	vertical rate 1	-5000, 5000 fpm	2000	6
	vertical rate 2	-5000, -1000 fpm	2000	3
	vertical accel 2	.05, .35 g	.1	4
	time vert accel 2	20, 30 sec	5	3
	alt bins	-20, 20 ft	40	2
	alt a/c 1 at CPA	3700,7500 ft	3800	2

$$6048 * 26 = 157248$$

7,17	alt sep @ CPA	-750, 750 ft	250	7
	vertical rate 1	1000, 5000 fpm	2000	3
	vertical rate 2	-5000, 5000 fpm	2000	6
	vertical accel 1	.05, .25 g	.1	3
	vertical accel 2	magnitudes .05 to .35 g; sign is same sign of vertical rate	.1	4
	time vert accel 1	25 sec		1
	time vert accel 2	20, 30 sec	5	3
	alt a/c 1 at CPA	3700,7500 ft	3800	2

$$9072 * 26 = 235872$$

8,18	alt sep @ CPA	-750, 750 ft	250	7
	vertical rate 1	-5000, -1000 fpm	2000	3
	vertical rate 2	-5000, 5000 fpm	2000	6
	vertical accel 1	.05, .25 g	.1	3
	vertical accel 2	magnitudes .05 to .35 g; sign is same sign of vertical rate	.1	4
	time vert accel 1	25 sec		1
	time vert accel 2	20, 30 sec	5	3
	alt a/c 1 at CPA	3700,7500 ft	3800	2

$$9072 * 26 = 235872$$

9,19	alt sep @ CPA	-1000, 1000 ft	250	9
	vertical rate 1	1000, 5000 fpm	2000	3
	vertical rate 2	-5000, 5000 fpm	2000	6
	vertical accel 1	-.15, -.05	.1	2
	vertical accel 2	magnitudes .05	.1	4
		to .35 g; sign		
		is opposite sign of		
		vertical rate		
	time vert accel 1	25 sec		1
	time vert accel 2	20, 30 sec	5	3
	alt a/c 1 at CPA	3700,7500 ft	3800.	2

7776 * 26 = 202176

TOTAL SCENARIOS RUN :

CLASS 0,10	2,184
CLASS 1,11	6,552
CLASS 2,12	78,624
CLASS 3,13	101,088
CLASS 4,14	13,104
CLASS 5,15	157,248
CLASS 6,16	157,248
CLASS 7,17	235,872
CLASS 8,18	235,872
CLASS 9,19	202,176

TOTAL	1,189,968

Appendix B

Number of Encounters Run Breakdown by Encounter Class and Equipage

Class	Parameter Variations	Dataset 1 (26 equip.pairs)	Dataset 2 (30 equip. pairs)
0/10	84	2184	2520
1/11	252	6552	7560
2/12	3024	78624	90720
3/13	3888	101088	116640
4/14	504	13104	15120
5/15	6048	157248	181440
6/16	6048	157248	181440
7/17	9072	235872	272160
8/18	9072	235872	272160
9/19	7776	202176	233280

Total = 1,189,968

1,373,040

Dataset 1 - 26 equipage pairs 6.04a, C7-100, C7-25 Pilot Responding

	AC1	AC2
1.	Mode C	non-resp TCAS (planned)
2.	Mode C	6.04a
3.	Mode C	C7-100
4.	Mode C	C7-25
5.	6.04a low ID	6.04a high ID
6.	6.04a low ID	C7-100 high ID
7.	6.04a high ID	C7-100 low ID
8.	6.04a low ID	C7-25 high ID
9.	6.04a high ID	C7-25 low ID
10.	C7-100 low ID	C7-100 high ID
11.	C7-100 low ID	C7-25 high ID
12.	C7-100 high ID	C7-25 low ID
13.	C7-25 low ID	C7-25 high ID
14.	non-resp TCAS	Mode C (planned)
15.	6.04a	Mode C
17.	C7-25	Mode C
16.	C7-100	Mode C
18.	6.04a high ID	6.04a low ID
19.	C7-100 high ID	6.04a low ID
20.	C7-100 low ID	6.04a high ID
21.	C7-25 high ID	6.04a low ID
22.	C7-25 low ID	6.04a high ID
23.	C7-100 high ID	C7-100 low ID
24.	C7-25 high ID	C7-100 low ID
25.	C7-25 low ID	C7-100 high ID
26.	C7-25 high ID	C7-25 low ID

Appendix B (cont.)

**Number of Encounters Run
Breakdown by Encounter Class and Equipage**

**Dataset 2 - 30 equipage pairs
6.04a, C7-25
Pilot Responding and Pilot Non-responding (PNR)**

	AC1	AC2
1.	Mode C	non-resp TCAS (planned)
2.	Mode C	6.04a
3.	Mode C	C7-25
4.	6.04a low ID	6.04a high ID
5.	6.04a low ID	C7-25 high ID
6.	6.04a high ID	C7-25 low ID
7.	6.04a low ID	6.04a PNR high ID
8.	6.04a high ID	6.04a PNR low ID
9.	6.04a low ID	C7-25 PNR high ID
10.	6.04a high ID	C7-25 PNR low ID
11.	C7-25 low ID	C7-25 high ID
12.	C7-25 low ID	6.04a PNR high ID
13.	C7-25 high ID	6.04a PNR low ID
14.	C7-25 low ID	C7-25 PNR high ID
15.	C7-25 high ID	C7-25 PNR low ID
16.	non-resp TCAS	Mode C (planned)
17.	6.04a	Mode C
18.	C7-25	Mode C
19.	6.04a high ID	6.04a low ID
20.	C7-25 high ID	6.04a low ID
21.	C7-25 low ID	6.04a high ID
22.	6.04a PNR high ID	6.04a low ID
23.	6.04a PNR low ID	6.04a high ID
24.	C7-25 PNR high ID	6.04a low ID
25.	C7-25 PNR low ID	6.04a high ID
26.	C7-25 high ID	C7-25 low ID
27.	6.04a PNR high ID	C7-25 low ID
28.	6.04a PNR low ID	C7-25 high ID
29.	C7-25 PNR high ID	C7-25 low ID
30.	C7-25 PNR low ID	C7-25 high ID

APPENDIX C. REVERSAL ANALYSIS PROGRAM

MITRE encounter classes: 0,10 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 2016

Total incorrectly labelled RAs : 0

		Class 0 Planned = CROSSING								
		6.04A ATCRBS	Ch7-100 ATCRBS	Ch7-25 ATCRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs	(%)	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00
Total NMACS/ runs	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced / NMACS	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ runs	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ RAs	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fast Reverse/ Reversals	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 Reversal/ Reversals	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 1 Rev.	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev.	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev.	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MTIRE encounter classes: 0,10 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 2016

Total incorrectly labelled RAs : 0

Class 10 Planned = NON-CROSSING

	6.04A AICRBS	Ch7-100 AICRBS	Ch7-25 AICRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)	65.63	65.63	65.63	65.63	65.63	65.63	65.63	65.63	65.63
Total NMACS/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced / NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ RAs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fast Reverse/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 Reversal/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 1 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MITRE encounter classes: 1,11 Date processed: 8/27/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 6048

Total incorrectly labelled RAs : 0

		Class 1 Planned = CROSSING								
		6.04A	Ch7-100	Ch7-25	6.04A	Ch7-100	Ch7-25	Ch7-100	Ch7-25	Ch7-25
		ATCRBS	ATCRBS	ATCRBS	only	6.04A	6.04A	only	only	Ch7-100
RAs/ runs (%)		94.39	94.39	94.39	94.39	94.39	94.39	94.39	94.39	94.39
Total NMACS/ runs (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced / NMACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ runs (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ RAs (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fast Reverse/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 Reversal/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 1 Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MTIRE encounter classes: 1,11 Date processed: 8/27/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 6048

Total incorrectly labelled RAs : 0

Class 11 Planned = NON-CROSSING

	6.04A ATCRBS	Ch7-100 ATCRBS	Ch7-25 ATCRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)	60.71	71.43	71.43	60.71	71.43	71.43	71.43	71.43	71.43
Total NMACS/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced / NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ RAs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fast Reverse/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 Reversal/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 1 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MITRE encounter classes: 2,12 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 72568

Total incorrectly labelled RAs : 8

		Class 2 Planned = CROSSING								
		6.04A ATCRBS	Ch7-100 ATCRBS	Ch7-25 ATCRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)		99.14	99.19	98.97	99.60	99.32	99.07	99.14	98.94	99.05
Total NVACS/ runs (%)		6.45	4.76	2.87	1.46	0.73	0.59	0.35	0.45	0.40
Induced / NVACS (%)		94.53	85.71	85.96	91.38	89.66	100.00	100.00	100.00	100.00
Reversals/ runs (%)		2.04	5.14	5.82	0.00	0.28	0.19	0.45	0.25	0.33
Reversals/ RAs (%)		2.06	5.18	5.88	0.00	0.28	0.19	0.46	0.25	0.33
Fast Reverse/ Reversals (%)		6.17	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00
1 Reversal/ Reversals (%)		100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NVACS/ 1 Rev. (%)		0.00	0.98	2.16	0.00	4.55	0.00	5.56	0.00	3.85
Induced NVAC/ NVACS (%)		0.00	100.00	100.00	0.00	100.00	0.00	100.00	0.00	100.00
2 Reversals/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NVACS/ 2 Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NVAC/ NVACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NVACS/ 3+ Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NVAC/ NVACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NVACS and average alt. sep. at CEA are based on simulation truth

MITRE encounter classes: 2,12 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 72568

Total incorrectly labelled RAs : 8

Class 12 Planned = NON-CROSSING

	6.04A ATCRBS	Ch7-100 ATCRBS	Ch7-25 ATCRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)	73.27	79.62	80.87	75.10	79.62	80.87	79.57	80.82	80.19
Total NMACS/ runs (%)	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced / NMACS (%)	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ runs (%)	0.91	0.53	0.24	0.00	0.22	0.14	0.43	0.10	0.19
Reversals/ RAs (%)	1.25	0.66	0.30	0.00	0.27	0.18	0.54	0.12	0.24
Fast Reverse/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 Reversal/ Reversals (%)	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NMACS/ 1 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CEA are based on simulation truth

MITRE encounter classes: 3,13 Date processed: 8/21/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 93312

Total incorrectly labelled RAs : 0

		Class 3 Planned = CROSSING								
		6.04A AICRBS	Ch7-100 AICRBS	Ch7-25 AICRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)		65.75	65.58	65.77	65.69	65.58	65.77	65.58	65.77	65.68
Total NMAs/ runs (%)		0.89	0.76	0.19	0.00	0.00	0.00	0.00	0.00	0.00
Induced / NMAs (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ runs (%)		1.06	0.81	0.54	0.00	0.28	0.27	0.57	0.54	0.55
Reversals/ RAs (%)		1.60	1.24	0.82	0.00	0.43	0.41	0.87	0.82	0.84
Fast Reverse/ Reversals (%)		30.77	33.33	55.00	0.00	4.76	20.00	4.76	20.00	12.20
1 Reversal/ Reversals (%)		100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NMAs/ 1 Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAs/ NMAs (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMAs/ 2 Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAs/ NMAs (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMAs/ 3+ Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAs/ NMAs (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMAs and average alt. sep. at CPA are based on simulation truth

MITRE encounter classes: 3,13 Date processed: 8/21/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 93312

Total incorrectly labelled RAs : 0

Class 13 Planned = NON-CROSSING

	6.04A AICRES	Ch7-100 AICRES	Ch7-25 AICRES	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)	59.29	59.17	58.33	62.06	62.52	60.01	62.50	60.15	61.29
Total NMACS/ runs (%)	0.76	0.37	0.22	0.10	0.05	0.02	0.07	0.00	0.04
Induced / NMACS (%)	96.77	100.00	100.00	100.00	100.00	100.00	100.00	0.00	100.00
Reversals/ runs (%)	6.89	7.87	9.39	0.00	2.66	2.86	5.17	5.34	5.23
Reversals/ RAs (%)	11.62	13.30	16.09	0.00	4.25	4.76	8.27	8.88	8.54
Fast Reverse/ Reversals (%)	38.43	39.25	43.34	0.00	29.95	32.19	33.65	36.24	35.13
1 Reversal/ Reversals (%)	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NMACS/ 1 Rev. (%)	0.00	0.00	0.00	0.00	0.92	0.43	1.42	0.00	0.70
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	100.00	100.00	100.00	0.00	100.00
2 Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MITRE encounter classes: 4,14 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 12096

Total incorrectly labelled RAs : 0

Class		Planned = CROSSING								
		6.04A ATCRBS	Ch7-100 ATCRBS	Ch7-25 ATCRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)		97.25	97.25	97.25	96.70	96.84	96.84	96.98	97.25	97.12
Total NMACS/ runs (%)		0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced / NMACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ runs (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ RAs (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fast Reverse/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 Reversal/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 1 Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MITRE encounter classes: 4,14 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 12096

Total incorrectly labelled RAs : 0

Class 14 Planned = NON-CROSSING

	6.04A AICRBS	Ch7-100 AICRBS	Ch7-25 AICRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RA's/ runs (%)	68.57	68.57	68.57	68.57	68.57	68.57	68.57	68.57	68.57
Total NMACS/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced / NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversals/ RAs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fast Reverse/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 Reversal/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 1 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MITRE encounter classes: 5,15 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 145152

Total incorrectly labelled RAs : 0

Class 5 Planned = CROSSING

	6.04A ATCRBS	Ch7-100 ATCRBS	Ch7-25 ATCRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)	95.76	95.60	95.70	95.77	95.15	95.01	94.85	94.65	94.75
Total NMACS/ runs (%)	3.93	3.12	1.74	0.31	0.17	0.12	0.04	0.07	0.06
Induced / NMACS (%)	73.19	59.46	63.03	100.00	93.94	100.00	100.00	100.00	100.00
Reversals/ runs (%)	0.81	2.66	2.58	0.00	0.08	0.15	0.11	0.17	0.14
Reversals/ RAs (%)	0.85	2.78	2.70	0.00	0.09	0.16	0.11	0.18	0.14
Fast Reverse/ Reversals (%)	0.00	9.13	5.71	0.00	18.75	25.00	20.00	50.00	38.46
1 Reversal/ Reversals (%)	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NMACS/ 1 Rev. (%)	0.00	3.57	2.04	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MITRE encounter classes: 5,15 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 145152

Total incorrectly labelled RAs : 0

Class 15 Planned = NON-CROSSING

	6.04A AICRBS	Ch7-100 AICRBS	Ch7-25 AICRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)	73.85	74.77	73.27	78.07	72.64	70.99	72.05	72.24	72.28
Total NMACS/ runs (%)	1.19	1.11	0.92	0.69	0.13	0.13	0.08	0.08	0.08
Induced / NMACS (%)	29.03	17.24	16.67	100.00	100.00	100.00	100.00	100.00	100.00
Reversals/ runs (%)	1.88	3.45	2.68	0.00	1.17	0.88	2.19	1.73	1.94
Reversals/ RAs (%)	2.54	4.62	3.66	0.00	1.61	1.24	3.03	2.39	2.68
Fast Reverse/ Reversals (%)	12.24	24.44	17.14	0.00	36.07	45.65	43.86	46.67	45.54
1 Reversal/ Reversals (%)	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NMACS/ 1 Rev. (%)	0.00	2.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MITRE encounter classes: 6,16 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 145044

Total incorrectly labelled RAs : 108

Class 6 Planned = CROSSING

	6.04A AICRS	Ch7-100 AICRS	Ch7-25 AICRS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)	94.43	94.56	94.68	94.53	94.27	94.22	94.09	94.37	94.18
Total NMACS/ runs (%)	1.77	1.24	0.76	0.27	0.19	0.15	0.19	0.10	0.14
Induced / NMACS (%)	43.79	35.59	52.05	46.15	59.46	78.57	66.67	40.00	53.85
Reversals/ runs (%)	1.32	2.21	2.37	0.00	0.39	0.38	0.74	0.69	0.72
Reversals/ RAs (%)	1.40	2.34	2.50	0.00	0.41	0.41	0.79	0.73	0.77
Fast Reverse/ Reversals (%)	42.06	27.96	30.53	0.00	22.97	42.47	21.13	37.88	30.43
1 Reversal/ Reversals (%)	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NMACS/ 1 Rev. (%)	3.17	2.37	2.21	0.00	2.70	2.74	2.82	3.03	2.90
Induced NMACS/ NMACS (%)	100.00	40.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MTIRE encounter classes: 6,16 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 145044

Total incorrectly labelled RAs : 108

Class 16 Planned = NON-CROSSING

	6.04A AICRBS	Ch7-100 AICRBS	Ch7-25 AICRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)	78.73	85.85	85.73	78.57	85.14	84.65	84.75	84.87	84.85
Total NMACS/ runs (%)	0.79	0.47	0.16	0.04	0.00	0.00	0.00	0.00	0.00
Induced / NMACS (%)	100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00
Reversals/ runs (%)	9.87	9.16	9.28	0.00	2.28	2.54	4.28	4.76	4.56
Reversals/ RAs (%)	12.53	10.67	10.82	0.00	2.68	3.00	5.06	5.60	5.37
Fast Reverse/ Reversals (%)	30.68	31.33	29.66	0.00	20.69	20.16	22.02	23.14	22.84
1 Reversal/ Reversals (%)	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NMACS/ 1 Rev. (%)	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MTIRE encounter classes: 7,17 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 217672

Total incorrectly labelled RAs : 56

Class		Planned = CROSSING								
		6.04A ATCRBS	Ch7-100 ATCRBS	Ch7-25 ATCRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)		99.60	99.58	99.40	99.36	99.30	99.18	99.06	99.15	99.08
Total NMACS/ runs (%)		9.63	8.07	5.04	1.60	1.06	0.51	0.67	0.28	0.30
Induced / NMACS (%)		81.93	74.06	83.78	98.00	96.21	100.00	100.00	100.00	100.00
Reversals/ runs (%)		2.66	7.55	9.04	0.00	0.15	0.17	0.18	0.14	0.19
Reversals/ RAs (%)		2.67	7.59	9.09	0.00	0.15	0.17	0.19	0.15	0.19
Fast Reverse/ Reversals (%)		5.72	5.63	5.41	0.00	31.58	9.30	26.09	0.00	10.42
1 Reversal/ Reversals (%)		99.40	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NMACS/ 1 Rev. (%)		2.73	2.44	2.66	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)		22.22	95.65	90.00	0.00	0.00	0.00	0.00	0.00	0.00
2 Reversals/ Reversals (%)		0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MITRE encounter classes: 7,17 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 217672

Total incorrectly labelled RAs : 56

Class 17 Planned = NON-CROSSING

	6.04A AICRBS	Ch7-100 AICRBS	Ch7-25 AICRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)	74.32	75.89	74.71	71.63	73.09	71.62	72.29	73.51	72.96
Total NMACS/ runs (%)	0.95	0.90	0.93	0.25	0.16	0.23	0.12	0.11	0.13
Induced / NMACS (%)	57.41	41.18	58.49	100.00	100.00	100.00	100.00	100.00	100.00
Reversals/ runs (%)	0.56	1.64	1.74	0.00	0.15	0.06	0.18	0.16	0.17
Reversals/ RAs (%)	0.76	2.16	2.34	0.00	0.20	0.09	0.24	0.22	0.23
Fast Reverse/ Reversals (%)	18.75	16.13	15.15	0.00	17.65	28.57	30.00	55.56	42.11
1 Reversal/ Reversals (%)	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NMACS/ 1 Rev. (%)	12.50	8.60	6.06	0.00	11.76	0.00	10.00	0.00	5.26
Induced NMACS/ NMACS (%)	100.00	87.50	100.00	0.00	100.00	0.00	100.00	0.00	100.00
2 Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMACS/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MITRE encounter classes: 8,18 Date processed: 8/23/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 217332

Total incorrectly labelled RAs : 396

Class		8 Planned = CROSSING								
		6.04A	Ch7-100	Ch7-25	6.04A	Ch7-100	Ch7-25	Ch7-100	Ch7-25	Ch7-25
		ATCRBS	ATCRBS	ATCRBS	only	6.04A	6.04A	only	only	Ch7-100
RAs/ runs (%)		93.39	94.06	94.64	93.02	93.56	94.11	93.41	94.41	93.93
Total NVACS/ runs (%)		5.95	4.83	2.84	1.55	0.98	0.74	0.68	0.49	0.62
Induced / NVACS (%)		80.55	72.63	78.64	85.92	86.18	94.66	93.68	94.20	94.25
Reversals/ runs (%)		3.89	7.06	7.09	0.00	0.75	0.76	1.34	1.16	1.25
Reversals/ RAs (%)		4.16	7.51	7.49	0.00	0.80	0.81	1.43	1.23	1.33
Fast Reverse/ Reversals (%)		37.32	25.51	16.33	0.00	22.49	16.43	24.60	14.20	19.77
1 Reversal/ Reversals (%)		99.63	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NVACS/ 1 Rev. (%)		3.69	2.43	2.22	0.00	0.00	0.47	0.53	0.00	1.15
Induced NVAC/ NVACS (%)		90.00	91.67	100.00	0.00	0.00	100.00	100.00	0.00	100.00
2 Reversals/ Reversals (%)		0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NVACS/ 2 Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NVAC/ NVACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NVACS/ 3+ Rev. (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NVAC/ NVACS (%)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NVACS and average alt. sep. at CPA are based on simulation truth

MTIRE encounter classes: 8,18 Date processed: 8/23/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 217332

Total incorrectly labelled RAs : 396

Class 18 Planned = NON-CROSSING

	6.04A AICRBS	Ch7-100 AICRBS	Ch7-25 AICRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)	81.87	83.94	86.45	77.24	82.81	85.33	82.71	86.16	84.20
Total NMACS/ runs (%)	1.98	1.30	0.63	0.43	0.30	0.13	0.22	0.02	0.05
Induced / NMACS (%)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Reversals/ runs (%)	15.02	16.63	14.54	0.00	3.88	3.83	7.40	7.21	7.17
Reversals/ RAs (%)	18.35	19.82	16.82	0.00	4.69	4.49	8.95	8.37	8.52
Fast Reverse/ Reversals (%)	41.41	44.35	39.14	0.00	22.67	22.64	25.41	24.08	22.69
1 Reversal/ Reversals (%)	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NMACS/ 1 Rev. (%)	0.16	1.45	0.17	0.00	4.97	1.26	2.93	0.33	0.67
Induced NMAC/ NMACS (%)	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
2 Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 2 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMACS/ 3+ Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAC/ NMACS (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMACS and average alt. sep. at CPA are based on simulation truth

MITRE encounter classes: 9,19 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 186583

Total incorrectly labelled RAs : 41

		Planned = CROSSING									
Class		9	6.04A AICRBS	Ch7-100 AICRBS	Ch7-25 AICRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs	(%)	68.90	68.51	68.05	69.32	68.87	68.30	68.76	68.32	68.48	
Total NMACS/ runs	(%)	1.13	0.48	0.53	0.22	0.14	0.10	0.07	0.03	0.04	
Induced / NMACS	(%)	8.14	16.67	10.00	100.00	100.00	100.00	100.00	100.00	100.00	
Reversals/ runs	(%)	1.60	2.64	1.83	0.00	0.42	0.30	0.55	0.25	0.37	
Reversals/ RAs	(%)	2.32	3.85	2.70	0.00	0.60	0.43	0.81	0.37	0.54	
Fast Reverse/ Reversals	(%)	23.14	24.50	21.58	0.00	34.92	37.78	21.43	10.53	8.93	
1 Reversal/ Reversals	(%)	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00	
NMACS/ 1 Rev.	(%)	0.00	2.50	2.88	0.00	1.59	0.00	2.38	0.00	0.00	
Induced NMAC/ NMACS	(%)	0.00	60.00	50.00	0.00	100.00	0.00	100.00	0.00	0.00	
2 Reversals/ Reversals	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NMACS/ 2 Rev.	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Induced NMAC/ NMACS	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3+ Reversals/ Reversals	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NMACS/ 3+ Rev.	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Induced NMAC/ NMACS	(%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

* NMACS and average alt. sep. at CPA are based on simulation truth

MITRE encounter classes: 9,19 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total Encounters : 186583

Total incorrectly labelled RAs : 41

Class 19 Planned = NON-CROSSING

	6.04A ATCRBS	Ch7-100 ATCRBS	Ch7-25 ATCRBS	6.04A only	Ch7-100 6.04A	Ch7-25 6.04A	Ch7-100 only	Ch7-25 only	Ch7-25 Ch7-100
RAs/ runs (%)	72.76	71.77	71.22	74.29	74.08	72.13	74.15	73.00	73.31
Total NMAs/ runs (%)	2.35	0.88	0.48	0.44	0.26	0.16	0.16	0.04	0.12
Induced / NMAs (%)	80.21	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Reversals/ runs (%)	13.52	13.09	10.94	0.00	2.81	2.95	5.19	5.68	5.39
Reversals/ RAs (%)	18.58	18.24	15.35	0.00	3.79	4.09	7.00	7.78	7.35
Fast Reverse/ Reversals (%)	30.71	29.50	29.01	0.00	24.33	25.74	26.57	26.05	26.08
1 Reversal/ Reversals (%)	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
NMAs/ 1 Rev. (%)	0.00	0.38	0.46	0.00	1.79	2.34	3.14	0.66	1.98
Induced NMAs/ NMAs (%)	0.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	100.00
2 Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMAs/ 2 Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAs/ NMAs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3+ Reversals/ Reversals (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NMAs/ 3+ Rev. (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Induced NMAs/ NMAs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* NMAs and average alt. sep. at CPA are based on simulation truth

APPENDIX D. SEPARATION DIFFERENCES

SEP. DIFF. = AES (ACHIEVED SEP.) - AES (PLANNED SEP.) DATASET 1 CLASSES 010 CH7 VS CH7 ONLY

PLANNED = CROSSING 160 ENCOUNTERS PLANNED = NON-CROSSING 512 ENCOUNTERS

-----NON REVERSED RAS -- GAINS : 336 LOSSES : 0 NO CHANGE : 144

PLANNED = CROSSING RA COUNT = 144 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	58	6	0
250 FT		0	0	50	14	0	0
500 FT		8	0	6	2	0	0
750 FT		0	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		0	0	0	0	0
500 FT		0	0	0	0	0
750 FT		0	0	0	0	0
1000 FT		0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 336 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	8	20	4	0
250 FT		0	12	100	14	2	0
500 FT		136	40	0	0	0	0
750 FT		0	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		0	0	0	0	0
500 FT		0	0	0	0	0
750 FT		0	0	0	0	0
1000 FT		0	0	0	0	0

-----REVERSED RAS - GAINS : 0 LOSSES : 0 NO CHANGE : 0

PLANNED = CROSSING RA COUNT = 0 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	0	0	0	0	0
500 FT		0	0	0	0	0	0
750 FT		0	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		0	0	0	0	0
500 FT		0	0	0	0	0
750 FT		0	0	0	0	0
1000 FT		0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 0 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	0	0	0	0	0
500 FT		0	0	0	0	0	0
750 FT		0	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		0	0	0	0	0
500 FT		0	0	0	0	0
750 FT		0	0	0	0	0
1000 FT		0	0	0	0	0

SEP. DIFF. = ABS(ACHIEVED SEP.) - ABS(PLANNED SEP.) DATASET 1 CLASSES 111 CH7 VS CH7 ONLY

PLANNED = CROSSING 1568 ENCOUNTERS PLANNED = NON-CROSSING 448 ENCOUNTERS

-----NON REVERSED RAS -- GAINS : 1360 LOSSES : 0 NO CHANGE : 440

PLANNED = CROSSING RA COUNT = 1480 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	90	170	28
250 FT		0	12	198	138	132	0
500 FT		48	178	128	62	32	0
750 FT		200	20	40	4	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			0	0	0	0	0
750 FT			0	0	0	0	0
1000 FT			0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 320 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	0	88	8	0	0
500 FT		96	32	0	0	0	0
750 FT		96	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			0	0	0	0	0
750 FT			0	0	0	0	0
1000 FT			0	0	0	0	0

-----REVERSED RAS - GAINS : 0 LOSSES : 0 NO CHANGE : 0

PLANNED = CROSSING RA COUNT = 0 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	0	0	0	0	0
500 FT		0	0	0	0	0	0
750 FT		0	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			0	0	0	0	0
750 FT			0	0	0	0	0
1000 FT			0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 0 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	0	0	0	0	0
500 FT		0	0	0	0	0	0
750 FT		0	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			0	0	0	0	0
750 FT			0	0	0	0	0
1000 FT			0	0	0	0	0

SEP. DIFF. = ABS(ACHIEVED SEP.) - ABS(PLANNED SEP.) DATASET 1 CLASSES 212 CH7 VS CH7 ONLY

PLANNED = CROSSING 15872 ENCOUNTERS PLANNED = NON-CROSSING 8320 ENCOUNTERS

-----NON REVERSED RAS --- GAINS : 16853 LOSSES : 1215 NO CHANGE : 4252

PLANNED = CROSSING RA COUNT = 15667 NMAC COUNT = 62

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	58	566	1818	1000	14
250 FT		0	1296	2792	945	282	0
500 FT		204	2464	938	224	92	24
750 FT		1018	476	180	44	16	16
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			54	0	0	0	0
500 FT			116	128	0	0	0
750 FT			750	122	30	0	0
1000 FT			0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 6653 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	210	1268	20	16	14
500 FT		1452	560	520	48	92	48
750 FT		1578	466	150	104	32	60
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			0	0	0	0	0
750 FT			10	5	0	0	0
1000 FT			0	0	0	0	0

-----REVERSED RAS - GAINS : 18 LOSSES : 55 NO CHANGE : 0

PLANNED = CROSSING RA COUNT = 54 NMAC COUNT = 2

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	0	0	0	0	0
500 FT		0	2	0	0	0	0
750 FT		0	10	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			0	0	0	0	0
750 FT			19	17	6	0	0
1000 FT			0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 19 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	4	2	0	0	0
500 FT		0	0	0	0	0	0
750 FT		0	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			0	0	0	0	0
750 FT			9	3	1	0	0
1000 FT			0	0	0	0	0

SEP. DIFF. = ABS(ACHIEVED SEP.) - ABS(PLANNED SEP.) DATASET 1 CLASSES 313 CH7 VS CH7 ONLY

PLANNED = CROSSING 14784 ENCOUNTERS PLANNED = NON-CROSSING 16320 ENCOUNTERS

-----NON REVERSED RAs -- GAINS : 15169 LOSSES : 10 NO CHANGE : 3598

PLANNED = CROSSING RA COUNT = 9628 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	170	1987	401	304
250 FT		0	210	2448	372	262	196
500 FT		2306	632	48	78	24	16
750 FT		106	48	14	2	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			0	0	0	0	0
750 FT			4	0	0	0	0
1000 FT			0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 9149 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	52	428	32	0
250 FT		0	37	1585	762	308	46
500 FT		898	1055	870	490	181	54
750 FT		146	626	491	226	88	0
1000 FT		142	239	299	84	4	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			6	0	0	0	0
500 FT			0	0	0	0	0
750 FT			0	0	0	0	0
1000 FT			0	0	0	0	0

-----REVERSED RAs - GAINS : 897 LOSSES : 41 NO CHANGE : 0

PLANNED = CROSSING RA COUNT = 82 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	70	12	0
250 FT		0	0	0	0	0	0
500 FT		0	0	0	0	0	0
750 FT		0	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			0	0	0	0	0
750 FT			0	0	0	0	0
1000 FT			0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 856 NMAC COUNT = 6

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	123	458	68	0	0
500 FT		0	104	62	0	0	0
750 FT		0	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			31	0	0	0	0
500 FT			10	0	0	0	0
750 FT			0	0	0	0	0
1000 FT			0	0	0	0	0

SEP. DIFF. = ABS(ACHIEVED SEP.) - ABS(PLANNED SEP.) DATASET 1 CLASSES 414 CH7 VS CH7 ONLY

PLANNED = CROSSING 2912 ENCOUNTERS PLANNED = NON-CROSSING 1120 ENCOUNTERS

-----NON REVERSED RAs -- GAINS : 3038 LOSSES : 6 NO CHANGE : 552

PLANNED = CROSSING RA COUNT = 2828 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	76	158	246
250 FT		0	150	234	172	156	248
500 FT		32	262	166	74	132	130
750 FT		296	78	56	74	44	38
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		0	0	0	0	0
500 FT		4	0	0	0	0
750 FT		2	0	0	0	0
1000 FT		0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 768 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	32	34	30	0
250 FT		0	38	134	4	16	0
500 FT		96	162	62	10	22	0
750 FT		128	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		0	0	0	0	0
500 FT		0	0	0	0	0
750 FT		0	0	0	0	0
1000 FT		0	0	0	0	0

-----REVERSED RAs - GAINS : 0 LOSSES : 0 NO CHANGE : 0

PLANNED = CROSSING RA COUNT = 0 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	0	0	0	0	0
500 FT		0	0	0	0	0	0
750 FT		0	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		0	0	0	0	0
500 FT		0	0	0	0	0
750 FT		0	0	0	0	0
1000 FT		0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 0 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	0	0	0	0	0
500 FT		0	0	0	0	0	0
750 FT		0	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		0	0	0	0	0
500 FT		0	0	0	0	0
750 FT		0	0	0	0	0
1000 FT		0	0	0	0	0

SEP. DIFF. = ABS(ACHIEVED SEP.) - ABS(PLANNED SEP.) DATASET 1 CLASSES 515 CH7 VS CH7 ONLY

PLANNED = CROSSING 37952 ENCOUNTERS PLANNED = NON-CROSSING 10432 ENCOUNTERS

-----NON REVERSED RAs -- GAINS : 36422 LOSSES : 1329 NO CHANGE : 5486

PLANNED = CROSSING RA COUNT = 35907 NMAC COUNT = 22

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	10	736	1623	2364	1589
250 FT		0	2620	3953	2424	2283	954
500 FT		712	5328	2061	1156	822	234
750 FT		2584	1750	942	348	238	30
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			104	0	0	0	0
500 FT			228	28	0	0	0
750 FT			644	92	50	0	0
1000 FT			0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 7330 NMAC COUNT = 8

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	124	282	118	20
250 FT		0	119	378	279	128	308
500 FT		824	486	431	277	476	294
750 FT		1366	122	212	362	334	207
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			15	0	0	0	0
500 FT			21	50	0	0	0
750 FT			48	41	8	0	0
1000 FT			0	0	0	0	0

-----REVERSED RAs - GAINS : 244 LOSSES : 11 NO CHANGE : 0

PLANNED = CROSSING RA COUNT = 52 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	5	9	0	0
250 FT		0	0	0	1	0	0
500 FT		0	4	0	0	0	0
750 FT		0	19	4	4	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			0	0	0	0	0
750 FT			6	0	0	0	0
1000 FT			0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 203 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	6	21	29	26	1
500 FT		0	16	17	17	8	1
750 FT		0	14	16	20	6	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			2	0	0	0	0
500 FT			0	2	0	0	0
750 FT			0	1	0	0	0
1000 FT			0	0	0	0	0

SEP. DIFF. = ABS (ACHIEVED SEP.) - ABS (PLANNED SEP.) DATASET 1 CLASSES 616 CH7 VS CH7 ONLY

PLANNED = CROSSING 38208 ENCOUNTERS PLANNED = NON-CROSSING 10176 ENCOUNTERS

-----NON REVERSED RAs -- GAINS : 36754 LOSSES : 892 NO CHANGE : 6242

PLANNED = CROSSING RA COUNT = 35718 NMAC COUNT = 46

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		16	54	695	1933	2337	1626
250 FT		2	1076	4159	2386	2189	1934
500 FT		1406	4183	2041	921	1037	1164
750 FT		2584	1353	681	265	446	504
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		28	0	0	0	0
500 FT		28	58	0	0	0
750 FT		548	64	0	0	0
1000 FT		0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 8170 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	57	604	536	401	128
500 FT		856	557	393	331	298	122
750 FT		1378	670	401	548	394	330
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		0	0	0	0	0
500 FT		2	0	0	0	0
750 FT		161	3	0	0	0
1000 FT		0	0	0	0	0

-----REVERSED RAs - GAINS : 713 LOSSES : 24 NO CHANGE : 0

PLANNED = CROSSING RA COUNT = 275 NMAC COUNT = 8

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	16	21	97	86	3
250 FT		0	10	19	14	3	0
500 FT		0	0	3	3	0	0
750 FT		0	0	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		0	0	0	0	0
500 FT		0	0	0	0	0
750 FT		0	0	0	0	0
1000 FT		0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 462 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	4	73	95	12	0
500 FT		0	168	53	8	0	0
750 FT		0	23	2	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		0	0	0	0	0
500 FT		11	0	0	0	0
750 FT		13	0	0	0	0
1000 FT		0	0	0	0	0

SEP. DIFF. = ABS(ACHIEVED SEP.) - ABS(PLANNED SEP.) DATASET 1 CLASSES 717 CH7 VS CH7 ONLY

PLANNED = CROSSING 49880 ENCOUNTERS PLANNED = NON-CROSSING 22696 ENCOUNTERS

-----NON REVERSED RAs -- GAINS : 53255 LOSSES : 5028 NO CHANGE : 7570

PLANNED = CROSSING RA COUNT = 49339 NMAC COUNT = 194

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	66	1668	3352	3420	1157
250 FT		0	4706	6770	3415	1257	693
500 FT		294	7613	2991	654	230	124
750 FT		3350	1786	528	226	84	20
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			260	0	0	0	0
500 FT			1035	292	0	0	0
750 FT			2304	730	314	0	0
1000 FT			0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 16514 NMAC COUNT = 26

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	86	270	126	190
250 FT		0	85	832	955	655	914
500 FT		1588	1602	1713	632	792	582
750 FT		2338	804	977	740	266	274
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			7	0	0	0	0
500 FT			18	27	0	0	0
750 FT			28	12	1	0	0
1000 FT			0	0	0	0	0

-----REVERSED RAs - GAINS : 83 LOSSES : 44 NO CHANGE : 0

PLANNED = CROSSING RA COUNT = 89 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	0	7	0	0	6
500 FT		0	4	0	0	2	7
750 FT		0	6	4	4	4	3
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			10	0	0	0	0
750 FT			29	3	0	0	0
1000 FT			0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 38 NMAC COUNT = 2

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	0	6	14	4	0
500 FT		0	4	0	0	0	0
750 FT		0	2	6	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			0	2	0	0	0
750 FT			0	0	0	0	0
1000 FT			0	0	0	0	0

SEP. DIFF. = ABS(ACHIEVED SEP.) - ABS(PLANNED SEP.) DATASET 1 CLASSES 818 CH7 VS CH7 ONLY

PLANNED = CROSSING 55984 ENCOUNTERS PLANNED = NON-CROSSING 16592 ENCOUNTERS

-----NON REVERSED RAs -- GAINS : 52518 LOSSES : 2957 NO CHANGE : 9197

PLANNED = CROSSING RA COUNT = 51883 NMAC COUNT = 333

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	222	1590	3549	2691	1930
250 FT		4	3866	7141	2707	2091	1702
500 FT		2082	6474	2608	1340	1241	508
750 FT		3930	1635	901	528	354	64
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			207	0	0	0	0
500 FT			482	433	0	0	0
750 FT			1049	341	213	0	0
1000 FT			0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 12789 NMAC COUNT = 0

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	130	1057	680	365	494
500 FT		1540	846	907	514	472	348
750 FT		1641	1069	810	750	530	404
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			35	8	0	0	0
750 FT			143	46	0	0	0
1000 FT			0	0	0	0	0

-----REVERSED RAs - GAINS : 1518 LOSSES : 381 NO CHANGE : 0

PLANNED = CROSSING RA COUNT = 698 NMAC COUNT = 5

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	62	184	107	0
250 FT		0	24	36	10	4	0
500 FT		0	29	6	0	0	0
750 FT		0	22	0	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			7	0	0	0	0
500 FT			2	0	0	0	0
750 FT			94	100	11	0	0
1000 FT			0	0	0	0	0

PLANNED = NON-CROSSING RA COUNT = 1201 NMAC COUNT = 14

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	3	93	31	0	0
500 FT		0	437	106	19	8	0
750 FT		0	203	80	35	17	2
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP		>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT			0	0	0	0	0
250 FT			0	0	0	0	0
500 FT			60	8	0	0	0
750 FT			61	17	21	0	0
1000 FT			0	0	0	0	0

SEP. DIFF. = ABS(ACHIEVED SEP.) - ABS(PLANNED SEP.) DATASET 1 CLASSES 919 CH7 VS CH7 ONLY
 PLANNED = CROSSING 30312 ENCOUNTERS PLANNED = NON-CROSSING 31896 ENCOUNTERS
 -----NON REVERSED RAs -- GAINS : 37216 LOSSES : 687 NO CHANGE : 4447

PLANNED = CROSSING RA COUNT = 20650 NMAC COUNT = 12

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	62	533	1176	1683	1167
250 FT		0	881	3601	1490	1231	691
500 FT		2958	1919	818	240	56	48
750 FT		253	722	115	26	1	16
1000 FT		198	214	15	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		14	0	0	0	0
500 FT		4	0	0	0	0
750 FT		166	0	0	0	0
1000 FT		316	36	0	0	0

PLANNED = NON-CROSSING RA COUNT = 21700 NMAC COUNT = 2

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	274	1318	614	74
250 FT		2	300	2503	1439	738	132
500 FT		560	2029	1924	954	846	524
750 FT		448	705	1488	513	437	632
1000 FT		28	694	1125	270	406	572

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		4	0	0	0	0
500 FT		25	4	0	0	0
750 FT		29	0	0	0	0
1000 FT		81	4	4	0	0

-----REVERSED RAs - GAINS : 1629 LOSSES : 214 NO CHANGE : 0

PLANNED = CROSSING RA COUNT = 117 NMAC COUNT = 1

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	2	2	4	3
250 FT		0	12	32	5	1	0
500 FT		0	7	14	7	2	0
750 FT		0	8	2	0	0	0
1000 FT		0	0	0	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		3	0	0	0	0
500 FT		0	0	0	0	0
750 FT		4	2	0	0	0
1000 FT		6	1	0	0	0

PLANNED = NON-CROSSING RA COUNT = 1726 NMAC COUNT = 33

GAINS (FT)	PLAN SEP	NO GAIN	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0	0
250 FT		0	76	521	109	5	0
500 FT		0	358	224	9	2	0
750 FT		0	89	129	0	0	0
1000 FT		0	4	2	0	0	0

LOSSES (FT)	PLAN SEP	>0..250	>250..500	>500..750	>750..1000	> 1000
0 FT		0	0	0	0	0
250 FT		25	0	0	0	0
500 FT		89	51	0	0	0
750 FT		13	7	0	0	0
1000 FT		9	0	2	2	0

APPENDIX E
NMAC TABLES

MITRE encounter class: 0 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 0.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 8
 Normalizing number for TCAS-TCAS cells: 16

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

Table 0.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 8
 Normalizing number for TCAS-TCAS cells: 16

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

MITRE encounter class: 0 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 0.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 8
 Normalizing number for TCAS-TCAS cells: 16

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
l							

Table 0.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 12
 Normalizing number for TCAS-TCAS cells: 24

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
l							

MITRE encounter class: 0 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 0.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 12
 Normalizing number for TCAS-TCAS cells: 24

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 0.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 12
 Normalizing number for TCAS-TCAS cells: 24

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	10	10	10	--
i	V6.04a	10	20	20	20	--
r	Ch7/100	10	20	20	20	--
c	Ch7/25	10	20	20	20	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 0 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 0.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 12
 Normalizing number for TCAS-TCAS cells: 24

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	2	2	2	--
i	V6.04a	2	4	4	4	--
r	Ch7/100	2	4	4	4	--
c	Ch7/25	2	4	4	4	--
a	-	--	--	--	--	--
f						
t						
l						

Table 0.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 12
 Normalizing number for TCAS-TCAS cells: 24

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	8	8	8	--
i	V6.04a	8	16	16	16	--
r	Ch7/100	8	16	16	16	--
c	Ch7/25	8	16	16	16	--
a	-	--	--	--	--	--
f						
t						
l						

MITRE encounter class: 10 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Modi; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 10.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 4
 Normalizing number for TCAS-TCAS cells: 8

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
a	-	--	--	--	--	--
f						
t						
l						

Table 10.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 4
 Normalizing number for TCAS-TCAS cells: 8

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
a	-	--	--	--	--	--
f						
t						
l						

MITRE encounter class: 10 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 10.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 4
 Normalizing number for TCAS-TCAS cells: 8

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
l							

Table 10.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 60
 Normalizing number for TCAS-TCAS cells: 120

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
l							

MITRE encounter class: 10 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 10.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 60
 Normalizing number for TCAS-TCAS cells: 120

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	0	0	0	--
r						
c	V6.04a	0	0	0	0	--
r						
a	Ch7/100	0	0	0	0	--
f						
t	Ch7/25	0	0	0	0	--
1	-	--	--	--	--	--

Table 10.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 60
 Normalizing number for TCAS-TCAS cells: 120

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	38	38	38	--
r						
c	V6.04a	38	76	76	76	--
r						
a	Ch7/100	38	76	76	76	--
f						
t	Ch7/25	38	76	76	76	--
1	-	--	--	--	--	--

MITRE encounter class: 10 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 10.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 60
 Normalizing number for TCAS-TCAS cells: 120

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	22	22	22	--
i	V6.04a	22	44	44	44	--
r	Ch7/100	22	44	44	44	--
c	Ch7/25	22	44	44	44	--
r	-	--	--	--	--	--
a						
f						
t						
1						

Table 10.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 60
 Normalizing number for TCAS-TCAS cells: 120

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	4	4	4	--
i	V6.04a	4	8	8	8	--
r	Ch7/100	4	8	8	8	--
c	Ch7/25	4	8	8	8	--
r	-	--	--	--	--	--
a						
f						
t						
1						

MITRE encounter class: 1 "planned = CROSSING" Date processed: 8/27/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 1.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 36
 Normalizing number for TCAS-TCAS cells: 72

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 1.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 36
 Normalizing number for TCAS-TCAS cells: 72

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 1 "planned = CROSSING" Date processed: 8/27/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 1.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 36
 Normalizing number for TCAS-TCAS cells: 72

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
1						

Table 1.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 160
 Normalizing number for TCAS-TCAS cells: 320

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
1						

MITRE encounter class: 1 "planned = CROSSING" Date processed: 8/27/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 1.5

Number of nonNMAC RAS with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 160
 Normalizing number for TCAS-TCAS cells: 320

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	22	15	15	--
i	V6.04a	0	8	0	0	--
r	Ch7/100	0	2	0	0	--
c	Ch7/25	0	5	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 1.6

Number of nonNMAC RAS with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 160
 Normalizing number for TCAS-TCAS cells: 320

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	127	134	134	--
i	V6.04a	149	290	298	300	--
r	Ch7/100	149	296	298	300	--
c	Ch7/25	149	293	298	300	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 1 "planned = CROSSING" Date processed: 8/27/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 1.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 160
 Normalizing number for TCAS-TCAS cells: 320

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	11	11	11	--
i	V6.04a	11	22	22	20	--
r	Ch7/100	11	22	22	20	--
c	Ch7/25	11	22	22	20	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 1.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 160
 Normalizing number for TCAS-TCAS cells: 320

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	36	36	36	--
i	V6.04a	36	72	72	72	--
r	Ch7/100	36	72	72	72	--
c	Ch7/25	36	72	72	72	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 11 "planned = NON CROSSING" Date processed: 8/27/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 11.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 0
 Normalizing number for TCAS-TCAS cells: 0

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 11.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 0
 Normalizing number for TCAS-TCAS cells: 0

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 11 "planned = NON CROSSING" Date processed: 8/27/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 11.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 0
 Normalizing number for TCAS-TCAS cells: 0

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

Table 11.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 56
 Normalizing number for TCAS-TCAS cells: 112

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

MITRE encounter class: 11 "planned = NON CROSSING" Date processed: 8/27/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 11.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 56
 Normalizing number for TCAS-TCAS cells: 112

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
1						

Table 11.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 56
 Normalizing number for TCAS-TCAS cells: 112

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	34	40	40	--
i	V6.04a	34	68	80	80	--
r	Ch7/100	40	80	80	80	--
c	Ch7/25	40	80	80	80	--
r	-	--	--	--	--	--
a						
f						
t						
1						

MITRE encounter class: 11 "planned = NON CROSSING" Date processed: 8/27/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 11.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 56
 Normalizing number for TCAS-TCAS cells: 112

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	22	16	16	--
i	V6.04a	22	44	32	32	--
r	Ch7/100	16	32	32	32	--
c	Ch7/25	16	32	32	32	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 11.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 56
 Normalizing number for TCAS-TCAS cells: 112

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 2 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 2.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 432
 Normalizing number for TCAS-TCAS cells: 864

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t 1	Non-TCAS	--	0	0	0	--
	V6.04a	0	0	0	0	--
	Ch7/100	0	0	0	0	--
	Ch7/25	0	0	0	0	--
	-	--	--	--	--	--

Table 2.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 432
 Normalizing number for TCAS-TCAS cells: 864

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t 1	Non-TCAS	--	0	0	1	--
	V6.04a	14	5	0	0	--
	Ch7/100	27	6	0	0	--
	Ch7/25	15	0	0	0	--
	-	--	--	--	--	--

MITRE encounter class: 2 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 2.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 432
 Normalizing number for TCAS-TCAS cells: 864

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	1	--
i	V6.04a	14	5	0	0	--
r	Ch7/100	27	6	0	0	--
c	Ch7/25	15	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 2.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1552
 Normalizing number for TCAS-TCAS cells: 3104

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	63	18	22	--
i	V6.04a	179	53	18	18	--
r	Ch7/100	144	34	14	16	--
c	Ch7/25	76	29	16	18	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 2 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 2.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1552
 Normalizing number for TCAS-TCAS cells: 3104

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t 1	Non-TCAS	--	360	373	363	--
	V6.04a	254	450	303	313	--
	Ch7/100	301	453	309	301	--
	Ch7/25	259	423	286	284	--
	-	--	--	--	--	--

Table 2.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1552
 Normalizing number for TCAS-TCAS cells: 3104

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t 1	Non-TCAS	--	1105	1137	1144	--
	V6.04a	1109	2591	2773	2765	--
	Ch7/100	1099	2607	2771	2779	--
	Ch7/25	1199	2622	2772	2776	--
	-	--	--	--	--	--

MITRE encounter class: 2 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 2.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1552
 Normalizing number for TCAS-TCAS cells: 3104

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	24	24	23	--
i	V6.04a	10	10	10	8	--
r	Ch7/100	8	10	10	8	--
c	Ch7/25	18	30	30	26	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 2.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 1552
 Normalizing number for TCAS-TCAS cells: 3104

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	432	432	431	--
i	V6.04a	418	859	864	864	--
r	Ch7/100	405	858	864	864	--
c	Ch7/25	417	864	864	864	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 12 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 12.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 0
 Normalizing number for TCAS-TCAS cells: 0

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 12.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 0
 Normalizing number for TCAS-TCAS cells: 0

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 12 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 12.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 0
 Normalizing number for TCAS-TCAS cells: 0

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
1						

Table 12.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1040
 Normalizing number for TCAS-TCAS cells: 2080

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	4	0	0	0	--
r	Ch7/100	4	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
1						

MITRE encounter class: 12 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 12.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1040
 Normalizing number for TCAS-TCAS cells: 2080

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	6	6	4	--
i	V6.04a	10	10	10	10	--
r	Ch7/100	10	10	10	10	--
c	Ch7/25	3	4	4	4	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 12.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1040
 Normalizing number for TCAS-TCAS cells: 2080

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	736	826	828	--
i	V6.04a	768	1562	1726	1726	--
r	Ch7/100	810	1638	1734	1726	--
c	Ch7/25	847	1696	1704	1696	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 12 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 12.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1040
 Normalizing number for TCAS-TCAS cells: 2080

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	298	208	208	--	
i	V6.04a	258	508	344	344	--	
r	Ch7/100	216	432	336	344	--	
c	Ch7/25	190	380	372	380	--	
a	-	--	--	--	--	--	
f							
t							
l							

Table 12.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 1040
 Normalizing number for TCAS-TCAS cells: 2080

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
a	-	--	--	--	--	--	
f							
t							
l							

MITRE encounter class: 3 "planned = CROSSING" Date processed: 8/21/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 3.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 368
 Normalizing number for TCAS-TCAS cells: 736

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 3.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 368
 Normalizing number for TCAS-TCAS cells: 736

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	33	0	0	0	--
r	Ch7/100	28	0	0	0	--
c	Ch7/25	7	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 3 "planned = CROSSING" Date processed: 8/21/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 3.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 368
 Normalizing number for TCAS-TCAS cells: 736

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	0	0	0	--
r						
c	V6.04a	33	0	0	0	--
r						
a	Ch7/100	28	0	0	0	--
f						
t	Ch7/25	7	0	0	0	--
l	-	--	--	--	--	--

Table 3.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1480
 Normalizing number for TCAS-TCAS cells: 2960

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	0	0	0	--
r						
c	V6.04a	0	0	0	0	--
r						
a	Ch7/100	0	0	0	0	--
f						
t	Ch7/25	0	0	0	0	--
l	-	--	--	--	--	--

MITRE encounter class: 3 "planned = CROSSING" Date processed: 8/21/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 3.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1480
 Normalizing number for TCAS-TCAS cells: 2960

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	9	14	14	--
i	V6.04a	0	2	0	2	--
r	Ch7/100	0	1	0	2	--
c	Ch7/25	0	0	0	2	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 3.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1480
 Normalizing number for TCAS-TCAS cells: 2960

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	839	834	834	--
i	V6.04a	846	1694	1696	1696	--
r	Ch7/100	840	1695	1696	1694	--
c	Ch7/25	847	1698	1698	1694	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 3 "planned = CROSSING" Date processed: 8/21/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 3.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1480
 Normalizing number for TCAS-TCAS cells: 2960

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	632	632	632	--	
r	V6.04a	634	1264	1264	1262	--	
c	Ch7/100	640	1264	1264	1264	--	
a	Ch7/25	633	1262	1262	1264	--	
f							
t							
1	-	--	--	--	--	--	

Table 3.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 1480
 Normalizing number for TCAS-TCAS cells: 2960

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	368	368	368	--	
r	V6.04a	335	736	736	736	--	
c	Ch7/100	340	736	736	736	--	
a	Ch7/25	361	736	736	736	--	
f							
t							
1	-	--	--	--	--	--	

MITRE encounter class: 13 "planned = NON CROSSING" Date processed: 8/21/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 13.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 64
 Normalizing number for TCAS-TCAS cells: 128

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 13.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 64
 Normalizing number for TCAS-TCAS cells: 128

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	1	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 13 "planned = NON CROSSING" Date processed: 8/21/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 13.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 64
 Normalizing number for TCAS-TCAS cells: 128

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	1	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
a	-	--	--	--	--	--
f						
t						
l						

Table 13.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1976
 Normalizing number for TCAS-TCAS cells: 3952

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	19	2	2	--
i	V6.04a	11	4	0	0	--
r	Ch7/100	13	4	3	2	--
c	Ch7/25	7	2	1	0	--
a	-	--	--	--	--	--
f						
t						
l						

MITRE encounter class: 13 "planned = NON CROSSING" Date processed: 8/21/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 13.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1976
 Normalizing number for TCAS-TCAS cells: 3952

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	59	23	25	--
i	V6.04a	28	34	13	18	--
r	Ch7/100	28	10	14	16	--
c	Ch7/25	14	7	4	7	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 13.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1976
 Normalizing number for TCAS-TCAS cells: 3952

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	1128	1189	1190	--
i	V6.04a	1046	2474	2499	2496	--
r	Ch7/100	1031	2504	2501	2502	--
c	Ch7/25	1014	2453	2457	2455	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 13 "planned = NON CROSSING" Date processed: 8/21/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 13.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1976
 Normalizing number for TCAS-TCAS cells: 3952

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	770	762	759	--	
i	V6.04a	891	1440	1440	1438	--	
r	Ch7/100	904	1434	1434	1432	--	
c	Ch7/25	941	1490	1490	1490	--	
a	-	--	--	--	--	--	
f							
t							
l							

Table 13.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 1976
 Normalizing number for TCAS-TCAS cells: 3952

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	64	64	64	--	
i	V6.04a	63	128	128	128	--	
r	Ch7/100	64	128	128	128	--	
c	Ch7/25	64	128	128	128	--	
a	-	--	--	--	--	--	
f							
t							
l							

MITRE encounter class: 4 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 4.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 60
 Normalizing number for TCAS-TCAS cells: 120

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r		--	--	--	--	--
a						
f						
t						
l						

Table 4.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 60
 Normalizing number for TCAS-TCAS cells: 120

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	1	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	1	0	0	0	--
c	Ch7/25	0	0	0	0	--
r		--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 4 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 4.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 60
 Normalizing number for TCAS-TCAS cells: 120

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	1	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	1	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 4.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 304
 Normalizing number for TCAS-TCAS cells: 608

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 4 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 4.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 304
 Normalizing number for TCAS-TCAS cells: 608

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	25	22	25	--
i	V6.04a	28	14	4	5	--
r	Ch7/100	21	5	1	3	--
c	Ch7/25	26	5	1	1	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 4.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 304
 Normalizing number for TCAS-TCAS cells: 608

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	269	272	269	--
i	V6.04a	266	574	584	583	--
r	Ch7/100	273	583	587	585	--
c	Ch7/25	268	583	587	587	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 4 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 4.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 304
 Normalizing number for TCAS-TCAS cells: 608

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	10	10	10	--
i	V6.04a	10	20	20	20	--
r	Ch7/100	10	20	20	20	--
c	Ch7/25	10	20	20	20	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 4.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 304
 Normalizing number for TCAS-TCAS cells: 608

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	60	59	60	--
i	V6.04a	60	120	120	120	--
r	Ch7/100	59	120	120	120	--
c	Ch7/25	60	120	120	120	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 14 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 14.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 12
 Normalizing number for TCAS-TCAS cells: 24

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	0	0	0	--
r						
c	V6.04a	0	0	0	0	--
r						
a	Ch7/100	0	0	0	0	--
f						
t	Ch7/25	0	0	0	0	--
l	-	--	--	--	--	--

Table 14.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 12
 Normalizing number for TCAS-TCAS cells: 24

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	0	0	0	--
r						
c	V6.04a	0	0	0	0	--
r						
a	Ch7/100	0	0	0	0	--
f						
t	Ch7/25	0	0	0	0	--
l	-	--	--	--	--	--

MITRE encounter class: 14 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 14.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 12
 Normalizing number for TCAS-TCAS cells: 24

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
l							

Table 14.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 128
 Normalizing number for TCAS-TCAS cells: 256

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
l							

MITRE encounter class: 14 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 14.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 128
 Normalizing number for TCAS-TCAS cells: 256

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	1	2	1	--
r						
c	V6.04a	0	1	0	0	--
r						
a	Ch7/100	1	0	0	0	--
f						
t	Ch7/25	0	0	0	0	--
l	-	--	--	--	--	--

Table 14.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 128
 Normalizing number for TCAS-TCAS cells: 256

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	83	82	83	--
r						
c	V6.04a	84	167	168	168	--
r						
a	Ch7/100	83	168	168	168	--
f						
t	Ch7/25	84	168	168	168	--
l	-	--	--	--	--	--

MITRE encounter class: 14 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 14.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 128
 Normalizing number for TCAS-TCAS cells: 256

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	44	44	44	--
i	V6.04a	44	88	88	88	--
r	Ch7/100	44	88	88	88	--
c	Ch7/25	44	88	88	88	--
a	-	--	--	--	--	--
f						
t						
1						

Table 14.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 128
 Normalizing number for TCAS-TCAS cells: 256

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	12	12	12	--
i	V6.04a	12	24	24	24	--
r	Ch7/100	12	24	24	24	--
c	Ch7/25	12	24	24	24	--
a	-	--	--	--	--	--
f						
t						
1						

MITRE encounter class: 5 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 5.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 796
 Normalizing number for TCAS-TCAS cells: 1592

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
1						

Table 5.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 796
 Normalizing number for TCAS-TCAS cells: 1592

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	6	20	6	--
i	V6.04a	94	0	0	0	--
r	Ch7/100	100	2	0	0	--
c	Ch7/25	55	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
1						

MITRE encounter class: 5 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 5.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 796
 Normalizing number for TCAS-TCAS cells: 1592

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	6	20	6	--	
i	V6.04a	94	0	0	0	--	
r	Ch7/100	100	2	0	0	--	
c	Ch7/25	55	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

Table 5.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3948
 Normalizing number for TCAS-TCAS cells: 7896

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	102	46	42	--	
i	V6.04a	171	29	4	4	--	
r	Ch7/100	130	27	4	4	--	
c	Ch7/25	62	19	7	7	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

MITRE encounter class: 5 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 5.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3948
 Normalizing number for TCAS-TCAS cells: 7896

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	512	517	522	--
r						
c	V6.04a	625	502	362	412	--
r						
a	Ch7/100	622	354	269	304	--
f						
t	Ch7/25	572	331	253	304	--
l	-	--	--	--	--	--

Table 5.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3948
 Normalizing number for TCAS-TCAS cells: 7896

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	3127	3177	3178	--
r						
c	V6.04a	2957	6989	7150	7100	--
r						
a	Ch7/100	2987	7137	7243	7208	--
f						
t	Ch7/25	3112	7146	7232	7185	--
l	-	--	--	--	--	--

MITRE encounter class: 5 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 5.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3948
 Normalizing number for TCAS-TCAS cells: 7896

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t 1	Non-TCAS	--	207	208	206	--
	V6.04a	195	376	380	380	--
	Ch7/100	209	378	380	380	--
	Ch7/25	202	400	404	400	--
	-	--	--	--	--	--

Table 5.8

Number of RAS Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 3948
 Normalizing number for TCAS-TCAS cells: 7896

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t 1	Non-TCAS	--	790	776	790	--
	V6.04a	702	1592	1592	1592	--
	Ch7/100	696	1590	1592	1592	--
	Ch7/25	741	1592	1592	1592	--
	-	--	--	--	--	--

MITRE encounter class: 15 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 15.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 68
 Normalizing number for TCAS-TCAS cells: 136

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
a	-	--	--	--	--	--	
f							
t							
l							

Table 15.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 68
 Normalizing number for TCAS-TCAS cells: 136

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	22	0	0	0	--	
r	Ch7/100	24	0	0	0	--	
c	Ch7/25	20	0	0	0	--	
a	-	--	--	--	--	--	
f							
t							
l							

MITRE encounter class: 15 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 15.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 68
 Normalizing number for TCAS-TCAS cells: 136

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	22	0	0	0	--	
r	Ch7/100	24	0	0	0	--	
c	Ch7/25	20	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

Table 15.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1236
 Normalizing number for TCAS-TCAS cells: 2472

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	7	3	0	--	
i	V6.04a	2	18	4	4	--	
r	Ch7/100	2	3	2	2	--	
c	Ch7/25	4	3	2	2	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

MITRE encounter class: 15 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 15.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1236
 Normalizing number for TCAS-TCAS cells: 2472

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t 1	Non-TCAS	--	100	118	117	--
	V6.04a	6	83	82	79	--
	Ch7/100	2	45	49	44	--
	Ch7/25	0	48	46	41	--
	-	--	--	--	--	--

Table 15.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1236
 Normalizing number for TCAS-TCAS cells: 2472

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t 1	Non-TCAS	--	750	741	743	--
	V6.04a	925	1811	1834	1835	--
	Ch7/100	948	1880	1877	1880	--
	Ch7/25	911	1817	1820	1823	--
	-	--	--	--	--	--

MITRE encounter class: 15 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 15.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1236
 Normalizing number for TCAS-TCAS cells: 2472

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	379	374	376	--
i	V6.04a	303	560	552	554	--
r	Ch7/100	284	544	544	546	--
c	Ch7/25	321	604	604	606	--
a	-	--	--	--	--	--
f						
t						
l						

Table 15.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 1236
 Normalizing number for TCAS-TCAS cells: 2472

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	68	68	68	--
i	V6.04a	46	136	136	136	--
r	Ch7/100	44	136	136	136	--
c	Ch7/25	48	136	136	136	--
a	-	--	--	--	--	--
f						
t						
l						

MITRE encounter class: 6 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of ; AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 6.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 864
 Normalizing number for TCAS-TCAS cells: 1728

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	4	0	0	0	--
r	Ch7/100	2	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 6.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 864
 Normalizing number for TCAS-TCAS cells: 1728

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	5	3	5	--
i	V6.04a	86	14	3	3	--
r	Ch7/100	71	12	6	6	--
c	Ch7/25	30	3	6	6	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 6 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 6.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 864
 Normalizing number for TCAS-TCAS cells: 1728

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	5	3	5	--
i	V6.04a	90	14	3	3	--
r	Ch7/100	73	12	6	6	--
c	Ch7/25	30	3	6	6	--
r	-	--	--	--	--	--
a						
f						
t						
1						

Table 6.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3912
 Normalizing number for TCAS-TCAS cells: 7824

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	49	30	28	--
i	V6.04a	25	12	8	12	--
r	Ch7/100	12	14	12	10	--
c	Ch7/25	10	10	4	4	--
r	-	--	--	--	--	--
a						
f						
t						
1						

MITRE encounter class: 6 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 6.5

Number of nonNMAC RAS with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3912
 Normalizing number for TCAS-TCAS cells: 7824

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	125	87	83	--
r	V6.04a	389	372	326	316	--
c	Ch7/100	410	178	142	216	--
r	Ch7/25	396	140	130	208	--
a	-	--	--	--	--	--
f						
t						
1						

Table 6.6

Number of nonNMAC RAS with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3912
 Normalizing number for TCAS-TCAS cells: 7824

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	3477	3536	3542	--
r	V6.04a	3231	7004	7050	7052	--
c	Ch7/100	3231	7192	7226	7154	--
r	Ch7/25	3257	7236	7248	7172	--
a	-	--	--	--	--	--
f						
t						
1						

MITRE encounter class: 6 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 6.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3912
 Normalizing number for TCAS-TCAS cells: 7824

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	261	259	259	--
i	V6.04a	267	436	440	444	--
r	Ch7/100	259	440	444	444	--
c	Ch7/25	249	438	442	440	--
a	-	--	--	--	--	--
f						
t						
l						

Table 6.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 3912
 Normalizing number for TCAS-TCAS cells: 7824

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	859	861	859	--
i	V6.04a	774	1714	1725	1725	--
r	Ch7/100	791	1716	1722	1722	--
c	Ch7/25	834	1725	1722	1722	--
a	-	--	--	--	--	--
f						
t						
l						

MITRE encounter class: 16 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 16.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 0
 Normalizing number for TCAS-TCAS cells: 0

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 16.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 0
 Normalizing number for TCAS-TCAS cells: 0

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 16 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 16.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 0
 Normalizing number for TCAS-TCAS cells: 0

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
r							
a							
f							
t							
1	-	--	--	--	--	--	

Table 16.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1272
 Normalizing number for TCAS-TCAS cells: 2544

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	4	1	1	--	
i	V6.04a	16	1	0	0	--	
r	Ch7/100	11	0	0	0	--	
c	Ch7/25	3	0	0	0	--	
r							
a							
f							
t							
1	-	--	--	--	--	--	

MITRE encounter class: 16 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 16.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1272
 Normalizing number for TCAS-TCAS cells: 2544

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	27	16	16	--
i	V6.04a	109	63	55	56	--
r	Ch7/100	121	61	51	53	--
c	Ch7/25	92	48	41	45	--
a	-	--	--	--	--	--
f						
t						
l						

Table 16.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1272
 Normalizing number for TCAS-TCAS cells: 2544

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	977	1084	1085	--
i	V6.04a	870	2154	2179	2178	--
r	Ch7/100	951	2159	2185	2183	--
c	Ch7/25	984	2172	2179	2175	--
a	-	--	--	--	--	--
f						
t						
l						

MITRE encounter class: 16 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 16.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 1272
 Normalizing number for TCAS-TCAS cells: 2544

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	264	171	170	--	
i	V6.04a	277	326	310	310	--	
r	Ch7/100	189	324	308	308	--	
c	Ch7/25	193	324	324	324	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

Table 16.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 1272
 Normalizing number for TCAS-TCAS cells: 2544

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	0	0	0	--	
i	V6.04a	0	0	0	0	--	
r	Ch7/100	0	0	0	0	--	
c	Ch7/25	0	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

MITRE encounter class: 7 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 7.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 1212
 Normalizing number for TCAS-TCAS cells: 2424

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t	Non-TCAS	--	0	0	0	--
	V6.04a	0	0	0	0	--
	Ch7/100	0	0	0	0	--
	Ch7/25	0	0	0	0	--
	-	--	--	--	--	--

Table 7.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 1212
 Normalizing number for TCAS-TCAS cells: 2424

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t	Non-TCAS	--	125	132	49	--
	V6.04a	92	4	4	0	--
	Ch7/100	129	6	0	0	--
	Ch7/25	53	0	0	0	--
	-	--	--	--	--	--

MITRE encounter class: 7 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 7.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 1212
 Normalizing number for TCAS-TCAS cells: 2424

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	125	132	49	--	
i	V6.04a	92	4	4	0	--	
r	Ch7/100	129	6	0	0	--	
c	Ch7/25	53	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

Table 7.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 5023
 Normalizing number for TCAS-TCAS cells: 10046

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	422	324	278	--	
i	V6.04a	562	196	162	54	--	
r	Ch7/100	421	92	84	34	--	
c	Ch7/25	249	72	41	35	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

MITRE encounter class: 7 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 7.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 5023
 Normalizing number for TCAS-TCAS cells: 10046

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	1063	1036	1094	--
i	V6.04a	1002	1696	1464	1455	--
r	Ch7/100	927	1490	1275	1250	--
c	Ch7/25	1001	1356	1171	1087	--
r	-	--	--	--	--	--
a						
f						
t						
1						

Table 7.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 5023
 Normalizing number for TCAS-TCAS cells: 10046

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	3508	3636	3615	--
i	V6.04a	3439	8116	8390	8497	--
r	Ch7/100	3650	8422	8653	8716	--
c	Ch7/25	3734	8568	8790	8862	--
r	-	--	--	--	--	--
a						
f						
t						
1						

MITRE encounter class: 7 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 7.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 5023
 Normalizing number for TCAS-TCAS cells: 10046

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t	Non-TCAS	--	30	27	36	--
	V6.04a	20	38	30	40	--
	Ch7/100	25	42	34	46	--
	Ch7/25	39	50	44	62	--
	-	--	--	--	--	--

Table 7.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 5023
 Normalizing number for TCAS-TCAS cells: 10046

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t	Non-TCAS	--	1087	1080	1163	--
	V6.04a	1120	2420	2420	2424	--
	Ch7/100	1083	2418	2424	2424	--
	Ch7/25	1159	2424	2424	2424	--
	-	--	--	--	--	--

MITRE encounter class: 17 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 17.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 84
 Normalizing number for TCAS-TCAS cells: 168

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
a	-	--	--	--	--	--
f						
t						
l						

Table 17.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 84
 Normalizing number for TCAS-TCAS cells: 168

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	12	17	13	--
i	V6.04a	11	0	0	0	--
r	Ch7/100	13	0	0	0	--
c	Ch7/25	9	0	0	0	--
a	-	--	--	--	--	--
f						
t						
l						

MITRE encounter class: 17 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 17.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 84
 Normalizing number for TCAS-TCAS cells: 168

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	12	17	13	--	
i	V6.04a	11	0	0	0	--	
r	Ch7/100	13	0	0	0	--	
c	Ch7/25	9	0	0	0	--	
r	-	--	--	--	--	--	
a							
f							
t							
l							

Table 17.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 2753
 Normalizing number for TCAS-TCAS cells: 5506

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	21	16	15	--	
i	V6.04a	10	14	7	8	--	
r	Ch7/100	5	11	7	5	--	
c	Ch7/25	16	18	10	6	--	
r	-	--	--	--	--	--	
a							
f							
t							
l							

MITRE encounter class: 17 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 17.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 2753
 Normalizing number for TCAS-TCAS cells: 5506

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	40	29	37	--
i	V6.04a	44	40	16	19	--
r	Ch7/100	41	27	16	15	--
c	Ch7/25	64	33	19	17	--
a	-	--	--	--	--	--
f						
t						
l						

Table 17.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 2753
 Normalizing number for TCAS-TCAS cells: 5506

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	1951	2022	1981	--
i	V6.04a	1983	4290	4335	4239	--
r	Ch7/100	2025	4342	4371	4280	--
c	Ch7/25	1958	4183	4219	4129	--
a	-	--	--	--	--	--
f						
t						
l						

MITRE encounter class: 17 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 17.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 2753
 Normalizing number for TCAS-TCAS cells: 5506

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	741	686	720	--
i	V6.04a	716	1162	1148	1240	--
r	Ch7/100	682	1126	1112	1206	--
c	Ch7/25	715	1272	1258	1354	--
a	-	--	--	--	--	--
f						
t						
l						

Table 17.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 2753
 Normalizing number for TCAS-TCAS cells: 5506

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	72	67	71	--
i	V6.04a	73	168	168	168	--
r	Ch7/100	71	168	168	168	--
c	Ch7/25	75	168	168	168	--
a	-	--	--	--	--	--
f						
t						
l						

MITRE encounter class: 8 "planned = CROSSING" Date processed: 8/22/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 8.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 1296
 Normalizing number for TCAS-TCAS cells: 2592

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	4	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 8.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 1296
 Normalizing number for TCAS-TCAS cells: 2592

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	89	72	27	--
i	V6.04a	69	30	5	5	--
r	Ch7/100	113	33	6	4	--
c	Ch7/25	58	6	6	4	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 8 "planned = CROSSING" Date processed: 8/22/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 8.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 1296
 Normalizing number for TCAS-TCAS cells: 2592

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A i r c r a f t 1	Non-TCAS	--	93	72	27	--	
	V6.04a	69	30	5	5	--	
	Ch7/100	113	33	6	4	--	
	Ch7/25	58	6	6	4	--	
	-	--	--	--	--	--	

Table 8.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 5702
 Normalizing number for TCAS-TCAS cells: 11404

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A i r c r a f t 1	Non-TCAS	--	186	97	59	--	
	V6.04a	485	188	99	66	--	
	Ch7/100	394	138	89	67	--	
	Ch7/25	254	129	97	65	--	
	-	--	--	--	--	--	

MITRE encounter class: 8 "planned = CROSSING" Date processed: 8/22/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 8.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 5702
 Normalizing number for TCAS-TCAS cells: 11404

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	734	741	780	--
i	V6.04a	817	857	670	656	--
r	Ch7/100	804	915	682	691	--
c	Ch7/25	703	784	614	634	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 8.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 5702
 Normalizing number for TCAS-TCAS cells: 11404

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	4262	4418	4464	--
i	V6.04a	3999	9667	10043	10134	--
r	Ch7/100	4118	9683	10045	10102	--
c	Ch7/25	4394	9793	9995	10031	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 8 "planned = CROSSING" Date processed: 8/22/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 8.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 5702
 Normalizing number for TCAS-TCAS cells: 11404

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t	Non-TCAS	--	520	446	399	--
	V6.04a	401	692	592	548	--
	Ch7/100	386	668	588	544	--
	Ch7/25	351	698	698	674	--
	1 -	--	--	--	--	--

Table 8.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 5702
 Normalizing number for TCAS-TCAS cells: 11404

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t	Non-TCAS	--	1203	1224	1269	--
	V6.04a	1227	2562	2587	2587	--
	Ch7/100	1183	2559	2586	2588	--
	Ch7/25	1238	2586	2586	2588	--
	1 -	--	--	--	--	--

MITRE encounter class: 18 "planned = NON CROSSING" Date processed: 8/22/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 18.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure

Normalizing number for Mode C cells: 0

Normalizing number for TCAS-TCAS cells: 0

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	0	0	0	--
r						
c	V6.04a	0	0	0	0	--
r						
a	Ch7/100	0	0	0	0	--
f						
t	Ch7/25	0	0	0	0	--
l	-	--	--	--	--	--

Table 18.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure

Normalizing number for Mode C cells: 0

Normalizing number for TCAS-TCAS cells: 0

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	0	0	0	--
r						
c	V6.04a	0	0	0	0	--
r						
a	Ch7/100	0	0	0	0	--
f						
t	Ch7/25	0	0	0	0	--
l	-	--	--	--	--	--

MITRE encounter class: 18 "planned = NON CROSSING" Date processed: 8/22/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 18.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 0
 Normalizing number for TCAS-TCAS cells: 0

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 18.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 2074
 Normalizing number for TCAS-TCAS cells: 4148

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	16	32	12	--
i	V6.04a	66	17	17	6	--
r	Ch7/100	22	8	9	4	--
c	Ch7/25	14	5	0	1	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 18 "planned = NON CROSSING" Date processed: 8/22/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 18.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 2074
 Normalizing number for TCAS-TCAS cells: 4148

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t 1	Non-TCAS	--	252	253	232	--
	V6.04a	101	325	190	164	--
	Ch7/100	39	196	126	93	--
	Ch7/25	40	120	99	67	--
	-	--	--	--	--	--

Table 18.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 2074
 Normalizing number for TCAS-TCAS cells: 4148

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t 1	Non-TCAS	--	1468	1522	1513	--
	V6.04a	1493	3264	3505	3516	--
	Ch7/100	1614	3430	3577	3587	--
	Ch7/25	1775	3609	3605	3600	--
	-	--	--	--	--	--

MITRE encounter class: 18 "planned = NON CROSSING" Date processed: 8/22/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 18.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 2074
 Normalizing number for TCAS-TCAS cells: 4148

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	338	267	317	--
i	V6.04a	414	542	436	462	--
r	Ch7/100	399	514	436	464	--
c	Ch7/25	245	414	444	480	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 18.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 2074
 Normalizing number for TCAS-TCAS cells: 4148

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	0	0	0	--
i	V6.04a	0	0	0	0	--
r	Ch7/100	0	0	0	0	--
c	Ch7/25	0	0	0	0	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 9 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 9.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 579
 Normalizing number for TCAS-TCAS cells: 1158

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	0	0	0	--
r						
c	V6.04a	0	0	0	0	--
r						
a	Ch7/100	0	0	0	0	--
f						
t	Ch7/25	0	0	0	0	--
l	-	--	--	--	--	--

Table 9.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 579
 Normalizing number for TCAS-TCAS cells: 1158

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A						
i	Non-TCAS	--	18	8	4	--
r						
c	V6.04a	61	0	0	0	--
r						
a	Ch7/100	22	0	0	0	--
f						
t	Ch7/25	32	0	0	0	--
l	-	--	--	--	--	--

MITRE encounter class: 9 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 9.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 579
 Normalizing number for TCAS-TCAS cells: 1158

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	18	8	4	--
i	V6.04a	61	0	0	0	--
r	Ch7/100	22	0	0	0	--
c	Ch7/25	32	0	0	0	--
a	-	--	--	--	--	--
f						
t						
1						

Table 9.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3210
 Normalizing number for TCAS-TCAS cells: 6420

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	5	2	1	--
i	V6.04a	2	18	10	7	--
r	Ch7/100	4	11	5	3	--
c	Ch7/25	3	8	3	2	--
a	-	--	--	--	--	--
f						
t						
1						

MITRE encounter class: 9 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 9.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3210
 Normalizing number for TCAS-TCAS cells: 6420

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	53	58	42	--
i	V6.04a	118	126	108	103	--
r	Ch7/100	97	123	132	140	--
c	Ch7/25	77	112	144	123	--
r	-	--	--	--	--	--
a						
f						
t						
l						

Table 9.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3210
 Normalizing number for TCAS-TCAS cells: 6420

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A	Non-TCAS	--	1955	1945	1961	--
i	V6.04a	1930	4000	4020	4012	--
r	Ch7/100	1928	3986	3977	3955	--
c	Ch7/25	1915	3926	3889	3901	--
r	-	--	--	--	--	--
a						
f						
t						
l						

MITRE encounter class: 9 "planned = CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 9.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3210
 Normalizing number for TCAS-TCAS cells: 6420

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t	Non-TCAS	--	1197	1205	1206	--
	V6.04a	1160	2276	2282	2298	--
	Ch7/100	1181	2300	2306	2322	--
	Ch7/25	1215	2374	2384	2394	--
	1 -	--	--	--	--	--

Table 9.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 3210
 Normalizing number for TCAS-TCAS cells: 6420

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t	Non-TCAS	--	561	571	575	--
	V6.04a	518	1158	1158	1158	--
	Ch7/100	557	1158	1158	1158	--
	Ch7/25	547	1158	1158	1158	--
	1 -	--	--	--	--	--

MITRE encounter class: 19 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 19.1

Number of unresolved Failures with neither aircraft having an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 285
 Normalizing number for TCAS-TCAS cells: 570

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t	Non-TCAS	--	0	0	0	--
	V6.04a	0	0	0	0	--
	Ch7/100	0	0	0	0	--
	Ch7/25	0	0	0	0	--
	-	--	--	--	--	--

Table 19.2

Number of unresolved Failures with at least one aircraft having an RA
 (based on simulation truth).

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 285
 Normalizing number for TCAS-TCAS cells: 570

		A i r c r a f t 2				
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-
A i r c r a f t	Non-TCAS	--	32	0	0	--
	V6.04a	5	0	0	0	--
	Ch7/100	0	0	0	0	--
	Ch7/25	0	0	0	0	--
	-	--	--	--	--	--

MITRE encounter class: 19 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 19.3

Total number of unresolved Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 285
 Normalizing number for TCAS-TCAS cells: 570

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	32	0	0	--	
r	V6.04a	5	0	0	0	--	
c	Ch7/100	0	0	0	0	--	
r	Ch7/25	0	0	0	0	--	
a	-	--	--	--	--	--	
f							
t							
1							

Table 19.4

Number of induced Failures
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3702
 Normalizing number for TCAS-TCAS cells: 7404

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	115	48	30	--	
r	V6.04a	35	36	18	21	--	
c	Ch7/100	22	24	13	10	--	
r	Ch7/25	8	5	9	3	--	
a	-	--	--	--	--	--	
f							
t							
1							

MITRE encounter class: 19 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 19.5

Number of nonNMAC RAs with Reduced Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3702
 Normalizing number for TCAS-TCAS cells: 7404

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	142	272	135	--	
i	V6.04a	105	289	169	115	--	
r	Ch7/100	132	161	93	80	--	
c	Ch7/25	99	98	75	66	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

Table 19.6

Number of nonNMAC RAs with Increased Separation
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3702
 Normalizing number for TCAS-TCAS cells: 7404

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	2423	2317	2429	--	
i	V6.04a	2412	5305	5389	5388	--	
r	Ch7/100	2362	5405	5428	5394	--	
c	Ch7/25	2408	5375	5334	5311	--	
r	-	--	--	--	--	--	
a							
f							
t							
1							

MITRE encounter class: 19 "planned = NON CROSSING" Date processed: 8/25/97
 Based on FAA Technical Center data of : AUG 1997
 All Responding V6.04A vs V7 V&V Baseline Mod1; 100 & 25 foot trackers
 Failure : CPA <= 100.0 ft based on simulation truth

Table 19.7

Number of encounters without an RA
 (based on simulation truth)

Normalizing Number = number of planned encounters not resulting in failure
 Normalizing number for Mode C cells: 3702
 Normalizing number for TCAS-TCAS cells: 7404

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	1022	1065	1108	--	
i	V6.04a	1150	1774	1828	1880	--	
r	Ch7/100	1186	1814	1870	1920	--	
c	Ch7/25	1187	1926	1986	2024	--	
r	-	--	--	--	--	--	
a							
f							
t							
l							

Table 19.8

Number of RAs Resolving NMACs
 (based on simulation truth)

Normalizing Number = number of planned encounters resulting in failure
 Normalizing number for Mode C cells: 3702
 Normalizing number for TCAS-TCAS cells: 7404

		A i r c r a f t 2					
		Non-TCAS	V6.04a	Ch7/100	Ch7/25	-	
A	Non-TCAS	--	253	285	285	--	
i	V6.04a	280	570	570	570	--	
r	Ch7/100	285	570	570	570	--	
c	Ch7/25	285	570	570	570	--	
r	-	--	--	--	--	--	
a							
f							
t							
l							

APPENDIX F
PARAMETER FILE DESCRIPTION
AND
PARAMETER FILE PRINTOUT FOR CLASS 7/17

Provided by Kathryn M. Ciaramella, WJHTC.
 Revised by Barbara J. Chludzinski, Lincoln Laboratory

The following is the intended format of the parameter file. The data will not include any header labels. The data will be printed in the following order.

Data_File	alpha-numeric (8 chars.),	
Category	integer (0..19),	
Table number	integer (1..5),	
Row number	integer(1..5),	
Column number	integer(1..5),	
Reiteration number	integer(1..999999)	(* simulation #*)
Simulation mode number	integer(7 digits)	(* simulation id, see below *)
Geometry_Index	integer (1..9999)	(* geometry id *)
AC #1 equipage	integer(0, 65,71,75)	(* 0 --> mode C *)
AC #2 equipage	integer(0, 65,71,75)	(* 0 --> mode C *)
AC #1 responding	integer(0..1)	(* 0 - false, 1 - true *)
AC #2 responding	integer(0..1)	(* 0 - false, 1 - true *)
Achieved separation	real(0.0..+/-9999.9)	(* feet *)
Converging RA	integer (0..1)	(* 0 - false, 1 - true *)
Crossing encounter	integer (0..1)	(* 0 - false, 1 - true *)
AC #1 TA Sensitivity level	integer(0..7)	
AC #2 TA Sensitivity level	integer(0..7)	
AC #1 RA Sensitivity level	integer(0..7)	
AC #2 RA Sensitivity level	integer(0..7),	
AC #1 Mode S ID	integer(0..999)	
AC #2 Mode S ID	integer(0..999)	
CPA altitude separation	real(0.0..+/-9999.9)	(* FT *)
AC #1 vertical rate	real(0.0..+/-9999.9)	(* FPM *)
AC #2 vertical rate	real(0.0..+/-9999.9)	(* FPM *)
AC #1 acceleration	real(0.0..+/-0.35)	(* G's *)
AC #2 acceleration	real(0.0..+/-0.35)	(* G's *)
AC #1 acceleration time	real(0.0..99.9) (* sec. - CPA relative *)	
AC #2 acceleration time	real(0.0..99.9) (* sec. - CPA relative *)	
Own Alt CPA Achieved	real(0.0..+/-9999.9)	(* FT *)
AC #1 CPA altitude	real(0.0..+/-9999.9)	(* FT *)
RA displayed	integer(0..2)	(* 0 - none, 1 - AC #1, 2 - AC #2, 3 - both *)
RA selection	integer(0..3)	(* 0 - no selection, 1 - AC #1, 2 - AC #2, 3 - unknown *)
Inhibit indication	integer(0..3)	(* 0 - none, 1 - AC #1, 2 - AC #2, 3 - both *)
VT Issued RA	integer (0..1)	(* 0 - false, 1 - true *)
RA 600 FT Rule	integer (0..1)	(* 0 - false, 1 - true *)
Level Wait	integer (0..1)	(* 0 - false, 1 - true *)
Defer Display	integer (0..1)	(* 0 - false, 1 - true *)
Firmness Delay	integer (0..1)	(* 0 - false, 1 - true *)
Logic Crossing	integer (0..1)	(* 0 - false, 1 - true *)

RA Enable Time	integer (0.. +/-90)	(* time RAs were enabled + after CPA, - before CPA *)
RA Disabled Time	integer (0.. +/-90)	(* time RAs were disabled + after CPA, - before CPA *)
RA Start Time	integer (0.. +/-90)	(* time RAs were issued + after CPA, - before CPA *)
RA Ending Time	integer (0.. +/-90)	(* time RAs were ended + after CPA, - before CPA *)
AC #1 RA Tracked Alt Rate	real (0.. +/-9999)	
AC #2 RA Tracked Alt Rate	real (0.. +/-9999)	
Initially Crossing RA	integer (0..1)	(* 0 -> false, 1 -> true *)
AC #1 worst RA	integer(-19..19)	(* Most severe RA *)
AC #2 worst RA	integer(-19..19)	(* Same as above *)
AC #1 initial RA	integer(-19..19)	(* First RA displayed *)
AC #2 initial RA	integer(-19..19)	(* Same as above *)
RA sequence time #1	real(0.0..99.9)	(* 1st RA displayed *)
RA sequence severity #1	integer(+/-9.. +/-21)	(* see below *)
RA sequence time #2	real(0.0..99.9)	(* 2nd RA displayed *)
RA sequence severity #2	integer(+/-9.. +/-21)	(* see below *)
RA sequence time #3	real(0.0..99.9)	(* 3rd RA displayed *)
RA sequence severity #3	integer(+/-9.. +/-21)	(* see below *)
RA sequence time #4	real(0.0..99.9)	(* 4th RA displayed *)
RA sequence severity #4	integer(+/-9.. +/-21)	(* see below *)
RA sequence time #5	real(0.0..99.9)	(* 5th RA displayed *)
RA sequence severity #5	integer(+/-9.. +/-21)	(* see below *)
RA sequence time #6	real(0.0..99.9)	(* 6th RA displayed *)
RA sequence severity #6	integer(+/-9.. +/-21)	(* see below *)
RA sequence time #7	real(0.0..99.9)	(* 7th RA displayed *)
RA sequence severity #7	integer(+/-9.. +/-21)	(* see below *)
RA sequence time #8	real(0.0..99.9)	(* 8th RA displayed *)
RA sequence severity #8	integer(+/-9.. +/-21)	(* see below *)
RA sequence time #9	real(0.0..99.9)	(* 9th RA displayed *)
RA sequence severity #9	integer(+/-9.. +/-21)	(* see below *)
RA sequence time #10	real(0.0..99.9)	(*10th RA displayed *)
RA sequence severity #10	integer(+/-9.. +/-21)	(* see below *)
Climb Determination	real(0..99999.99)	
Descend Determination	real(0..99999.99)	
POT_AC1_ZD	real(0..99999.99)	
POT_AC2_ZD	real(0..99999.99)	
Intruder_receipt_time	real(0..99999.99)	
PVMD on cycle prior to POTRA	real(0..99999.99)	
PVMD on POTRA cycle	real(0..99999.99)	
PVMD on INITIAL RA cycle	real(0..99999.99)	

To aid in the proper use of these parameters, the following paragraphs will explain exactly what the parameters are.

DATA FILE - This is the name of the scenario definition file which was used to generate the encounter for this data.

CATEGORY - This is the number which corresponds to the MITRE encounter classes (0 - 19).

TABLE, ROW, & COLUMN NUMBERS - These numbers are indicators to the matrix and cell entry which corresponds to the parameter values.

REITERATION NUMBER - This number is an indication of the reiteration in the simulation process. The number can be used, in conjunction with the next number, by the simulation process when it is desired to re-run the simulation and select a particular encounter for more detailed review.

SIMULATION MODE NUMBER - This number is an indication of the equipage pairing of the simulation run. This number is used in conjunction with the previous number to select a particular encounter to be re-run. The number is a seven digit value of the form, DXYYIRC. D is the data group number, X is the aircraft point of view indication (1 or 2), YY is the logic version of own aircraft (65 = V6.04a, 71 = V7 100 ft, 75 = V7 25 ft), I is the Mode S ID (1 = high id, 0 = low id), R is the ROW index for the MATRIX (ac1 equipage), C is the COLUMN index for MATRIX (ac2 equipage).

GEOMETRY INDEX - This field is an indication of which geometry the simulation was running.

AC #1 EQUIPAGE - This is the logic version of the AC #1 aircraft (0, 65, 71, or 75). A value of 0 is entered if the intruder is a Mode C aircraft.

AC #2 EQUIPAGE - This is the logic version of the AC #2 aircraft (0, 65, 71, or 75). A value of 0 is entered if the intruder is a Mode C aircraft.

AC #1 RESPONDING - This is an indication of whether AC #1 is responding to its RAs.

AC #2 RESPONDING - This is an indication of whether AC #2 is responding to its RAs.

ACHIEVED SEPARATION - This is the altitude separation at CPA of the "equipped" encounter. The number is computed, using true FTEG position, by subtracting the intruder's altitude from own's altitude.

CONVERGING RA - This is an indication of an RA which was issued and resulted in the two aircraft converging at CPA.

CROSSING ENCOUNTER - This is an indication that this encounter was a crossing encounter. This parameter is determined by comparing the true FTEG position data of the two aircraft. If a crossing is indicated then a time check is performed to see if the crossing occurred within -40 and +10 seconds relative to CPA.

AC #1 TA SENSITIVITY LEVEL - This is the sensitivity level of AC #1 at TA time.

AC #2 TA SENSITIVITY LEVEL - This is the sensitivity level of AC #2 at TA time.

AC #1 RA SENSITIVITY LEVEL - This is the sensitivity level of AC #1 at POTRA/RA time.

AC #2 RA SENSITIVITY LEVEL - This is the sensitivity level of AC #2 at POTRA/RA time.

AC #1 MODE S ID - This is AC #1's Mode S identifier.

AC #2 MODE S ID - This is AC #2's Mode S identifier.

CPA ALTITUDE SEPARATION - This is the designed vertical separation at CPA. This value is calculated from the scenario definition file information and the current reiteration number. The number is calculated by the following formula: $AC_1_altitude - AC_2_altitude$. With the values for the altitudes of AC 1 and AC 2 being calculated from the reiteration numbers.

AC #1 VERTICAL RATE - This is the designed vertical rate of aircraft #1. This value is calculated from the scenario definition file information and the current reiteration number.

AC #2 VERTICAL RATE - This is the designed vertical rate of aircraft #2. This value is calculated from the scenario definition file information and the current reiteration number.

AC #1 ACCELERATION - This is the designed vertical acceleration of aircraft #1. This value is calculated from the scenario definition file information and the current reiteration number. A value of 0 indicates that there was no acceleration applied.

AC #2 ACCELERATION - This is the designed vertical acceleration of aircraft #2. This value is calculated from the scenario definition file information and the current reiteration number. A value of 0 indicates that there was no acceleration applied.

AC #1 ACCELERATION TIME - This is the designed vertical acceleration time of aircraft #1. This value is calculated from the scenario definition file information and the current reiteration number. A value of 0 in this field can have 2 possible meanings.

- 1). If there is no acceleration applied as indicated by the previous parameter, then this field will also be 0.
- 2). If an acceleration is applied then a 0 value indicated that the acceleration occurred at CPA.

AC #2 ACCELERATION TIME - This is the designed vertical acceleration time of aircraft #2. This value is calculated from the scenario definition file information and the current reiteration number. A value of 0 in this field can have 2 possible meanings.

- 1). If there is no acceleration applied as indicated by the previous parameter, then this field will also be 0.
- 2). If an acceleration is applied then a 0 value indicated that the acceleration occurred at CPA.

OWN ALT CPA ACHIEVED - This is the achieved altitude of Own aircraft at CPA. This value is from the recorded simulation true position data.

AC #1 CPA ALTITUDE - This is the designed altitude of aircraft #1 at CPA. This value is calculated from the scenario definition file information and the current reiteration number.

RA DISPLAYED - This is an indication of which aircraft displayed an RA. The possible indications are NONE, AC #1, AC #2, or BOTH.

RA SELECTION - This field is an indication of which aircraft selected the RA sense. The possible indications are NO SELECTION, AC #1, AC #2, or UNKNOWN.

INHIBIT INDICATION - Currently, this field is not used. A default value of zero is used. The field is retained for possible future use. The intended function of this field is to indicate if any aircraft was inhibited at any point during the encounter. The possible indications are NONE, AC #1, AC #2, or BOTH. This parameter is determined by reviewing the climb inhibit and descend inhibit flags at start time, TA time, RA time, CPA time, minimum altitude time, TA end time, and end time.

VT ISSUED RA - This field is an indication that the logic associated with the reduced vertical tau led to OWN's RA selection. This field is a 6.04 logic specific flag. For the parameter file, this flag is set to true if it was true at any time during the encounter.

RA 600 FT RULE - This field is an indication that the "600 FT RULE" led to OWN's RA selection. This flag is set to true if it was true at any time during the encounter.

LEVEL WAIT - This field indicates that OWN aircraft was in a "level wait" state before issuing an RA. For the parameter file, this flag is set to true if it was true at any time during the encounter.

DEFER DISPLAY - This field indicated that OWN aircraft was in a "defer display" state before issuing an RA. For the parameter file, this flag is set to true if it was true at any time during the encounter.

FIRMNESS DELAY - This field indicates that OWN aircraft was in a "firmness delay" state before issuing an RA. For the parameter file, this flag is set to true if it was true at any time during the encounter.

LOGIC CROSSING - This field is set if either of the CAS logic flags OCROSS or ICROSS was set.

NOTE: THE FOLLOWING 4 FIELDS ARE TIMES RELATIVE TO CPA. CONSIDERING THE FORMAT OF THE SCENARIO DEFINITIONS, THESE FIELDS MAY CONTAIN THE FOLLOWING "SPECIAL NUMBERS". A TIME OF -60 s INDICATES THE EVENT OCCURRED AT THE START OF THE ENCOUNTER RUN. A TIME OF +30 s INDICATES THAT THE EVENT OCCURRED AT THE END OF THE ENCOUNTER RUN.

RA ENABLE TIME - This field is an indication of the time, relative to CPA, that OWN's RAs were enabled. (- -> before CPA, + -> after CPA)

RA DISABLE TIME - This field is an indication of the time, relative to CPA, that OWN's RAs were disabled. (- -> before CPA, + -> after CPA)

RA START TIME - This field is an indication of the time, relative to CPA, that the first RA of OWN was issued. (- -> before CPA, + -> after CPA)

RA END TIME - This field is an indication of the time, relative to CPA, that the last RA of OWN was ended. (- -> before CPA, + -> after CPA)

AC #1 RA TRACKED ALT RATE - This field is the tracked altitude rate of the AC #1 aircraft at the time of the RA.

AC #2 RA TRACKED ALT RATE - This field is the tracked altitude rate of the AC #2 aircraft at the time of the RA.

INITIALLY CROSSING RA - This field is an indication that the first RA issued by OWN was a crossing RA based on the geometry of the encounter and recorded track data. The recorded track position data, along with the sense of Own's RA, is used to determine if the sense of the RA is toward the intruder aircraft. Additionally, the magnitude of the altitude difference of Own and Intruder is checked to ensure the separation is greater than 100 feet.

AC_#1_WORST_RA - This field is an indication of the most severe RA displayed by AC #1; see the translation table below.

AC_#2_WORST_RA - Currently, this field is not used. The intent of this field is to indicate the most severe RA displayed by AC #2. See the translation table below.

AC_#1_INIT_RA - This field is an indication of the first RA displayed by AC #1. See the translation table below.

AC_#2_INIT_RA - The intent of this field is to give an indication of the first RA displayed by AC #2. See the translation table below.

NOTE: For the following table: + = climb sense, - = descend sense.

- (* 0 --> Only surveillance data on intruder. *)
- (* 1 --> Qualified for CAS evaluation. *)
- (* 2 --> Intruder declared a Proximity target *)
- (* 3 --> Intruder declared a TA non Mode C with TCAS on ground *)
- (* 4 --> Intruder declared a TA Mode C with TCAS on ground *)
- (* 5 --> Intruder declared a TA non Mode C with no aural generated *)
- (* 6 --> Intruder declared a TA Mode C with no aural generated *)
- (* 7 --> Intruder declared a TA non Mode C *)
- (* 8 --> Intruder declared a TA Mode C *)
- (* 9 --> Intruder meets RA criteria but the RA is being deferred *)
- (* 10 --> RA was issued but not sure what it was; used for live data *)
- (* +/- 11 --> a negative advisory limit rate to 2000 FPM *)
- (* +/- 12 --> a negative advisory limit rate to 1000 FPM *)
- (* +/- 13 --> a negative advisory limit rate to 500 FPM *)
- (* +/- 14 --> negative advisory i.e. don't climb or don't descend *)
- (* +/- 15 --> positive advisory of a preventive nature *)
- (* +/- 16 --> positive advisory of a corrective nature *)
- (* +/- 17 --> a maintain rate RA *)
- (* +/- 18 --> when either ICROSS or OCROSS is set *)
- (* +/- 19 --> an increased rate RA *)
- (* +/- 20 --> a sense reversal RA *)
- (* +/- 21 --> an increase rate RA after a reversal RA *)
- (* +/- 22 --> ADVISORY INVALID, no longer used; should not be seen *)

NOTE:

The next two fields are repeated a total of ten times. They are the time and display information for RA's. The fields are an indication of the sequence in which RA's were displayed during an encounter. Due to the fixed length format of the recording process, only ten entries are permissible.

RA SEQUENCE TIME #1 - This field is the time of OWN's first RA. NOTE: since we are recording information about POTRA, this time may actually be for a POTRA.

RA SEQUENCE SEVERITY #1 - This field contains a numeric code indicating the RA displayed by OWN. This code is the same one which is used for the AC #1/2 WORST RA present above. Since this field is only concerned with RA's then the value will be greater than 8 in magnitude.

CLIMB DETERMINATION - This field contains ZMPCLM, the modeling value of the predicted separation using a climb sense maneuver at the time of the first RA, if available.

DESCEND DETERMINATION - This field contains ZMPDES, the modeling value of the predicted separation using a descend sense maneuver at the time of the first RA, if available.

POT_AC1_ZD - This field contains the TRACKED altitude rate for AC1 at the time of a POTRA.

POT_AC2_ZD - This field contains the TRACKED altitude rate for AC2 at the time of a POTRA.

INTRUDER_RECEIPT_TIME - This field contains the time of receipt for TCAS intruder message.

PVMD ON CYCLE PRIOR TO POTRA - This field contains the predicted vertical miss distance (PVMD) calculated by CAS for the cycle time prior to the first POTENTIAL RA CYCLE (POTRA).

PVMD ON POTRA CYCLE - This field contains the predicted vertical miss distance (PVMD) calculated by CAS for the cycle time of the first POTENTIAL RA CYCLE (POTRA).

PVMD ON INITIAL RA CYCLE - This field contains the predicted vertical miss distance (PVMD) calculated by CAS for the cycle time of the INITIAL RA CYCLE (RA).

The following records were added to the parameter file, but not printed in LLPRPA program:

RA Tracked Vertical Rate	real(0..99999.99)	
PRM Tracked Vertical Rate	real(0..99999.99)	
First_RA_Delays	set of 32 bits	(* F - false, T - true *)
RA_Delays	set of 32 bits	(* F - false, T - true *)
First_RA_Rev_Delays	set of 32 bits	(* F - false, T - true *)
RA_Rev_Delays	set of 32 bits	(* F - false, T - true *)
Reverse_count	integer (0..15)	
Mdf_hit_count	byte (0..256)	
Numdpx	byte (0..256)	
Taurise	byte (0..256)	
Hfirm	byte (0..256)	
Hfirmb	byte (0..256)	
Manct	byte (0..256)	
RA_Delay_Time	real(0..99999.99)	
Num_RA_Delay_Entries	integer (0..8)	
RA_Delay_Seq	alpha-numeric(40 characters)	
Rev_Delay_Time	real(0..99999.99)	
Num_Rev_Delay_Entries	integer (0..8)	
Rev_Delay_Seq	alpha-numeric(40 characters)	

RA TRACKED VERTICAL RATE - This field contains the tracked vertical rate of OWN aircraft at the time the RA is chosen.

PRM TRACKED VERTICAL RATE - This field contains the tracked vertical rate of OWN aircraft at the time 5 seconds after the RA is chosen; the 5 seconds is the assumed pilot delay.

FIRST RA DELAYS - This field is a 32 bit set. The position from left to right corresponds to alphabetical lettering; position 0 = A, 1= B, etc. The description of these reasons to delay issuing an RA is described in Delays.doc. This field contains the delays that were in effect for the initial RA.

RA DELAYS - This field is a 32 bit set. The position from left to right corresponds to alphabetical lettering; position 0 = A, 1= B, etc. The description of these reasons to delay issuing an RA is described in Delays.doc. This field is an accumulation of all the delays that were ever in effect.

ENC_DELAY_POSSIBLE =

Position in set

- | | |
|----|-----------------------|
| 1 | EDF_LEVEL_WAIT |
| 2 | EDF_DEFERRED_CLIMB, |
| 3 | EDF_DEFERRED_DESCEND, |
| 4 | EDF_DEFER_DISPLAY, |
| 5 | EDF_FIRMNESS, |
| 6 | EDF_VT_ISSUED, |
| 7 | EDF_600_FT, |
| 8 | EDF_NAF, |
| 9 | EDF_MDF, |
| 10 | EDF_RAMODE_ON, |
| 11 | EDF_HIGH_ZDINT, |
| 12 | EDF_ALT_SEP, |
| 13 | EDF_SEP_NOT_ADE, |
| 14 | EDF_LOW_FIRM_NOT_ADE, |
| 15 | EDF_NO_CROSS_FIRM, |

SHOULD NOT EVER BE SET EDF_15 through EDF_31

FIRST RA REV DELAYS - This field is a 32 bit set. The position from left to right corresponds to alphabetical lettering; position 0 = A, 1= B, etc. The description of these reasons to delay/inhibit

issuing an RA Reversal is described in Delays.doc. This field contains the reversal delays/inhibits that were in effect for the first RA reversal.

RA REV DELAYS - This field is a 32 bit set. The position from left to right corresponds to alphabetical lettering; position 0 = A, 1= B, etc. The description of these reasons to delay/inhibit issuing an RA Reversal is described in Delays.doc. This field contains the reversal delays/inhibits that were in effect for all RA reversals.

ENC_REVERSAL_DELAYS =
POSITION IN SET

1	REV_A	No time to reverse Tau is rising
2	REV_B	Crossed altitude/ no time to re-cross
3	REV_C	INT cross but INTR proj not passed OWN by 100 ft
4	REV_D	OWN CROSS and INTR not proj to CROSS and multi a/c
5	REV_E	OWN cross nut multi/ rev to CL not 100' better then DES
6	REV_F	OWN cross nut multi/ rev to DES not 100' better then CL
7	REV_G	Good firm but not adeq sep to reverse
8	REV_H	Bad firmness
9	REV_I	TCAS-TCAS own level RA rate same as tracked
10	REV_J	TCAS-Mode C Own non-level wrong side of threat
11	REV_K	Can't rev non-cross to cross when a/c are co-altitude (RZ < 100 feet)
12	REV_L	Can't rev non-cross to cross/low firm/responding to RA
13	REV_M	TCAS-TCAS inhibit 2/3 test
14	REV_N	Weakening RA
15	REV_O	Descend inhibited
16	REV_P	Not in V7ir8 (now in multi a/c logic)
17	REV_Q	Predicted reversal separation < nominal sep
18	REV_R	Modeled sep by cont current RA > ALIM
19	REV_S	Level-off ok so can weaken RA
	NOT CURRENTLY USED	REV_19 through REV31

REVERSE COUNT - This field is the count of the number of RA reversals that occurred.

MDF_HIT_COUNT - This field is a count of the consecutive HMD predictions above the threshold.

NUMDPX - This field is the count of consecutive same sign cross-range residuals from the bearing tracker.

TAURISE- This field is the count of the number of scans TRTRN is rising.

HFIRM - This field is the horizontal firmness for range based trackers.

HFIRMB - This field is the horizontal firmness used for bearing based tracker.

MANCT- This field is the count of maneuvers.

RA_DELAY_TIME - This field is the time of the first entry in RA_DELAY_SEQ.

NUM_RA_DELAY_ENTRIES- This field is the number of unique delay entries in an ERD array that can contain up to 8 entries. This ERD array is translated into the RA_DELAY_SEQ; Note: It is possible for the number found here and what is displayed in the RA_DELAY_SEQ to appear inconsistent. (This field does not include the duration of the delay.

RA_DELAY_SEQ- This field contains a sequence of 40 characters. This sequence currently represents 40 seconds prior to CPA. The right most position represents CPA - 1. The following is a list of what each character represents:

A: EDF_LEVEL_WAIT
 B: EDF_DEFERRED_CLIMB
 C: EDF_DEFERRED_DESCEND
 D: EDF_DEFER_DISPLAY
 E: EDF_FIRMNESS
 F: EDF_VT_ISSUED
 G: EDF_600_FT
 H: EDF_NAF
 I: EDF_MDF
 J: EDF_RAMODE_ON
 K: EDF_HIGH_ZDINT
 L: EDF_ALT_SEP
 M: EDF_SEP_NOT_ADE
 N: EDF_LOW_FIRM_NOT_ADE
 O: EDF_NO_CROSS_FIRM
 %: UNKNOWN DELAY
 -: NO DELAY OR RA
 +: RA ISSUED
 #: INDICATES AN OVERLAP OF A DELAY AND RA

If an entry has multiple flags set, only the first flag is displayed. This is why a NUM_RA_DELAY_ENTRIES count can be greater than the actual unique letters displayed.

REV_DELAY_TIME- This field is the time of the first entry in REV_DELAY_SEQ.

NUM_REV_DELAY_ENTRIES- This field is the number of unique reversal entries in REV_DELAY_SEQ. This does not include the duration of the delay. Note: It is possible to have TWO matching reversal entries separated by a different reversal entry.

REV_DELAY_SEQ- This field contains a sequence of 40 characters that represent REVERSALS. This sequence currently represents 40 seconds prior to CPA. The right most position represents CPA - 1. The following is a list of what each character represents:

A: REV_A
 B: REV_B
 C: REV_C
 D: REV_D
 E: REV_E
 F: REV_F
 G: REV_G
 H: REV_H
 I: REV_I
 J: REV_J
 K: REV_K
 L: REV_L
 M: REV_M
 N: REV_N
 O: REV_O
 P: REV_P
 Q: REV_Q
 R: REV_R
 S: REV_S
 %: UNKNOWN REVERSAL
 -: NO REVERSAL

PROGRAM LLPRPA - Full Parameter Value Report, part1of3

Run Date = Mon, 29 Dec 1997

Page 1

SEQ CLS ROW
NUM TBL COL

00001	7	3	2	2	CL7B1_E	7	3	2	2	2538	1165022	2538	65	65	1	1	-35.4	1	1	4	4	4	4	5	10	0.00	5000.0	-5000.0	0.15	-0.05	-25.0	-20.0	3683.9
00002	7	3	2	2	CL7B1_F	7	3	2	2	2538	1165122	2538	65	65	1	1	-93.3	1	1	4	4	4	4	10	5	0.00	5000.0	-5000.0	0.15	-0.05	-25.0	-20.0	3683.9
00003	7	3	2	2	CL7B1_E	7	3	2	2	2559	1165022	2559	65	65	1	1	-35.4	1	1	4	4	4	4	5	10	0.00	5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	3683.9
00004	7	3	2	2	CL7B1_F	7	3	2	2	2559	1165122	2559	65	65	1	1	-93.3	1	1	4	4	4	4	10	5	0.00	5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	3683.9
00005	7	4	2	2	CL7B1_F	7	4	2	2	135	1165122	135	65	65	1	1	-50.5	0	1	4	4	4	4	10	5	500.00	1000.0	-5000.0	0.05	-0.15	-25.0	-25.0	3442.8
00006	7	4	2	2	CL7B1_F	7	4	2	2	143	1165122	143	65	65	1	1	-89.9	0	0	4	4	4	4	10	5	250.00	1000.0	-5000.0	0.05	-0.15	-25.0	-20.0	3573.7
00007	7	4	2	2	CL7B1_F	7	4	2	2	164	1165122	164	65	65	1	1	-61.3	0	1	4	4	4	4	10	5	250.00	1000.0	-3000.0	0.05	-0.15	-25.0	-20.0	3559.2
00008	7	4	2	2	CL7B1_E	7	4	2	2	260	1165022	260	65	65	1	1	-98.9	0	1	4	4	4	4	5	10	750.00	1000.0	-5000.0	0.05	-0.25	-25.0	-25.0	3267.8
00009	7	4	2	2	CL7B1_E	7	4	2	2	267	1165022	267	65	65	1	1	-76.3	1	1	4	4	4	4	5	10	750.00	1000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3341.6
00010	7	4	2	2	CL7B1_F	7	4	2	2	394	1165122	394	65	65	1	1	-40.4	0	1	4	4	4	4	10	5	500.00	1000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3442.8
00011	7	4	2	2	CL7B1_E	7	4	2	2	507	1165022	507	65	65	1	1	81.1	1	1	4	4	4	4	5	10	250.00	3000.0	-5000.0	0.05	-0.05	-25.0	-30.0	3622.8
00012	7	4	2	2	CL7B1_F	7	4	2	2	507	1165122	507	65	65	1	1	-15.4	1	1	4	4	4	4	10	5	250.00	3000.0	-5000.0	0.05	-0.05	-25.0	-30.0	3622.8
00013	7	4	2	2	CL7B1_E	7	4	2	2	528	1165022	528	65	65	1	1	81.1	1	1	4	4	4	4	5	10	250.00	3000.0	-3000.0	0.05	-0.05	-25.0	-30.0	3622.8
00014	7	4	2	2	CL7B1_F	7	4	2	2	528	1165122	528	65	65	1	1	-15.4	1	1	4	4	4	4	10	5	250.00	3000.0	-3000.0	0.05	-0.05	-25.0	-30.0	3622.8
00015	7	4	2	2	CL7B1_E	7	4	2	2	639	1165022	639	65	65	1	1	-23.8	1	1	4	4	4	4	5	10	500.00	3000.0	-5000.0	0.05	-0.15	-25.0	-25.0	3387.7
00016	7	4	2	2	CL7B1_F	7	4	2	2	647	1165122	647	65	65	1	1	-98.8	0	0	4	4	4	4	10	5	250.00	3000.0	-5000.0	0.05	-0.15	-25.0	-20.0	3564.9
00017	7	4	2	2	CL7B1_F	7	4	2	2	668	1165122	668	65	65	1	1	-41.2	0	1	4	4	4	4	10	5	250.00	3000.0	-3000.0	0.05	-0.15	-25.0	-20.0	3553.6
00018	7	4	2	2	CL7B1_E	7	4	2	2	771	1165022	771	65	65	1	1	29.8	1	1	4	4	4	4	5	10	750.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3277.4
00019	7	4	2	2	CL7B1_E	7	4	2	2	772	1165022	772	65	65	1	1	-54.8	0	0	4	4	4	4	5	10	500.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3356.7
00020	7	4	2	2	CL7B1_F	7	4	2	2	772	1165122	772	65	65	1	1	74.5	1	1	4	4	4	4	10	5	500.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3486.1
00021	7	4	2	2	CL7B1_F	7	4	2	2	773	1165122	773	65	65	1	1	-55.6	0	0	4	4	4	4	10	5	250.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3539.1
00022	7	4	2	2	CL7B1_E	7	4	2	2	897	1165022	897	65	65	1	1	-17.6	0	1	4	4	4	4	5	10	750.00	3000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3230.0
00023	7	4	2	2	CL7B1_F	7	4	2	2	898	1165122	898	65	65	1	1	-84.2	0	0	4	4	4	4	10	5	500.00	3000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3387.7
00024	7	4	2	2	CL7B1_E	7	4	2	2	1011	1165022	1011	65	65	1	1	81.1	1	1	4	4	4	4	5	10	250.00	5000.0	-5000.0	0.05	-0.05	-25.0	-30.0	3622.8
00025	7	4	2	2	CL7B1_F	7	4	2	2	1011	1165122	1011	65	65	1	1	-15.4	1	1	4	4	4	4	10	5	250.00	5000.0	-5000.0	0.05	-0.05	-25.0	-30.0	3622.8
00026	7	4	2	2	CL7B1_E	7	4	2	2	1032	1165022	1032	65	65	1	1	81.1	1	1	4	4	4	4	5	10	250.00	5000.0	-3000.0	0.05	-0.05	-25.0	-30.0	3622.8
00027	7	4	2	2	CL7B1_F	7	4	2	2	1032	1165122	1032	65	65	1	1	-15.4	1	1	4	4	4	4	10	5	250.00	5000.0	-3000.0	0.05	-0.05	-25.0	-30.0	3622.8
00028	7	4	2	2	CL7B1_E	7	4	2	2	1143	1165022	1143	65	65	1	1	-23.8	1	1	4	4	4	4	5	10	500.00	5000.0	-5000.0	0.05	-0.15	-25.0	-25.0	3387.7
00029	7	4	2	2	CL7B1_F	7	4	2	2	1151	1165122	1151	65	65	1	1	-98.8	0	0	4	4	4	4	10	5	250.00	5000.0	-5000.0	0.05	-0.15	-25.0	-20.0	3564.9
00030	7	4	2	2	CL7B1_F	7	4	2	2	1172	1165122	1172	65	65	1	1	-41.2	0	1	4	4	4	4	10	5	250.00	5000.0	-3000.0	0.05	-0.15	-25.0	-20.0	3553.6
00031	7	4	2	2	CL7B1_E	7	4	2	2	1275	1165022	1275	65	65	1	1	29.8	1	1	4	4	4	4	5	10	750.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3277.4
00032	7	4	2	2	CL7B1_E	7	4	2	2	1276	1165022	1276	65	65	1	1	-54.8	0	0	4	4	4	4	5	10	500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3356.7
00033	7	4	2	2	CL7B1_F	7	4	2	2	1276	1165122	1276	65	65	1	1	74.5	1	1	4	4	4	4	10	5	500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3486.1
00034	7	4	2	2	CL7B1_F	7	4	2	2	1277	1165122	1277	65	65	1	1	-55.6	0	0	4	4	4	4	10	5	250.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3539.1
00035	7	4	2	2	CL7B1_E	7	4	2	2	1401	1165022	1401	65	65	1	1	-17.6	0	1	4	4	4	4	5	10	750.00	5000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3230.0
00036	7	4	2	2	CL7B1_F	7	4	2	2	1402	1165122	1402	65	65	1	1	-84.2	0	1	4	4	4	4	10	5	500.00	5000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3387.7
00037	7	4	2	2	CL7B1_E	7	4	2	2	1654	1165022	1654	65	65	1	1	-79.2	1	1	4	4	4	4	5	10	500.00	1000.0	-5000.0	0.15	-0.15	-25.0	-20.0	3458.3
00038	7	4	2	2	CL7B1_E	7	4	2	2	1772	1165022	1772	65	65	1	1	-84.4	0	1	4	4	4	4	5	10	750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-25.0	3267.8
00039	7	4	2	2	CL7B1_E	7	4	2	2	1779	1165022	1779	65	65	1	1	8.0	1	1	4	4	4	4	5	10	750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3341.6
00040	7	4	2	2	CL7B1_F	7	4	2	2	1779	1165122	1779	65	65	1	1	-97.0	0	1	4	4	4	4	10	5	750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3341.6
00041	7	4	2	2	CL7B1_E	7	4	2	2	1780	1165022	1780	65	65	1	1	-98.7	0	0	4	4	4	4	5	10	500.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3384.4
00042	7	4	2	2	CL7B1_E	7	4	2	2	1905	1165022	1905	65	65	1	1	-7.6	1	1	4	4	4	4	5	10	750.00	1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3261.1
00043	7	4	2	2	CL7B1_F	7	4	2	2	1905	1165122	1905	65	65	1	1	-84.0	0	1	4	4	4	4	10	5	750.00	1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3326.1
00044	7	4	2	2	CL7B1_E	7	4	2	2	2014	1165022	2014	65	65	1	1	94.3	0	0	4	4	4	4	5	10	-250.00	1000.0	5000.0	0.15	0.35	-25.0	-20.0	3847.2
00045	7	4	2	2	CL7B1_E	7	4	2	2	2157	1165022	2157	65	65	1	1	20.0	0	1	4	4	4	4	5	10	750.00	3000.0	-5000.0	0.15	-0.15	-25.0	-20.0	3442.6
00046	7	4	2	2	CL7B1_E	7	4	2	2	2158	1165022	2158	65	65	1	1	-34.6	1	1	4	4	4	4	5	10	500.00	3000.0	-5000.0	0.1				

SEQ CLS ROW
NUM TBL COL

00066	7	4	2	2	CL7B1_E	7	4	2	2	2579	1165022	2579	65	65	1	1	95.6	1	1	4	4	4	4	5	10	250.00	5000.0	-1000.0	0.15	-0.05	-25.0	-20.0	3635.7
00067	7	4	2	2	CL7B1_F	7	4	2	2	2579	1165122	2579	65	65	1	1	-13.2	1	1	4	4	4	4	10	5	250.00	5000.0	-1000.0	0.15	-0.05	-25.0	-20.0	3635.7
00068	7	4	2	2	CL7B1_F	7	4	2	2	2649	1165122	2649	65	65	1	1	-91.8	1	1	3	4	4	4	10	5	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-30.0	3555.2
00069	7	4	2	2	CL7B1_F	7	4	2	2	2654	1165122	2654	65	65	1	1	-13.5	1	1	3	4	4	4	10	5	750.00	5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	3392.2
00070	7	4	2	2	CL7B1_E	7	4	2	2	2656	1165022	2656	65	65	1	1	-91.8	0	1	4	4	4	4	5	10	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	3502.9
00071	7	4	2	2	CL7B1_F	7	4	2	2	2656	1165122	2656	65	65	1	1	4.7	1	1	4	4	4	4	10	5	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	3599.5
00072	7	4	2	2	CL7B1_E	7	4	2	2	2663	1165022	2663	65	65	1	1	-89.9	0	1	4	4	4	4	5	10	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	3502.9
00073	7	4	2	2	CL7B1_F	7	4	2	2	2663	1165122	2663	65	65	1	1	42.8	1	1	4	4	4	4	10	5	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	3635.7
00074	7	4	2	2	CL7B1_F	7	4	2	2	2684	1165122	2684	65	65	1	1	-9.8	1	1	4	4	4	4	10	5	250.00	5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	3599.5
00075	7	4	2	2	CL7B1_F	7	4	2	2	2703	1165122	2703	65	65	1	1	32.0	1	1	3	4	4	4	10	5	750.00	5000.0	-1000.0	0.15	-0.15	-25.0	-20.0	3374.5
00076	7	4	2	2	CL7B1_E	7	4	2	2	2704	1165022	2704	65	65	1	1	20.0	0	1	3	4	4	4	5	10	500.00	5000.0	-1000.0	0.15	-0.15	-25.0	-20.0	3477.2
00077	7	4	2	2	CL7B1_F	7	4	2	2	2704	1165122	2704	65	65	1	1	-68.0	0	0	3	4	4	4	10	5	500.00	5000.0	-1000.0	0.15	-0.15	-25.0	-20.0	3477.2
00078	7	4	2	2	CL7B1_F	7	4	2	2	2712	1165122	2712	65	65	1	1	-42.0	0	0	3	4	4	4	10	5	250.00	5000.0	1000.0	0.15	0.15	-25.0	-30.0	3555.2
00079	7	4	2	2	CL7B1_E	7	4	2	2	2787	1165022	2787	65	65	1	1	17.6	1	1	4	4	4	4	5	10	750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3282.8
00080	7	4	2	2	CL7B1_E	7	4	2	2	2788	1165022	2788	65	65	1	1	6.4	1	1	4	4	4	4	5	10	500.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3418.0
00081	7	4	2	2	CL7B1_E	7	4	2	2	2789	1165022	2789	65	65	1	1	-91.8	0	1	4	4	4	4	5	10	250.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3502.9
00082	7	4	2	2	CL7B1_F	7	4	2	2	2789	1165122	2789	65	65	1	1	4.7	1	1	4	4	4	4	10	5	250.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3599.5
00083	7	4	2	2	CL7B1_F	7	4	2	2	2808	1165122	2808	65	65	1	1	90.9	1	1	3	4	4	4	10	5	750.00	5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	3445.0
00084	7	4	2	2	CL7B1_E	7	4	2	2	2809	1165022	2809	65	65	1	1	-69.2	0	0	4	4	4	4	5	10	500.00	5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	3406.7
00085	7	4	2	2	CL7B1_F	7	4	2	2	2809	1165122	2809	65	65	1	1	53.6	1	1	4	4	4	4	5	10	500.00	5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	3529.5
00086	7	4	2	2	CL7B1_E	7	4	2	2	2829	1165022	2829	65	65	1	1	-30.0	0	1	3	4	4	4	5	10	750.00	5000.0	-1000.0	0.15	-0.25	-25.0	-20.0	3265.1
00087	7	4	2	2	CL7B1_E	7	4	2	2	2830	1165022	2830	65	65	1	1	20.0	0	1	3	4	4	4	5	10	500.00	5000.0	-1000.0	0.15	-0.25	-25.0	-20.0	3477.2
00088	7	4	2	2	CL7B1_F	7	4	2	2	2830	1165122	2830	65	65	1	1	-68.0	0	0	3	4	4	4	10	5	500.00	5000.0	-1000.0	0.15	-0.25	-25.0	-20.0	3477.2
00089	7	4	2	2	CL7B1_F	7	4	2	2	2838	1165122	2838	65	65	1	1	-42.0	0	0	3	4	4	4	10	5	250.00	5000.0	1000.0	0.15	0.25	-25.0	-30.0	3555.2
00090	7	4	2	2	CL7B1_E	7	4	2	2	2913	1165022	2913	65	65	1	1	-21.1	1	0	4	4	4	4	5	10	750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3265.1
00091	7	4	2	2	CL7B1_E	7	4	2	2	2914	1165022	2914	65	65	1	1	6.4	1	1	4	4	4	4	5	10	500.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3418.0
00092	7	4	2	2	CL7B1_F	7	4	2	2	2915	1165122	2915	65	65	1	1	-91.8	1	1	4	4	4	4	10	5	250.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3555.2
00093	7	4	2	2	CL7B1_E	7	4	2	2	2934	1165022	2934	65	65	1	1	88.3	1	1	3	4	4	4	5	10	750.00	5000.0	-3000.0	0.15	-0.35	-25.0	-20.0	3374.5
00094	7	4	2	2	CL7B1_F	7	4	2	2	2934	1165122	2934	65	65	1	1	-50.8	0	1	3	4	4	4	5	10	750.00	5000.0	-3000.0	0.15	-0.35	-25.0	-20.0	3374.5
00095	7	4	2	2	CL7B1_E	7	4	2	2	2955	1165022	2955	65	65	1	1	-30.0	0	1	3	4	4	4	5	10	750.00	5000.0	-1000.0	0.15	-0.35	-25.0	-20.0	3265.1
00096	7	4	2	2	CL7B1_E	7	4	2	2	2956	1165022	2956	65	65	1	1	20.0	0	1	3	4	4	4	5	10	500.00	5000.0	-1000.0	0.15	-0.35	-25.0	-20.0	3477.2
00097	7	4	2	2	CL7B1_F	7	4	2	2	2956	1165122	2956	65	65	1	1	-68.0	0	0	3	4	4	4	10	5	500.00	5000.0	-1000.0	0.15	-0.35	-25.0	-20.0	3477.2
00098	7	4	2	2	CL7B1_F	7	4	2	2	2964	1165122	2964	65	65	1	1	-42.0	0	0	3	4	4	4	10	5	250.00	5000.0	1000.0	0.15	0.35	-25.0	-30.0	3555.2
00099	7	4	2	2	CL7B1_E	7	4	2	2	3166	1165022	3166	65	65	1	1	-79.2	1	1	4	4	4	4	5	10	500.00	1000.0	-5000.0	0.25	-0.15	-25.0	-20.0	3458.3
00100	7	4	2	2	CL7B1_E	7	4	2	2	3284	1165022	3284	65	65	1	1	-84.4	0	1	4	4	4	4	5	10	750.00	1000.0	-5000.0	0.25	-0.25	-25.0	-25.0	3267.8
00101	7	4	2	2	CL7B1_E	7	4	2	2	3291	1165022	3291	65	65	1	1	8.0	1	1	4	4	4	4	5	10	750.00	1000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3341.6
00102	7	4	2	2	CL7B1_F	7	4	2	2	3291	1165122	3291	65	65	1	1	-97.0	0	1	4	4	4	4	10	5	750.00	1000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3341.6
00103	7	4	2	2	CL7B1_E	7	4	2	2	3292	1165022	3292	65	65	1	1	-98.7	0	0	4	4	4	4	5	10	500.00	1000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3384.4
00104	7	4	2	2	CL7B1_E	7	4	2	2	3417	1165022	3417	65	65	1	1	-7.6	1	1	4	4	4	4	5	10	750.00	1000.0	-5000.0	0.25	-0.35	-25.0	-20.0	3326.1
00105	7	4	2	2	CL7B1_F	7	4	2	2	3417	1165122	3417	65	65	1	1	-84.0	0	1	4	4	4	4	10	5	750.00	1000.0	-5000.0	0.25	-0.35	-25.0	-20.0	3326.1
00106	7	4	2	2	CL7B1_E	7	4	2	2	3526	1165022	3526	65	65	1	1	94.3	0	0	4	4	4	4	5	10	-250.00	1000.0	5000.0	0.25	0.35	-25.0	-20.0	3847.2
00107	7	4	2	2	CL7B1_E	7	4	2	2	3669	1165022	3669	65	65	1	1	-4.1	1	0	4	4	4	4	5	10	750.00	3000.0	-5000.0	0.25	-0.15	-25.0	-20.0	3442.6
00108	7	4	2	2	CL7B1_F	7	4	2	2	3704	1165122	3704	65	65	1	1	89.2	1	1	4	4	4	4	10	5	750.00	3000.0	-1000.0	0.25	-0.15	-25.0	-25.0	3089.8
00109	7	4	2	2	CL7B1_E	7	4	2	2	3795	1165022	3795	65	65	1	1	-17.3	1	1	4	4	4	4	5	10	750.00	3000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3316.3
00110	7	4	2	2	CL7B1_E	7	4	2	2	3796	1165022	3796	65	65	1	1	-55.0	0	0	4	4	4	4	5	10	500.00	3000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3416.9
00111	7	4	2	2	CL7B1_F	7	4	2	2	3830	1165122	3830	65	65	1	1	89.2	1	1	4</													

PROGRAM LLPRPA - Full Parameter Value Report, part1of3

Run Date = Mon, 29 Dec 1997

SEQ NUM	CLS TBL	ROW COL																															
00132	7	4	2	2	CL7B1_E	7	4	2	2	5307	1165022	5307	65	65	1	1	29.8	1	1	5	5	5	5	10	750.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7077.4	
00133	7	4	2	2	CL7B1_F	7	4	2	2	5308	1165122	5308	65	65	1	1	-48.4	0	1	5	5	5	5	10	5	500.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7223.5
00134	7	4	2	2	CL7B1_E	7	4	2	2	5329	1165022	5329	65	65	1	1	2.7	1	1	5	5	5	5	10	500.00	3000.0	-3000.0	0.05	-0.25	-25.0	-20.0	7187.7	
00135	7	4	2	2	CL7B1_E	7	4	2	2	5433	1165022	5433	65	65	1	1	-17.6	0	1	5	5	5	5	10	750.00	3000.0	-5000.0	0.05	-0.35	-25.0	-20.0	7030.0	
00136	7	4	2	2	CL7B1_F	7	4	2	2	5686	1165122	5686	65	65	1	1	53.1	1	1	5	5	5	5	10	5	500.00	5000.0	-5000.0	0.05	-0.15	-25.0	-20.0	7364.9
00137	7	4	2	2	CL7B1_F	7	4	2	2	5687	1165122	5687	65	65	1	1	-98.8	0	0	5	5	5	5	10	5	250.00	5000.0	-5000.0	0.05	-0.15	-25.0	-20.0	7364.9
00138	7	4	2	2	CL7B1_E	7	4	2	2	5811	1165022	5811	65	65	1	1	29.8	1	1	5	5	5	5	10	750.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7077.4	
00139	7	4	2	2	CL7B1_F	7	4	2	2	5812	1165122	5812	65	65	1	1	-48.4	0	0	5	5	5	5	10	5	500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7223.5
00140	7	4	2	2	CL7B1_E	7	4	2	2	5833	1165022	5833	65	65	1	1	2.7	1	1	5	5	5	5	10	500.00	5000.0	-3000.0	0.05	-0.25	-25.0	-20.0	7187.7	
00141	7	4	2	2	CL7B1_E	7	4	2	2	5937	1165022	5937	65	65	1	1	-17.6	0	1	5	5	5	5	10	750.00	5000.0	-5000.0	0.05	-0.35	-25.0	-20.0	7030.0	
00142	7	4	2	2	CL7B1_E	7	4	2	2	6190	1165022	6190	65	65	1	1	-79.2	1	1	5	5	5	5	10	500.00	1000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7258.3	
00143	7	4	2	2	CL7B1_E	7	4	2	2	6315	1165022	6315	65	65	1	1	8.0	1	1	5	5	5	5	10	750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7141.6	
00144	7	4	2	2	CL7B1_F	7	4	2	2	6315	1165122	6315	65	65	1	1	-96.9	0	1	5	5	5	5	10	5	750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7141.6
00145	7	4	2	2	CL7B1_E	7	4	2	2	6316	1165022	6316	65	65	1	1	-98.7	0	0	5	5	5	5	10	500.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7184.4	
00146	7	4	2	2	CL7B1_E	7	4	2	2	6441	1165022	6441	65	65	1	1	-7.6	1	1	5	5	5	5	10	750.00	1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7126.1	
00147	7	4	2	2	CL7B1_F	7	4	2	2	6441	1165122	6441	65	65	1	1	-84.0	0	1	5	5	5	5	10	5	750.00	1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7126.1
00148	7	4	2	2	CL7B1_E	7	4	2	2	6693	1165022	6693	65	65	1	1	20.0	0	1	5	5	5	5	10	750.00	3000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7242.6	
00149	7	4	2	2	CL7B1_E	7	4	2	2	6819	1165022	6819	65	65	1	1	-17.3	1	1	5	5	5	5	10	750.00	3000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7116.3	
00150	7	4	2	2	CL7B1_E	7	4	2	2	6820	1165022	6820	65	65	1	1	-55.0	0	0	5	5	5	5	10	500.00	3000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7216.9	
00151	7	4	2	2	CL7B1_E	7	4	2	2	6945	1165022	6945	65	65	1	1	-85.5	0	0	5	5	5	5	10	750.00	3000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7048.1	
00152	7	4	2	2	CL7B1_F	7	4	2	2	7071	1165122	7071	65	65	1	1	68.8	1	1	5	5	5	5	10	5	750.00	5000.0	-5000.0	0.15	-0.05	-25.0	-20.0	7232.4
00153	7	4	2	2	CL7B1_F	7	4	2	2	7072	1165122	7072	65	65	1	1	-55.0	0	1	5	5	5	5	10	5	500.00	5000.0	-5000.0	0.15	-0.05	-25.0	-20.0	7302.9
00154	7	4	2	2	CL7B1_E	7	4	2	2	7073	1165022	7073	65	65	1	1	82.7	1	1	5	5	5	5	10	250.00	5000.0	-5000.0	0.15	-0.05	-25.0	-20.0	7435.7	
00155	7	4	2	2	CL7B1_F	7	4	2	2	7073	1165122	7073	65	65	1	1	-45.5	1	0	5	5	5	5	10	5	250.00	5000.0	-5000.0	0.15	-0.05	-25.0	-20.0	7435.7
00156	7	4	2	2	CL7B1_F	7	4	2	2	7092	1165122	7092	65	65	1	1	68.8	1	1	5	5	5	5	10	5	750.00	5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	7232.4
00157	7	4	2	2	CL7B1_F	7	4	2	2	7093	1165122	7093	65	65	1	1	-55.0	0	0	5	5	5	5	10	5	500.00	5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	7302.9
00158	7	4	2	2	CL7B1_E	7	4	2	2	7094	1165022	7094	65	65	1	1	82.7	1	1	5	5	5	5	10	250.00	5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	7435.7	
00159	7	4	2	2	CL7B1_F	7	4	2	2	7094	1165122	7094	65	65	1	1	-45.5	1	0	5	5	5	5	10	5	250.00	5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	7435.7
00160	7	4	2	2	CL7B1_E	7	4	2	2	7106	1165022	7106	65	65	1	1	-30.0	0	0	5	5	5	5	10	750.00	5000.0	-1000.0	0.15	-0.05	-25.0	-25.0	7065.1	
00161	7	4	2	2	CL7B1_E	7	4	2	2	7107	1165022	7107	65	65	1	1	-93.3	0	0	5	5	5	5	10	500.00	5000.0	-1000.0	0.15	-0.05	-25.0	-25.0	7206.7	
00162	7	4	2	2	CL7B1_F	7	4	2	2	7113	1165122	7113	65	65	1	1	-22.9	0	1	5	5	5	5	10	5	750.00	5000.0	-1000.0	0.15	-0.05	-25.0	-20.0	7123.1
00163	7	4	2	2	CL7B1_F	7	4	2	2	7114	1165122	7114	65	65	1	1	2.9	0	1	5	5	5	5	10	5	500.00	5000.0	-1000.0	0.15	-0.05	-25.0	-20.0	7302.9
00164	7	4	2	2	CL7B1_F	7	4	2	2	7115	1165122	7115	65	65	1	1	-93.7	0	0	5	5	5	5	10	5	250.00	5000.0	-1000.0	0.15	-0.05	-25.0	-20.0	7355.2
00165	7	4	2	2	CL7B1_F	7	4	2	2	7185	1165122	7185	65	65	1	1	-91.8	1	1	5	5	5	5	10	5	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-30.0	7355.2
00166	7	4	2	2	CL7B1_E	7	4	2	2	7192	1165022	7192	65	65	1	1	-91.8	0	1	5	5	5	5	10	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	7302.9	
00167	7	4	2	2	CL7B1_F	7	4	2	2	7192	1165122	7192	65	65	1	1	4.7	1	1	5	5	5	5	10	5	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	7399.5
00168	7	4	2	2	CL7B1_E	7	4	2	2	7197	1165022	7197	65	65	1	1	-99.6	0	0	5	5	5	5	10	750.00	5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7123.1	
00169	7	4	2	2	CL7B1_F	7	4	2	2	7197	1165122	7197	65	65	1	1	80.3	1	1	5	5	5	5	10	5	750.00	5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7302.9
00170	7	4	2	2	CL7B1_E	7	4	2	2	7198	1165022	7198	65	65	1	1	74.8	1	1	5	5	5	5	10	500.00	5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7302.9	
00171	7	4	2	2	CL7B1_E	7	4	2	2	7199	1165022	7199	65	65	1	1	-89.9	0	1	5	5	5	5	10	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7302.9	
00172	7	4	2	2	CL7B1_F	7	4	2	2	7199	1165122	7199	65	65	1	1	42.8	1	1	5	5	5	5	10	5	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7435.7
00173	7	4	2	2	CL7B1_F	7	4	2	2	7218	1165122	7218	65	65	1	1	-48.3	0	1	5	5	5	5	10	5	750.00	5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	7192.2
00174	7	4	2	2	CL7B1_F	7	4	2	2	7220	1165122	7220	65	65	1	1	-9.8	1	1	5	5	5	5	10	5	250.00	5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	7399.5
00175	7	4	2	2	CL7B1_F	7	4	2	2	7239	1165122	7239	65	65	1	1	32.0	1	1	5	5	5	5	10	5	750.00	5000.0	-1000.0	0.15	-0.15	-25.0	-20.0	7174.5
00176	7	4	2	2	CL7B1_E	7	4	2	2	7323	1165022	7323	65	65	1	1	-50.8	1	1	5	5	5	5	10	750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7082.8	
00177	7	4	2	2	CL7B1_F	7	4	2	2	7323	1165122	7323	65	65	1	1	58.6	1	1	5	5	5	5	10	5	750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7192.2

SEQ NUM	CLS TBL	ROW COL									PROGRAM LLPRPA - Full Parameter Value Report, part1of3																						
00263	7	4	3	3	CL7B1_N	7	4	3	3	5812	1271033	5812	71	71	1	1	69.7	0	0	5	5	5	5	10	5	500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7257.4
00264	7	4	3	3	CL7B1_M	7	4	3	3	5833	1171033	5833	71	71	1	1	-88.2	0	1	5	5	5	5	10	5	500.00	5000.0	-3000.0	0.05	-0.25	-25.0	-20.0	7187.7
00265	7	4	3	3	CL7B1_N	7	4	3	3	5833	1271033	5833	71	71	1	1	88.2	0	1	5	5	5	5	10	5	500.00	5000.0	-3000.0	0.05	-0.25	-25.0	-20.0	7275.9
00266	7	4	3	3	CL7B1_N	7	4	3	3	5937	1271033	5937	71	71	1	1	-16.1	0	1	5	5	5	5	10	5	750.00	5000.0	-5000.0	0.05	-0.35	-25.0	-20.0	7110.3
00267	7	4	3	3	CL7B1_M	7	4	3	3	7191	1171033	7191	71	71	1	1	94.6	1	1	5	5	5	5	10	5	500.00	5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	7297.3
00268	7	4	3	3	CL7B1_N	7	4	3	3	7191	1271033	7191	71	71	1	1	-94.6	1	1	5	5	5	5	10	5	500.00	5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	7202.7
00269	7	4	3	3	CL7B1_M	7	4	3	3	7199	1171033	7199	71	71	1	1	-89.9	0	1	5	5	5	5	10	5	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7302.9
00270	7	4	3	3	CL7B1_N	7	4	3	3	7199	1271033	7199	71	71	1	1	89.9	0	1	5	5	5	5	10	5	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7392.9
00271	7	4	3	3	CL7B1_M	7	4	3	3	7218	1171033	7218	71	71	1	1	-0.5	1	1	5	5	5	5	10	5	750.00	5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	7153.6
00272	7	4	3	3	CL7B1_N	7	4	3	3	7218	1271033	7218	71	71	1	1	0.5	1	1	5	5	5	5	10	5	750.00	5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	7154.1
00273	7	4	3	3	CL7B1_M	7	4	3	3	7239	1171033	7239	71	71	1	1	-98.3	0	1	5	5	5	5	10	5	750.00	5000.0	-1000.0	0.15	-0.15	-25.0	-20.0	7044.2
00274	7	4	3	3	CL7B1_N	7	4	3	3	7239	1271033	7239	71	71	1	1	98.3	0	1	5	5	5	5	10	5	750.00	5000.0	-1000.0	0.15	-0.15	-25.0	-20.0	7142.6
00275	7	4	3	3	CL7B1_M	7	4	3	3	7323	1171033	7323	71	71	1	1	-21.1	1	1	5	5	5	5	10	5	750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7065.1
00276	7	4	3	3	CL7B1_N	7	4	3	3	7323	1271033	7323	71	71	1	1	21.1	1	1	5	5	5	5	10	5	750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7086.2
00277	7	4	3	3	CL7B1_M	7	4	3	3	7324	1171033	7324	71	71	1	1	94.6	1	1	5	5	5	5	10	5	500.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7297.3
00278	7	4	3	3	CL7B1_N	7	4	3	3	7324	1271033	7324	71	71	1	1	-94.6	1	1	5	5	5	5	10	5	500.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7202.7
00279	7	4	3	3	CL7B1_M	7	4	3	3	7346	1171033	7346	71	71	1	1	-97.5	1	0	5	5	5	5	10	5	250.00	5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	7355.2
00280	7	4	3	3	CL7B1_N	7	4	3	3	7346	1271033	7346	71	71	1	1	97.5	0	0	5	5	5	5	10	5	250.00	5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	7452.7
00281	7	4	3	3	CL7B1_M	7	4	3	3	7449	1171033	7449	71	71	1	1	-0.9	1	1	5	5	5	5	10	5	750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7153.6
00282	7	4	3	3	CL7B1_N	7	4	3	3	7449	1271033	7449	71	71	1	1	0.9	1	1	5	5	5	5	10	5	750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7154.6
00283	7	4	3	3	CL7B1_M	7	4	3	3	8709	1171033	8709	71	71	1	1	1.5	1	1	5	5	5	5	10	5	750.00	5000.0	-5000.0	0.25	-0.15	-25.0	-20.0	7224.1
00284	7	4	3	3	CL7B1_N	7	4	3	3	8709	1271033	8709	71	71	1	1	-1.5	1	1	5	5	5	5	10	5	750.00	5000.0	-5000.0	0.25	-0.15	-25.0	-20.0	7222.6
00285	7	4	4	4	CL7B1_T	7	4	4	4	393	1175044	393	75	75	1	1	-49.5	0	1	4	4	4	4	5	10	750.00	1000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3432.9
00286	7	4	4	4	CL7B1_U	7	4	4	4	393	1275044	393	75	75	1	1	49.5	0	1	4	4	4	4	10	5	750.00	1000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3482.5
00287	7	4	4	4	CL7B1_T	7	4	4	4	771	1175044	771	75	75	1	1	26.8	0	1	4	4	4	4	5	10	750.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3342.7
00288	7	4	4	4	CL7B1_U	7	4	4	4	771	1275044	771	75	75	1	1	-26.8	0	1	4	4	4	4	10	5	750.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3316.0
00289	7	4	4	4	CL7B1_T	7	4	4	4	772	1175044	772	75	75	1	1	-74.1	0	0	4	4	4	4	5	10	500.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3423.5
00290	7	4	4	4	CL7B1_U	7	4	4	4	772	1275044	772	75	75	1	1	74.1	0	0	4	4	4	4	10	5	500.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3497.6
00291	7	4	4	4	CL7B1_T	7	4	4	4	897	1175044	897	75	75	1	1	40.8	1	1	4	4	4	4	5	10	750.00	3000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3356.7
00292	7	4	4	4	CL7B1_U	7	4	4	4	897	1275044	897	75	75	1	1	-40.8	1	1	4	4	4	4	10	5	750.00	3000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3316.0
00293	7	4	4	4	CL7B1_T	7	4	4	4	1275	1175044	1275	75	75	1	1	26.8	0	1	4	4	4	4	5	10	750.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3342.7
00294	7	4	4	4	CL7B1_U	7	4	4	4	1275	1275044	1275	75	75	1	1	-26.8	1	1	4	4	4	4	10	5	750.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3316.0
00295	7	4	4	4	CL7B1_T	7	4	4	4	1276	1175044	1276	75	75	1	1	-74.1	0	1	4	4	4	4	5	10	500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3423.5
00296	7	4	4	4	CL7B1_U	7	4	4	4	1276	1275044	1276	75	75	1	1	74.1	0	1	4	4	4	4	10	5	500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3497.6
00297	7	4	4	4	CL7B1_T	7	4	4	4	1401	1175044	1401	75	75	1	1	40.8	1	1	4	4	4	4	5	10	750.00	5000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3356.7
00298	7	4	4	4	CL7B1_U	7	4	4	4	1401	1275044	1401	75	75	1	1	-40.8	1	1	4	4	4	4	10	5	750.00	5000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3316.0
00299	7	4	4	4	CL7B1_T	7	4	4	4	1779	1175044	1779	75	75	1	1	-55.1	0	1	4	4	4	4	5	10	750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3365.8
00300	7	4	4	4	CL7B1_U	7	4	4	4	1779	1275044	1779	75	75	1	1	55.1	0	1	4	4	4	4	10	5	750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3420.9
00301	7	4	4	4	CL7B1_T	7	4	4	4	1905	1175044	1905	75	75	1	1	-22.2	0	1	4	4	4	4	5	10	750.00	1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3432.9
00302	7	4	4	4	CL7B1_U	7	4	4	4	1905	1275044	1905	75	75	1	1	22.2	0	1	4	4	4	4	10	5	750.00	1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3455.1
00303	7	4	4	4	CL7B1_T	7	4	4	4	2283	1175044	2283	75	75	1	1	-46.6	0	1	4	4	4	4	5	10	750.00	3000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3334.0
00304	7	4	4	4	CL7B1_U	7	4	4	4	2283	1275044	2283	75	75	1	1	46.6	0	1	4	4	4	4	10	5	750.00	3000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3380.7
00305	7	4	4	4	CL7B1_T	7	4	4	4	2682	1175044	2682	75	75	1	1	-23.2	0	1	3	4	4	4	5	10	750.00	5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	3353.6
00306	7	4	4	4	CL7B1_U	7	4	4	4	2682	1275044	2682	75	75	1	1	23.2	0	1	3	4	4	4	10	5	750.00	5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	3376.8
00307	7	4	4	4	CL7B1_T	7	4	4	4	2787	1175044	2787	75	75	1	1	37.7	1	1	4	4	4	4	5	10	750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3392.2
00308	7	4	4	4	CL7B1_U	7	4	4	4	2787	1275044	2787	75	75	1	1	-37.7	1	1	3													

SEQ CLS ROW
NUM TBL COL

00327	17	4	2	2	CL7B1_F	17	4	2	2	2865	1165122	2865	65	65	1	1	87.6	1	1	3	3	4	3	10	5	500.00	5000.0	3000.0	0.15	0.25	-25.0	-25.0	3297.3
00328	17	4	2	2	CL7B1_E	17	4	2	2	2886	1165022	2886	65	65	1	1	-57.1	0	1	3	3	4	3	5	10	500.00	5000.0	5000.0	0.15	0.25	-25.0	-25.0	3142.9
00329	17	4	2	2	CL7B1_E	17	4	2	2	2984	1165022	2984	65	65	1	1	-39.4	0	1	3	3	4	3	5	10	500.00	5000.0	3000.0	0.15	0.35	-25.0	-30.0	3160.6
00330	17	4	2	2	CL7B1_F	17	4	2	2	2984	1165122	2984	65	65	1	1	82.8	1	1	3	3	4	3	10	5	500.00	5000.0	3000.0	0.15	0.35	-25.0	-30.0	3282.8
00331	17	4	2	2	CL7B1_E	17	4	2	2	2991	1165022	2991	65	65	1	1	-41.8	0	1	3	3	4	3	5	10	500.00	5000.0	3000.0	0.15	0.35	-25.0	-25.0	3175.1
00332	17	4	2	2	CL7B1_F	17	4	2	2	2991	1165122	2991	65	65	1	1	80.5	1	1	3	3	4	3	10	5	500.00	5000.0	3000.0	0.15	0.35	-25.0	-25.0	3297.3
00333	17	4	2	2	CL7B1_F	17	4	2	2	4518	1165122	4518	65	65	1	1	-97.4	0	1	3	3	3	3	10	5	250.00	5000.0	5000.0	0.25	0.35	-25.0	-30.0	3359.8
00334	17	4	3	3	CL7B1_M	17	4	3	3	2732	1171033	2732	71	71	1	1	-33.0	0	1	3	3	4	3	5	10	500.00	5000.0	3000.0	0.15	0.15	-25.0	-30.0	3175.1
00335	17	4	3	3	CL7B1_N	17	4	3	3	2732	1271033	2732	71	71	1	1	33.0	0	1	3	3	3	3	10	5	500.00	5000.0	3000.0	0.15	0.15	-25.0	-30.0	3208.1
00336	17	4	3	3	CL7B1_M	17	4	3	3	2858	1171033	2858	71	71	1	1	-26.9	0	1	3	3	4	3	5	10	500.00	5000.0	3000.0	0.15	0.25	-25.0	-30.0	3175.1
00337	17	4	3	3	CL7B1_M	17	4	3	3	2865	1171033	2865	71	71	1	1	-34.7	0	1	3	3	4	3	5	10	500.00	5000.0	3000.0	0.15	0.25	-25.0	-25.0	3175.1
00338	17	4	3	3	CL7B1_N	17	4	3	3	2865	1271033	2865	71	71	1	1	34.7	0	1	3	3	3	3	10	5	500.00	5000.0	3000.0	0.15	0.25	-25.0	-25.0	3209.7
00339	17	4	3	3	CL7B1_M	17	4	3	3	2984	1171033	2984	71	71	1	1	42.6	0	0	3	3	4	3	5	10	500.00	5000.0	3000.0	0.15	0.35	-25.0	-30.0	3220.1
00340	17	4	3	3	CL7B1_M	17	4	3	3	4517	1171033	4517	71	71	1	1	-63.0	0	1	3	3	3	3	5	10	500.00	5000.0	5000.0	0.25	0.35	-25.0	-30.0	3137.0
00341	17	4	4	4	CL7B1_T	17	4	4	4	2732	1175044	2732	75	75	1	1	-33.0	0	1	3	3	4	3	5	10	500.00	5000.0	3000.0	0.15	0.15	-25.0	-30.0	3175.1
00342	17	4	4	4	CL7B1_T	17	4	4	4	2739	1175044	2739	75	75	1	1	-24.9	0	1	3	3	4	3	5	10	500.00	5000.0	3000.0	0.15	0.15	-25.0	-25.0	3175.1
00343	17	4	4	4	CL7B1_T	17	4	4	4	2858	1175044	2858	75	75	1	1	-41.4	0	1	3	3	4	3	5	10	500.00	5000.0	3000.0	0.15	0.25	-25.0	-30.0	3160.6
00344	17	4	4	4	CL7B1_T	17	4	4	4	2865	1175044	2865	75	75	1	1	-34.7	0	1	3	3	4	3	5	10	500.00	5000.0	3000.0	0.15	0.25	-25.0	-25.0	3175.1
00345	17	4	4	4	CL7B1_T	17	4	4	4	2984	1175044	2984	75	75	1	1	-24.9	0	1	3	3	4	3	5	10	500.00	5000.0	3000.0	0.15	0.35	-25.0	-30.0	3175.1
00346	17	4	4	4	CL7B1_T	17	4	4	4	2991	1175044	2991	75	75	1	1	-56.2	0	1	3	3	4	3	5	10	500.00	5000.0	3000.0	0.15	0.35	-25.0	-25.0	3160.6

PROGRAM LLPRPA - Full Parameter Value Report, part2of3

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SEQ CLS ROW
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00001	7	3	2	2	3700.0	3	3	0	0	0	0	0	1	1	-61	28	-8	2	4665.5	-349.9	0	-18	0	-16	0	50	8	53	-16	62	-18	64	8	72	2
00002	7	3	2	2	3700.0	3	3	0	0	0	0	0	1	1	-61	28	-8	2	4665.5	-349.9	0	-18	0	-16	0	50	8	53	-16	63	-18	64	8	72	2
00003	7	3	2	2	3700.0	3	3	0	0	0	0	0	1	1	-61	28	-8	2	4665.5	-349.9	0	-18	0	-16	0	50	8	53	-16	62	-18	64	8	72	2
00004	7	3	2	2	3700.0	3	3	0	0	0	0	0	1	1	-61	28	-8	2	4665.5	-349.9	0	-18	0	-16	0	50	8	53	-16	63	-18	64	8	72	2
00005	7	4	2	2	3700.0	3	2	0	0	0	0	0	1	0	-61	28	-13	2	991.2	-2181.8	0	-19	0	-16	0	46	9	48	-16	51	-19	64	8	72	2
00006	7	4	2	2	3700.0	3	2	0	0	0	0	0	1	0	-61	28	-11	2	1016.2	-2000.0	0	-19	0	-16	0	48	9	50	-16	54	-19	64	8	72	2
00007	7	4	2	2	3700.0	3	2	0	0	0	0	0	1	0	-61	28	-11	2	1016.2	-2400.0	0	-19	0	-16	0	48	9	50	-16	52	-19	64	8	72	2
00008	7	4	2	2	3700.0	3	3	0	0	0	0	0	1	0	-61	28	-16	2	789.4	-3529.4	0	-19	0	-16	0	43	8	45	-16	47	-19	64	8	72	2
00009	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-15	2	881.7	-2000.0	0	-19	0	-16	0	46	-16	50	-19	54	-19	64	8	72	2
00010	7	4	2	2	3700.0	3	2	0	0	0	0	0	1	0	-61	28	-13	2	991.2	-3428.6	0	-19	0	-16	0	46	9	48	-16	50	-19	64	8	72	2
00011	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-10	2	1368.7	-1500.0	0	-18	0	-16	0	47	8	51	-16	60	-18	64	8	72	2
00012	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-10	2	1368.7	-1500.0	0	-16	0	-16	0	47	8	51	-16	64	8	72	2	88	1
00013	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-10	2	1368.7	-1500.0	0	-18	0	-16	0	47	8	51	-16	60	-18	64	8	72	2
00014	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-10	2	1368.7	-1500.0	0	-16	0	-16	0	47	8	51	-16	64	8	72	2	89	2
00015	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-13	2	1079.7	-2181.8	0	-19	0	-14	0	47	8	48	-14	49	-16	51	-19	64	8
00016	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-11	2	1272.3	-2000.0	0	-19	0	-16	0	48	9	50	-16	55	-19	64	8	72	2
00017	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-11	2	1272.3	-2400.0	0	-19	0	-16	0	48	9	50	-16	54	-19	64	8	72	2
00018	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-15	2	886.6	-2000.0	0	-19	0	-16	0	46	-16	52	-19	56	-19	63	-19	64	8
00019	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	0	-61	28	-14	2	983.3	-3000.0	0	-19	0	-16	0	47	-16	53	-19	64	8	72	2	89	2
00020	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-12	2	1176.0	-3000.0	0	-19	0	-16	0	47	9	49	-16	53	-19	59	-19	64	8
00021	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-11	2	1272.3	-2571.4	0	-19	0	-16	0	48	9	50	-16	53	-19	64	8	72	2
00022	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-15	2	886.6	-3000.0	0	-19	0	-16	0	46	-16	48	-19	57	-19	62	-19	64	8
00023	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-13	2	1079.7	-3428.6	0	-19	0	-16	0	47	8	48	-16	50	-19	64	8	72	2
00024	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-10	2	1368.7	-1500.0	0	-18	0	-16	0	47	8	51	-16	60	-18	64	8	72	2
00025	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-10	2	1368.7	-1500.0	0	-16	0	-16	0	47	8	51	-16	64	8	72	2	86	1
00026	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-10	2	1368.7	-1500.0	0	-18	0	-16	0	47	8	51	-16	60	-18	64	8	72	2
00027	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-10	2	1368.7	-1500.0	0	-16	0	-16	0	47	8	51	-16	64	8	72	2	87	1
00028	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-13	2	1079.7	-2181.8	0	-19	0	-14	0	47	8	48	-14	49	-16	51	-19	64	8
00029	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-11	2	1272.3	-2000.0	0	-19	0	-16	0	48	9	50	-16	55	-19	64	8	72	2
00030	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-11	2	1272.3	-2400.0	0	-19	0	-16	0	48	9	50	-16	54	-19	64	8	72	2
00031	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-15	2	886.6	-2000.0	0	-19	0	-16	0	46	-16	52	-19	56	-19	63	-19	64	8
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00034	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-11	2	1272.3	-2571.4	0	-19	0	-16	0	48	9	50	-16	53	-19	64	8	72	2
00035	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-15	2	886.6	-3000.0	0	-19	0	-16	0	46	-16	48	-19	57	-19	62	-19	64	8
00036	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-13	2	1079.7	-3428.6	0	-19	0	-16	0	47	8	48	-16	50	-19	64	8	72	2
00037	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-13	2	1003.9	-432.0	0	-19	0	-14	0	47	8	48	-14	50	-16	52	-19	64	8
00038	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-16	2	1031.4	-3529.4	0	-19	0	-16	0	43	8	45	-16	47	-19	64	8	72	2
00039	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-15	2	1020.3	-2000.0	0	-19	0	-16	0	46	-16	50	-19	54	-19	63	-19	64	8
00040	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	0	-61	28	-15	2	1020.3	-2000.0	0	-19	0	-16	0	46	-16	50	-19	64	8	72	2	89	2
00041	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	0	-61	28	-14	2	1010.6	-3000.0	0	-19	0	-16	0	47	-16	50	-19	64	8	72	2	89	2
00042	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	0	-61	28	-15	2	1020.3	-3000.0	0	-19	0	-16	0	46	-16	48	-19	54	-19	63	-19	64	8
00043	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-15	2	1020.3	-3000.0	0	-19	0	-16	0	46	-16	48	-19	57	-19	62	-19	64	8
00044	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	0	-61	28	-13	2	1003.9	4500.0	0	19	0	16	0	47	9	48	16	50	19	64	8	72	2
00045	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-14	2	2850.1	-388.8	0	-18	0	-14	0	45	8	47	-14	48	-16	58	-18	64	8
00046	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-13	2	2973.7	-432.0	0	-19	0	-12	0	47	8	48	-12	50	-16	55	-19	64	8
00047	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	0	-61	28	-15	2	2645.1	-2000.0	0	-19	0	-16	0	46	-16	52	-19	64	8	72	2	89	2
00048	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	0	-61	28	-14	2	2850.1	-3000.0	0	-19	0	-16	0	47	-16	54	-19	64	8	72	2	89	2
00049	7	4	2	2	3700.0	3	3	0	0																										

SEQ CLS ROW
NUM TBL COL

00066	7	4	2	2	3700.0	3	3	0	0	0	0	0	1	1	-61	28	-10	2	4106.1	-349.9	0	-18	0	-16	0	48	8	51	-16	59	-18	64	8	72	2
00067	7	4	2	2	3700.0	3	3	0	0	0	0	0	1	0	-61	28	-10	2	4106.1	-349.9	0	-16	0	-16	0	48	8	51	-16	64	8	72	2	86	1
00068	7	4	2	2	3700.0	3	2	0	0	0	0	1	1	0	-61	28	-12	2	3528.0	-4444.4	0	-16	0	-16	0	46	8	47	9	49	-16	64	8	72	2
00069	7	4	2	2	3700.0	3	3	0	0	0	0	1	0	0	-60	29	-13	2	2949.9	-2400.0	0	-19	0	-16	0	46	9	47	-16	53	-19	63	8	71	2
00070	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	0	-61	28	-13	2	3239.1	-2571.4	0	-16	0	-11	0	48	-11	52	-16	64	8	72	2	81	1
00071	7	4	2	2	3700.0	3	2	0	0	0	0	1	0	1	-60	29	-10	2	3817.0	-3600.0	0	-18	0	-16	0	48	9	50	-16	61	-18	63	8	71	2
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00078	7	4	2	2	3700.0	3	2	0	0	0	0	1	0	0	-61	28	-12	2	3528.0	1090.9	0	-16	0	-16	0	47	9	49	-16	64	8	72	2	89	2
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00082	7	4	2	2	3700.0	3	2	0	0	0	0	1	0	1	-60	29	-10	2	3817.0	-2571.4	0	-18	0	-16	0	48	9	50	-16	61	-18	63	8	71	2
00083	7	4	2	2	3700.0	3	3	0	0	1	0	0	0	1	-61	28	-13	2	3239.1	-3000.0	0	-19	0	-16	0	46	9	48	-16	52	-19	57	-19	64	8
00084	7	4	2	2	3700.0	3	2	0	0	0	0	0	0	0	-61	28	-14	2	2949.9	-3000.0	0	-19	0	-16	0	47	-16	54	-19	64	8	72	2	89	2
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00086	7	4	2	2	3700.0	3	3	0	0	0	0	0	1	1	-61	28	-15	2	2659.9	-314.9	0	-19	0	-16	0	44	8	46	-16	52	-19	54	-19	62	-19
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00094	7	4	2	2	3700.0	3	3	0	0	1	0	0	0	1	-61	28	-14	2	2949.9	-3000.0	0	-19	0	-16	0	46	9	47	-16	52	-19	58	-19	62	-19
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00103	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	0	-61	28	-14	2	1004.5	-3000.0	0	-19	0	-16	0	47	-16	50	-19	64	8	72	2	89	2
00104	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-15	2	1012.2	-3000.0	0	-19	0	-16	0	46	-16	48	-19	54	-19	63	-19	64	8
00105	7	4	2	2	3700.0	3	3	0	0	0	0	0	1	1	-61	28	-15	2	1012.2	-3000.0	0	-19	0	-16	0	46	-16	48	-19	57	-19	62	-19	64	8
00106	7	4	2	2	3700.0	3	3	0	1	0	0	0	0	0	-61	28	-13	2	1000.2	4500.0	0	19	0	16	0	47	9	48	16	50	19	64	8	72	2
00107	7	4	2	2	3700.0	3	3	0	0	0	0	1	1	1	-61	28	-14	2	3073.1	-388.8	0	-18	0	-16	0	45	8	47	-16	58	-18	63	-16	64	8
00108	7	4	2	2	3700.0	3	2	0	0	0	0	1	0	1	-61	28	-17	2	2964.8	-388.8	0	-19	0	-16	0	41	9	44	-16	48	-19	51	-19	63	-19
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00110	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	0	-61	28	-14	2	3073.1	-3000.0	0	-19	0	-16	0	47	-16	54	-19	64	8	72	2	89	2
00111	7	4	2	2	3700.0	3	2	0	0	0	0	1	0	1	-61	28	-17	2	2964.8	-432.0	0	-19	0	-16	0	41	9	44	-16	48	-19	51	-19	63	-19
00112	7	4	2	2	3700.0	3	3	0	0	0	0	0	0	0	-61	28	-15	2	3083.6	-3000.0	0	-19	0	-16	0	46	-16	49	-19	64	8	72	2	89	2
00113	7	4	2	2	3700.0	3	2	0	0	0	0	1	0	1	-61	28	-17	2	2964.8	-1000.0	0	-19	0	-16	0	41	9	44	-16	48	-19	51	-19	63	-19
00114	7	4	2	2	3700.0	3	2	0																											

PROGRAM LLPRPA - Full Parameter Value Report, part2of3

Run Date = Mon, 29 Dec 1997

SEQ CLS ROW
NUM TBL COL

00132	7	4	2	2	7500.0	3	2	0	0	0	0	0	0	0	1	-61	28	-15	2	886.6	-2000.0	0	-19	0	-16	0	46	-16	52	-19	56	-19	63	-19	64	8	
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00134	7	4	2	2	7500.0	3	2	0	0	0	0	0	0	1	0	-61	28	-13	2	1079.7	-2000.0	0	-19	0	-16	0	48	-16	51	-19	57	-19	63	-19	64	8	
00135	7	4	2	2	7500.0	3	2	0	0	0	0	0	0	1	0	-61	28	-15	2	886.6	-3000.0	0	-19	0	-16	0	46	-16	48	-19	57	-19	62	-19	64	8	
00136	7	4	2	2	7500.0	3	2	0	0	0	0	0	0	1	0	-61	28	-11	2	1272.3	-2000.0	0	-19	0	-16	0	50	-16	55	-19	59	-19	64	8	72	2	
00137	7	4	2	2	7500.0	3	2	0	0	0	0	0	1	0	0	-61	28	-11	2	1272.3	-2000.0	0	-19	0	-16	0	48	9	50	-16	55	-19	64	8	72	2	
00138	7	4	2	2	7500.0	3	2	0	0	0	0	0	0	1	0	-61	28	-15	2	886.6	-2000.0	0	-19	0	-16	0	46	-16	52	-19	56	-19	63	-19	64	8	
00139	7	4	2	2	7500.0	3	3	0	0	0	0	0	0	0	0	-61	28	-13	2	1079.7	-3000.0	0	-19	0	-16	0	47	9	48	-16	53	-19	64	8	72	2	
00140	7	4	2	2	7500.0	3	2	0	0	0	0	0	0	1	0	-61	28	-13	2	1079.7	-2000.0	0	-19	0	-16	0	48	-16	51	-19	57	-19	63	-19	64	8	
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00142	7	4	2	2	7500.0	3	3	0	0	0	0	0	0	1	0	-61	28	-13	2	1003.8	-432.0	0	-19	0	-14	0	47	8	48	-14	50	-16	52	-19	64	8	
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00147	7	4	2	2	7500.0	3	3	0	0	0	0	0	0	1	0	-61	28	-15	2	1020.3	-3000.0	0	-19	0	-16	0	46	-16	48	-19	57	-19	62	-19	64	8	
00148	7	4	2	2	7500.0	3	3	0	0	0	0	0	0	1	1	-61	28	-14	2	2850.1	-388.8	0	-18	0	-16	0	45	8	47	-16	58	-18	64	8	72	2	
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00153	7	4	2	2	7500.0	3	2	0	0	0	0	0	1	0	0	-61	28	-13	2	3239.1	0.0	0	-16	0	-16	0	45	9	48	-16	64	8	72	2	85	1	
00154	7	4	2	2	7500.0	3	3	0	0	0	0	0	0	1	1	-61	28	-10	2	4106.1	-283.4	0	-18	0	-16	0	46	8	51	-16	59	-18	64	8	72	2	
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00157	7	4	2	2	7500.0	3	2	0	0	0	0	0	1	0	0	-61	28	-13	2	3239.1	0.0	0	-16	0	-16	0	45	9	48	-16	64	8	72	2	87	1	
00158	7	4	2	2	7500.0	3	3	0	0	0	0	0	0	1	1	-61	28	-10	2	4106.1	-283.4	0	-18	0	-16	0	46	8	51	-16	59	-18	64	8	72	2	
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00163	7	4	2	2	7500.0	3	2	0	0	0	0	0	1	0	0	-60	29	-12	2	3239.1	0.0	0	-16	0	-16	0	45	9	48	-16	63	8	71	2	87	1	
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00165	7	4	2	2	7500.0	3	2	0	0	0	0	0	1	1	0	-61	28	-12	2	3528.0	-3871.0	0	-16	0	-16	0	46	8	47	9	49	-16	64	8	72	2	
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00179	7	4	2																																		

SEQ CLS ROW
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00199	7 4 2 2	7500.0 3 3 0 0 0 0 0 0 0 0	-61 28 -15	2 4408.6 -3000.0 0 -19	0 -16 0	46 -16	52 -19	64 8	72 2	88 1
00200	7 4 2 2	7500.0 3 3 0 0 0 0 0 0 1 0	-61 28 -15	2 4408.6 -388.8 0 -19	0 -14 0	44 8	46 -14	47 -16	53 -19	64 8
00201	7 4 3 3	3700.0 3 2 0 0 0 0 0 0 1	-61 28 -15	2 881.7 -2000.0 0 -19	0 -16 0	46 -16	49 -19	55 -19	56 -19	64 8
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00203	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-61 28 -11	2 1272.3 -1500.0 0 -16	0 -16 0	47 9	50 -16	64 8	72 2	89 1
00204	7 4 3 3	3700.0 3 1 0 0 0 0 0 0 0	-61 28 -12	2 1200.0 -1658.1 0 0	19 0 16	49 16	53 19	64 8	72 2	89 1
00205	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-61 28 -11	2 1272.3 -1500.0 0 -16	0 -16 0	47 9	50 -16	64 8	72 2	89 2
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00208	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-61 28 -14	2 349.9 -2457.4 0 0	19 0 14	47 14	48 16	51 19	64 8	72 2
00209	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-61 28 -12	2 1176.0 -3000.0 0 -19	0 -16 0	47 9	49 -16	53 -19	64 8	72 2
00210	7 4 3 3	3700.0 3 1 0 0 0 0 0 0 0	-61 28 -13	2 314.9 -2960.0 0 0	19 0 16	48 16	53 19	64 8	72 2	89 1
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00212	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-61 28 -11	2 1272.3 -1500.0 0 -16	0 -16 0	47 9	50 -16	64 8	72 2	87 1
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00219	7 4 3 3	3700.0 3 1 0 0 0 0 0 0 0	-61 28 -13	2 314.9 -2960.0 0 0	19 0 16	48 16	53 19	64 8	72 2	87 1
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00223	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-61 28 -11	2 3817.0 -388.8 0 -16	0 -16 0	48 9	50 -16	64 8	72 2	87 1
00224	7 4 3 3	3700.0 3 1 0 0 0 0 0 0 0	-61 28 -12	2 2526.3 -691.3 0 0	19 0 14	49 14	50 16	53 19	64 8	72 2
00225	7 4 3 3	3700.0 3 2 0 0 0 0 0 0 0	-61 28 -15	2 2659.9 -2400.0 0 -19	0 -12 0	46 -12	49 -16	53 -19	64 8	72 2
00226	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-61 28 -15	2 1714.3 -2659.9 0 0	19 0 11	46 11	49 14	50 16	53 19	64 8
00227	7 4 3 3	3700.0 3 2 0 0 0 0 0 0 0	-61 28 -13	2 3239.1 -2000.0 0 -16	0 -11 0	48 -11	52 -16	64 8	72 2	82 1
00228	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-61 28 -11	2 3555.6 -2368.3 0 0	16 0 12	50 12	51 16	64 8	72 2	82 1
00229	7 4 3 3	3700.0 3 2 0 0 0 0 0 0 0	-60 29 -14	2 2659.9 -2000.0 0 -19	0 -11 0	46 -11	48 -12	49 -16	53 -19	63 8
00230	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-60 29 -13	2 2181.8 -2457.4 0 0	19 0 11	47 11	49 16	53 19	63 8	71 2
00231	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-61 28 -14	2 2949.9 -3000.0 0 -19	0 -16 0	46 9	47 -16	50 -19	64 8	72 2
00232	7 4 3 3	3700.0 3 1 0 0 0 0 0 0 0	-61 28 -15	2 1714.3 -1952.3 0 0	19 0 13	46 13	47 16	51 19	64 8	72 2
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00234	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-61 28 -14	2 2181.8 -3440.3 0 0	19 0 12	47 12	48 16	53 19	64 8	72 2
00235	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-61 28 -15	2 1012.2 -2000.0 0 -19	0 -16 0	46 -16	49 -19	64 8	72 2	89 2
00236	7 4 3 3	3700.0 3 1 0 0 0 0 0 0 0	-61 28 -16	2 1000.0 -1454.8 0 0	19 0 16	45 16	53 19	64 8	72 2	89 2
00237	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-60 29 -12	2 4956.1 -2000.0 0 -19	0 -16 0	45 9	48 -16	51 -19	63 8	71 2
00238	7 4 3 3	3700.0 3 1 0 0 0 0 0 0 0	-60 29 -13	2 3200.0 -1474.4 0 0	19 0 14	46 9	47 14	48 16	51 19	63 8
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00241	7 4 3 3	3700.0 3 3 0 0 0 0 0 0 0	-61 28 -13	2 4956.1 -3000.0 0 -19	0 -16 0	47 9	48 -16	51 -19	64 8	72 2
00242	7 4 3 3	3700.0 3 1 0 0 0 0 0 0 0	-61 28 -14	2 3200.0 -2457.4 0 0	19 0 11	47 11	48 12	49 16	53 19	64 8
00243	7 4 3 3	7500.0 3 2 0 0 0 0 0 0 1	-61 28 -15	2 881.7 -2000.0 0 -19	0 -16 0	46 -16	49 -19	55 -19	56 -19	64 8
00244	7 4 3 3	7500.0 3 3 0 0 0 0 0 0 1	-61 28 -15	2 432.0 -1952.3 0 0	19 0 16	45 9	46 16	52 19	55 19	56 19
00245	7 4 3 3	7500.0 3 2 0 0 0 0 0 0 0	-61 28 -12	2 1010.7 -3000.0 0 -19	0 -16 0	47 9	49 -16	51 -19	64 8	72 2
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00248	7 4 3 3	7500.0 3 3 0 0 0 0 0 0 0	-61 28 -11	2 1272.3 -2000.0 0 -19	0 -16 0	50 -16	52 -19	64 8	72 2	87 1
00249	7 4 3 3	7500.0 3 1 0 0 0 0 0 0 0	-61 28 -13	2 314.9 -1776.0 0 0	16 0 16	48 16	64 8	72 2	87 1	89 1
00250	7 4 3 3	7500.0 3 2 0 0 0 0 0 0 0	-61 28 -15	2 886.6 -2000.0 0 -19	0 -16 0	46 -16	52 -19	64 8	72 2	89 2
00251	7 4 3 3	7500.0 3 3 0 0 0 0 0 0 0	-61 28 -15	2 388.8 -1952.3 0 0	19 0 14	46 14	48 16	51 19	64 8	72 2
00252	7 4 3 3	7500.0 3 3 0 0 0 0 0 0 0	-61 28 -13	2 1079.7 -3000.0 0 -19	0 -16 0	47 9	48 -16	51 -19	64 8	72 2
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00254	7 4 3 3	7500.0 3 2 0 0 0 0 0 0 0	-61 28 -13	2 1079.7 -2000.0 0 -19	0 -16 0	48 -16	51 -19	64 8	72 2	89 2
00255	7 4 3 3	7500.0 3 3 0 0 0 0 0 0 0	-61 28 -13	2 314.9 -2761.8 0 0	19 0 16	45 9	48 16	51 19	64 8	72 2
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00257	7 4 3 3	7500.0 3 3 0 0 0 0 0 0 1	-61 28 -13	2 314.9 -1776.0 0 0	19 0 16	45 9	48 16	51 19	55 19	56 19
00258	7 4 3 3	7500.0 3 3 0 0 0 0 0 0 0	-61 28 -11	2 1272.3 -2000.0 0 -19	0 -16 0	50 -16	52 -19	64 8	72 2	86 1
00259	7 4 3 3	7500.0 3 1 0 0 0 0 0 0 0	-61 28 -13	2 314.9 -1776.0 0 0	16 0 16	48 16	64 8	72 2	86 1	89 1
00260	7 4 3 3	7500.0 3 2 0 0 0 0 0 0 0	-61 28 -15	2 886.6 -2000.0 0 -19	0 -16 0	46 -16	52 -19	64 8	72 2	89 1
00261	7 4 3 3	7500.0 3 3 0 0 0 0 0 0 0	-61 28 -15	2 388.8 -1952.3 0 0	19 0 14	46 14	48 16	51 19	64 8	72 2
00262	7 4 3 3	7500.0 3 3 0 0 0 0 0 0 0	-61 28 -13	2 1079.7 -3000.0 0 -19	0 -16 0	47 9	48 -16	51 -19	64 8	72 2

F-20

SEQ CLS ROW
NUM TBL COL

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00265	7 4 3 3	7500.0	3 3 0 0 0 0 0 0 0 0	-61	28	-13	2	314.9	-2761.8	0 0	19 0 16	45 9	48 16	51 19	64 8	72 2
00266	7 4 3 3	7500.0	3 3 0 0 0 0 0 0 0 0	-61	28	-14	2	349.9	-3440.3	0 0	19 0 16	45 9	47 16	50 19	64 8	72 2
00267	7 4 3 3	7500.0	3 2 0 0 0 0 0 0 0 0	-61	28	-12	2	3528.0	-2526.3	0 -19	0 -14 0	47 9	49 -14	50 -16	52 -19	64 8
00268	7 4 3 3	7500.0	3 3 0 0 0 0 0 0 0 0	-61	28	-12	2	2526.3	-3528.0	0 0	19 0 14	47 9	49 -14	50 16	52 19	64 8
00269	7 4 3 3	7500.0	3 2 0 0 0 0 0 0 0 0	-61	28	-13	2	3239.1	-2000.0	0 -16	0 -11 0	48 -11	52 -16	64 8	72 2	82 1
00270	7 4 3 3	7500.0	3 3 0 0 0 0 0 0 0 0	-61	28	-11	2	3555.6	-2368.3	0 0	16 0 14	50 14	51 16	64 8	72 2	82 1
00271	7 4 3 3	7500.0	3 3 0 0 0 0 0 0 0 0	-60	29	-13	2	2949.9	-388.8	0 -19	0 -12 0	45 9	47 -12	48 -16	51 -19	63 8
00272	7 4 3 3	7500.0	3 1 0 0 0 0 0 0 0 0	-60	29	-14	2	1714.3	-1171.4	0 0	19 0 13	46 13	47 16	51 19	63 8	71 2
00273	7 4 3 3	7500.0	3 3 0 0 0 0 0 0 0 1	-61	28	-15	2	2659.9	-314.9	0 -19	0 -16 0	42 9	46 -16	51 -19	55 -19	56 -19
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00275	7 4 3 3	7500.0	3 2 0 0 0 0 0 0 0 0	-60	29	-14	2	2659.9	-2000.0	0 -19	0 -12 0	46 -12	48 -13	49 -16	52 -19	63 8
00276	7 4 3 3	7500.0	3 3 0 0 0 0 0 0 0 0	-60	29	-13	2	2181.8	-2457.4	0 0	19 0 12	47 12	49 16	51 19	63 8	71 2
00277	7 4 3 3	7500.0	3 2 0 0 0 0 0 0 0 0	-61	28	-12	2	3528.0	-3000.0	0 -19	0 -16 0	47 9	49 -16	51 -19	64 8	72 2
00278	7 4 3 3	7500.0	3 3 0 0 0 0 0 0 0 0	-61	28	-12	2	2526.3	-3456.6	0 0	19 0 14	47 9	49 14	50 16	52 19	64 8
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00290	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-61	28	-14	2	1220.7	-2457.4	0 0	19 0 14	47 14	48 16	53 19	64 8	72 2
00291	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 0	-61	28	-14	2	983.3	-3657.8	0 -19	0 -16 0	46 9	47 -16	53 -19	64 8	72 2
00292	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-61	28	-15	2	1043.3	-2733.2	0 0	19 0 16	46 16	53 19	64 8	72 2	89 2
00293	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 0	-61	28	-14	2	983.3	-2259.3	0 -19	0 -16 0	46 9	47 -16	52 -19	64 8	72 2
00294	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-61	28	-15	2	1043.3	-1952.3	0 0	19 0 16	46 16	53 19	64 8	72 2	88 1
00295	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 0	-61	28	-13	2	1079.7	-3109.9	0 -19	0 -16 0	47 9	48 -16	53 -19	64 8	72 2
00296	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-61	28	-14	2	1220.7	-2457.4	0 0	19 0 14	47 14	48 16	53 19	64 8	72 2
00297	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 0	-61	28	-14	2	983.3	-3657.8	0 -19	0 -16 0	46 9	47 -16	53 -19	64 8	72 2
00298	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-61	28	-15	2	1043.3	-2733.2	0 0	19 0 16	46 16	53 19	64 8	72 2	88 1
00299	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 0	-61	28	-15	2	1020.3	-1572.4	0 -19	0 -16 0	46 -16	52 -19	64 8	72 2	89 2
00300	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-61	28	-16	2	1032.7	-1454.8	0 0	19 0 16	45 16	53 19	64 8	72 2	89 2
00301	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 1	-61	28	-15	2	1020.3	-2753.6	0 -18	0 -16 0	45 9	46 -16	55 -18	56 -16	64 8
00302	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-61	28	-16	2	1032.7	-2036.7	0 0	19 0 16	45 16	50 19	64 8	72 2	89 2
00303	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 0	-61	28	-15	2	2645.1	-1572.4	0 -19	0 -14 0	46 -14	47 -16	53 -19	64 8	72 2
00304	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-61	28	-16	2	2219.3	-1454.8	0 0	16 0 13	45 13	46 16	64 8	72 2	88 1
00305	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 0	-61	28	-14	2	2949.9	-1369.5	0 -19	0 -16 0	46 9	47 -16	51 -19	64 8	72 2
00306	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-61	28	-15	2	2570.2	-1171.4	0 0	19 0 16	46 16	50 19	64 8	72 2	89 2
00307	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 0	-60	29	-13	2	2949.9	-2259.3	0 -19	0 -12 0	47 -12	48 -16	53 -19	63 8	71 2
00308	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-60	29	-14	2	2570.2	-1952.3	0 0	19 0 12	46 12	48 16	51 19	63 8	71 2
00309	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 0	-60	29	-13	2	2949.9	-3657.8	0 -19	0 -16 0	46 9	47 -16	53 -19	63 8	71 2
00310	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-60	29	-14	2	2570.2	-2733.2	0 0	19 0 12	46 12	48 16	51 19	63 8	71 2
00311	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 0	-61	28	-15	2	1012.2	-1572.4	0 -19	0 -16 0	46 -16	52 -19	64 8	72 2	89 2
00312	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-61	28	-16	2	1050.0	-1454.8	0 0	19 0 16	45 16	53 19	64 8	72 2	89 2
00313	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 1	-61	28	-15	2	1012.2	-2753.6	0 -18	0 -16 0	45 9	46 -16	55 -18	56 -16	64 8
00314	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-61	28	-16	2	1050.0	-2036.7	0 0	19 0 16	45 16	50 19	64 8	72 2	89 2
00315	7 4 4 4	3700.0	3 3 0 0 0 0 0 0 0 0	-61	28	-15	2	4408.6	-1572.4	0 -19	0 -11 0	46 -11	47 -16	53 -19	64 8	72 2
00316	7 4 4 4	3700.0	3 1 0 0 0 0 0 0 0 0	-61	28	-16	2	3916.8	-1454.8	0 0	19 0 16	45 16	53 19	64 8	72 2	88 1
00317	7 4 4 4	3700.0	3 2 0 0 0 0 0 0 0 1	-61	28	-16	2	3947.2	3138.7	0 -19	0 -16 0	45 -16	48 -19	49 -19	57 -19	64 8
00318	7 4 4 4	7500.0	3 3 0 0 0 0 0 0 0 0	-61	28	-15	2	881.7	-2753.6	0 -19	0 -16 0	45 9	46 -16	52 -19	64 8	72 2
00319	7 4 4 4	7500.0	3 1 0 0 0 0 0 0 0 0	-61	28	-16	2	654.1	-2036.7	0 0	19 0 16	45 16	50 19	64 8	72 2	89 2
00320	17 4 2 2	3700.0	3 2 0 0 0 0 0 0 0 1	-61	28	-16	2	2368.3	2571.4	1 -19	0 -18 0	45 -18	54 -19	61 -19	64 8	72 2
00321	17 4 2 2	3700.0	3 3 0 0 0 0 0 0 1 0	-61	28	-15	2	2659.9	2666.7	1 -19	0 -18 0	45 9	46 -18	54 -19	63 -19	64 8
00322	17 4 2 2	3700.0	3 2 0 0 0 0 0 0 0 1	-61	28	-16	2	2368.3	2400.0	0 -19	0 -16 0	45 -16	46 -18	52 -19	62 -19	64 8
00323	17 4 2 2	3700.0	3 3 0 0 0 0 0 0 1 0	-61	28	-15	2	2659.9	2400.0	1 -19	0 -18 0	45 9	46 -18	52 -19	63 -19	64 8
00324	17 4 2 2	3700.0	3 2 0 0 0 0 0 0 0 1	-61	28	-16	2	2368.3	2769.2	1 -19	0 -18 0	45 -18	54 -19	61 -19	64 8	72 2
00325	17 4 2 2	3700.0	3 3 0 0 0 0 0 0 1 0	-61	28	-15	2	2659.9	2823.5	1 -19	0 -18 0	45 9	46 -18	54 -19	63 -19	64 8
00326	17 4 2 2	3700.0	3 2 0 0 0 0 0 0 0 1	-61	28	-16	2	2368.3	2400.0	1 -19	0 -18 0	45 -18	54 -19	61 -19	64 8	72 2

F-21

SEQ CLS ROW
NUM TBL COL

00327	17	4	2	2	3700.0	3	3	0	0	0	0	0	1	0	1	-61	28	-15	2	2659.9	2571.4	1	-19	0	-18	0	45	9	46	-18	54	-19	63	-19	64	8
00328	17	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	4500.0	1	-19	0	-18	0	45	-18	52	-19	61	-19	64	8	72	1	
00329	17	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	2823.5	1	-19	0	-18	0	45	-18	53	-19	62	-19	64	8	72	2	
00330	17	4	2	2	3700.0	3	3	0	0	0	0	0	1	0	1	-61	28	-15	2	2659.9	2857.1	1	-19	0	-18	0	45	9	46	-18	53	-19	63	-19	64	8
00331	17	4	2	2	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	2400.0	1	-19	0	-18	0	45	-18	54	-19	61	-19	64	8	72	2	
00332	17	4	2	2	3700.0	3	3	0	0	0	0	0	1	0	1	-61	28	-15	2	2659.9	2571.4	1	-19	0	-18	0	45	9	46	-18	54	-19	63	-19	64	8
00333	17	4	2	2	3700.0	3	3	0	0	0	0	0	1	0	1	-61	28	-15	2	4408.6	4736.8	1	-19	0	-18	0	45	9	46	-18	55	-19	60	-19	64	8
00334	17	4	3	3	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	2571.4	1	-19	0	-18	0	45	-18	54	-19	57	-19	64	8	72	2	
00335	17	4	3	3	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-16	2	1714.3	3048.7	1	0	18	0	18	45	18	57	16	64	8	72	2	89	2	
00336	17	4	3	3	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	2769.2	1	-19	0	-18	0	45	-18	54	-19	57	-19	64	8	72	2	
00337	17	4	3	3	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	2400.0	1	-19	0	-18	0	45	-18	54	-19	57	-19	64	8	72	2	
00338	17	4	3	3	3700.0	3	3	0	0	0	0	0	0	1	-61	28	-16	2	1714.3	3058.9	1	0	18	0	18	45	18	57	16	64	8	72	2	89	2	
00339	17	4	3	3	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	2842.1	1	-19	0	-18	0	45	-18	54	-19	56	16	64	8	72	2	
00340	17	4	3	3	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	3947.2	5217.4	1	-19	0	-18	0	45	-18	48	-19	57	-19	64	8	72	1	
00341	17	4	4	4	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	3000.5	1	-19	0	-18	0	45	-18	54	-19	57	-19	64	8	72	2	
00342	17	4	4	4	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	2219.3	1	-19	0	-18	0	45	-18	54	-19	57	-19	64	8	72	2	
00343	17	4	4	4	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	3027.2	1	-19	0	-14	0	45	-14	46	-18	53	-19	57	-19	64	8	
00344	17	4	4	4	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	3023.6	1	-19	0	-18	0	45	-18	54	-19	57	-19	64	8	72	2	
00345	17	4	4	4	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	3009.9	1	-19	0	-18	0	45	-18	54	-19	57	-19	64	8	72	2	
00346	17	4	4	4	3700.0	3	2	0	0	0	0	0	0	1	-61	28	-16	2	2368.3	3138.7	1	-19	0	-14	0	45	-14	46	-18	53	-19	57	-19	64	8	

PROGRAM LLPRPA - Full Parameter Value Report, part3of3

Run Date = Mon, 29 Dec 1997

SEQ CLS ROW
NUM TBL COL

00001	7 3 2 2	79	1	89	1	0	0	0	0	0	0	-316.73	-58.99	3527.98	-480.00	51.00	-545.50	-352.14	-228.92	4665.49	5042.20
00002	7 3 2 2	79	1	89	1	0	0	0	0	0	0	-316.73	-58.99	3527.98	-480.00	51.00	-545.50	-352.14	-228.92	4665.49	5042.20
00003	7 3 2 2	79	1	89	1	0	0	0	0	0	0	-316.73	-58.99	3527.98	-480.00	51.00	-545.50	-352.14	-228.92	4665.49	5042.20
00004	7 3 2 2	80	1	89	1	0	0	0	0	0	0	-316.73	-58.99	3527.98	-480.00	51.00	-545.50	-352.14	-228.92	4665.49	5042.20
00005	7 4 2 2	89	2	0	0	0	0	0	0	0	0	-197.25	496.07	789.44-1714.29		47.00	-261.36	-236.98	-63.13	881.72	1005.77
00006	7 4 2 2	89	2	0	0	0	0	0	0	0	0	-138.09	318.80	950.05-2000.00		49.00	-559.60	-134.20	-129.92	991.23	1000.50
00007	7 4 2 2	89	2	0	0	0	0	0	0	0	0	59.75	119.09	950.05-2000.00		49.00	-360.43	13.45	102.56	991.23	1000.50
00008	7 4 2 2	89	2	0	0	0	0	0	0	0	0	-8.68	-1126.09	491.47-4285.71		43.00	-277.94	428.82	245.08	789.44	1016.23
00009	7 4 2 2	89	2	0	0	0	0	0	0	0	0	138.75	155.58	789.44-2000.00		47.00	-389.96	61.56	61.56	881.72	1014.49
00010	7 4 2 2	89	2	0	0	0	0	0	0	0	0	-225.79	521.98	789.44-2000.00		47.00	-285.27	-261.72	85.02	881.72	1005.77
00011	7 4 2 2	87	1	89	1	0	0	0	0	0	0	-113.96	-58.46	886.65-1500.00		49.00	-300.55	-88.35	-6.95	1368.70	1851.18
00012	7 4 2 2	89	1	0	0	0	0	0	0	0	0	-113.96	-58.46	886.65-1500.00		49.00	-300.55	-88.35	-6.95	1368.70	1851.18
00013	7 4 2 2	89	1	89	1	0	0	0	0	0	0	-113.96	-58.46	886.65-1500.00		49.00	-300.55	-88.35	-6.95	1368.70	1851.18
00014	7 4 2 2	0	0	0	0	0	0	0	0	0	0	-113.96	-58.46	886.65-1500.00		49.00	-300.55	-88.35	-6.95	1368.70	1851.18
00015	7 4 2 2	72	2	89	1	89	1	0	0	0	0	-321.38	-759.87	886.65-2181.82		46.00	-406.58	-234.49	-212.43	1079.69	1561.62
00016	7 4 2 2	88	1	89	1	0	0	0	0	0	0	-295.25	471.63	983.30-2000.00		49.00	-722.42	-282.80	-243.17	1079.69	1754.66
00017	7 4 2 2	89	2	0	0	0	0	0	0	0	0	-98.15	272.02	983.30-2000.00		49.00	-523.55	-85.23	0.00	1079.69	1754.66
00018	7 4 2 2	72	2	89	1	89	1	0	0	0	0	-31.37	326.73	789.44-2000.00		47.00	-561.75	-66.42	-66.42	886.65	1368.70
00019	7 4 2 2	0	0	0	0	0	0	0	0	0	0	-52.98	274.16	886.65-3000.00		48.00	-737.36	-47.78	-47.78	983.30	1465.14
00020	7 4 2 2	72	2	88	1	89	1	0	0	0	0	-52.98	274.16	886.65-3000.00		48.00	-737.36	-47.78	-7.00	983.30	1658.13
00021	7 4 2 2	85	1	89	1	0	0	0	0	0	0	-416.76	587.55	983.30-2400.00		49.00	-536.90	-398.08	-310.40	1079.69	1754.66
00022	7 4 2 2	72	2	89	2	0	0	0	0	0	0	95.88	184.76	789.44-3000.00		47.00	-657.33	19.05	19.05	886.65	1368.70
00023	7 4 2 2	89	2	0	0	0	0	0	0	0	0	-280.34	510.04	886.65-2400.00		47.00	-430.83	-284.50	0.00	983.30	1561.62
00024	7 4 2 2	85	1	89	1	0	0	0	0	0	0	-113.96	-58.46	886.65-1500.00		49.00	-300.55	-88.35	-6.95	1368.70	1851.18
00025	7 4 2 2	89	1	0	0	0	0	0	0	0	0	-113.96	-58.46	886.65-1500.00		49.00	-300.55	-88.35	-6.95	1368.70	1851.18
00026	7 4 2 2	86	1	89	1	0	0	0	0	0	0	-113.96	-58.46	886.65-1500.00		49.00	-300.55	-88.35	-6.95	1368.70	1851.18
00027	7 4 2 2	89	1	0	0	0	0	0	0	0	0	-113.96	-58.46	886.65-1500.00		49.00	-300.55	-88.35	-6.95	1368.70	1851.18
00028	7 4 2 2	72	2	87	1	89	1	0	0	0	0	-321.38	-759.87	886.65-2181.82		46.00	-406.58	-234.49	-212.43	1079.69	1561.62
00029	7 4 2 2	86	1	89	1	0	0	0	0	0	0	-295.25	471.63	983.30-2000.00		49.00	-722.42	-282.80	-243.17	1079.69	1754.66
00030	7 4 2 2	88	1	89	1	0	0	0	0	0	0	-98.15	272.02	983.30-2000.00		49.00	-523.55	-85.23	0.00	1079.69	1754.66
00031	7 4 2 2	72	2	88	1	89	1	0	0	0	0	-31.37	326.73	789.44-2000.00		47.00	-561.75	-66.42	-66.42	886.65	1368.70
00032	7 4 2 2	89	1	0	0	0	0	0	0	0	0	-52.98	274.16	886.65-3000.00		48.00	-737.36	-47.78	-47.78	983.30	1465.14
00033	7 4 2 2	72	2	87	1	89	1	0	0	0	0	-52.98	274.16	886.65-3000.00		48.00	-737.36	-47.78	-7.00	983.30	1658.13
00034	7 4 2 2	84	1	89	1	0	0	0	0	0	0	-416.76	587.55	983.30-2400.00		49.00	-536.90	-398.08	-310.40	1079.69	1754.66
00035	7 4 2 2	72	2	88	1	89	1	0	0	0	0	95.88	184.76	789.44-3000.00		47.00	-657.33	19.05	19.05	886.65	1368.70
00036	7 4 2 2	88	1	89	1	0	0	0	0	0	0	-280.34	510.04	886.65-2400.00		47.00	-430.83	-284.50	0.00	983.30	1561.62
00037	7 4 2 2	72	2	89	2	0	0	0	0	0	0	-305.62	-81.42	1020.32-480.00		46.00	-394.69	-239.26	-251.47	1003.86	999.02
00038	7 4 2 2	89	2	0	0	0	0	0	0	0	0	28.12	-1182.90	1002.03-4285.71		43.00	-133.87	544.63	303.95	1031.40	998.46
00039	7 4 2 2	72	2	89	2	0	0	0	0	0	0	0	0	1031.40-2000.00		45.00	-326.76	94.45	94.45	1020.32	998.17
00040	7 4 2 2	0	0	0	0	0	0	0	0	0	0	0	0	1031.40-2000.00		45.00	-326.76	94.45	94.45	1020.32	998.17
00041	7 4 2 2	0	0	0	0	0	0	0	0	0	0	0	0	1020.32-3000.00		46.00	-532.09	66.17	66.17	1010.59	998.51
00042	7 4 2 2	72	2	89	2	0	0	0	0	0	0	0	0	1031.40-3000.00		45.00	-422.44	221.07	221.07	1020.32	998.17
00043	7 4 2 2	72	2	89	2	0	0	0	0	0	0	0	0	1031.40-3000.00		45.00	-422.44	221.07	221.07	1020.32	998.17
00044	7 4 2 2	89	2	0	0	0	0	0	0	0	0	12.35	189.65	1020.32-4000.00		47.00	228.29	-2.27	-127.98	1003.86	999.02
00045	7 4 2 2	72	2	88	1	89	1	0	0	0	0	-267.28	-147.34	2073.97-480.00		45.00	-448.84	-190.34	-87.17	2850.13	3030.39
00046	7 4 2 2	72	2	89	2	0	0	0	0	0	0	-426.96	-10.76	2645.14-480.00		46.00	-488.01	-278.59	-260.86	2973.69	3017.31
00047	7 4 2 2	0	0	0	0	0	0	0	0	0	0	-21.92	280.46	2368.31-2000.00		45.00	-497.80	0.00	0.00	2645.14	3043.45
00048	7 4 2 2	0	0	0	0	0	0	0	0	0	0	1.17	167.72	2645.14-3000.00		46.00	-623.84	1.17	1.17	2850.13	3030.39
00049	7 4 2 2	0	0	0	0	0	0	0	0	0	0	104.85	138.68	2368.31-3000.00		45.00	-593.36	104.85	104.85	2645.14	3043.45
00050	7 4 2 2	89	1	0	0	0	0	0	0	0	0	-322.67	659.94	2073.97-1200.00		47.00	-657.32	-274.70	-56.06	2368.31	4665.49
00051	7 4 2 2	88	1	89	1	0	0	0	0	0	0	-428.26	248.25	2368.31-388.80		47.00	-366.65	-298.91	-174.38	2659.93	4665.49
00052	7 4 2 2	83	1	89	1	0	0	0	0	0	0	-450.29	655.11	2659.93-600.00		49.00	-612.86	-395.40	-206.18	2949.89	4979.67
00053	7 4 2 2	84	1	89	1	0	0	0	0	0	0	-296.20	563.16	2368.31-0.00		48.00	-336.54	-257.73	-52.83	2659.93	4862.54
00054	7 4 2 2	82	1	89	1	0	0	0	0	0	0	-214.09	113.16	2659.93-432.00		49.00	-388.28	-326.18	-111.94	4106.11	5033.94
00055	7 4 2 2	83	1	89	1	0	0	0	0	0	0	-214.09	113.16	2659.93-432.00		49.00	-388.28	-326.18	-111.94	4106.11	5033.94
00056	7 4 2 2	89	1	0	0	0	0	0	0	0	0	-322.67	659.94	2073.97-1200.00		47.00	-657.32	-274.70	-56.06	2368.31	4665.49
00057	7 4 2 2	89	2	0	0	0	0	0	0	0	0	-428.26	248.25	2368.31-388.80		47.00	-366.65	-298.91	-174.38	2659.93	4665.49
00058	7 4 2 2	84	1	89	1	0	0	0	0	0	0	-450.29	655.11	2659.93-600.00		49.00	-612.86	-395.40	-206.18	2949.89	4979.67
00059	7 4 2 2	85	1	89	1	0	0	0	0	0	0	-296.20	563.16	2368.31-0.00		48.00	-336.54	-257.73	-52.83	2659.93	4862.54
00060	7 4 2 2	82	1	89	1	0	0	0	0	0	0	-214.09	113.16	2659.93-432.00		49.00	-388.28	-326.18	-111.94	4106.11	5033.94
00061	7 4 2 2	84	1	89	1	0	0	0	0	0	0	-214.09	113.16	2659.93-432.00		49.00	-388.28	-326.18	-111.94	4106.11	5033.94
00062	7 4 2 2	64	8	72	2	89	2	0	0	0	0	-97.6									

SEQ NUM	CLS TBL	ROW COL																						
00066	7	4	2	2	84	1	89	1	0	0	0	0	0	0	-125.17	-108.44	2949.89	-480.00	49.00	-382.49	-163.89	-13.06	4106.11	5033.94
00067	7	4	2	2	89	1	0	0	0	0	0	0	0	0	-125.17	-108.44	2949.89	-480.00	49.00	-382.49	-163.89	-13.06	4106.11	5033.94
00068	7	4	2	2	81	1	89	1	0	0	0	0	0	0	-388.02	545.33	2368.31	-3789.47	48.00	-852.84	-474.05	-83.07	2949.89	4862.54
00069	7	4	2	2	86	1	89	1	0	0	0	0	0	0	-295.74	551.92	2368.31	-2400.00	46.00	-430.55	-223.63	-152.96	2659.93	4395.43
00070	7	4	2	2	89	1	0	0	0	0	0	0	0	0	-610.20	720.21	2949.89	-2571.43	49.00	-636.81	-515.18	-515.18	3239.05	4665.49
00071	7	4	2	2	77	1	89	1	0	0	0	0	0	0	-610.20	720.21	2949.89	-2571.43	49.00	-636.81	-515.18	-144.18	3239.05	4979.67
00072	7	4	2	2	89	1	0	0	0	0	0	0	0	0	-519.95	639.92	2949.89	-2000.00	50.00	-920.63	-433.24	-433.24	3239.05	4665.49
00073	7	4	2	2	78	1	89	1	0	0	0	0	0	0	-519.95	639.92	2949.89	-2000.00	50.00	-920.63	-433.24	-264.45	3239.05	5033.94
00074	7	4	2	2	82	1	89	1	0	0	0	0	0	0	-327.21	442.30	2949.89	-2000.00	49.00	-725.20	-240.16	-19.15	3239.05	4979.67
00075	7	4	2	2	64	8	72	2	89	2	0	0	0	0	-20.10	20.97	1776.01	-388.80	45.00	-129.95	-51.83	107.31	2949.89	4395.43
00076	7	4	2	2	72	2	89	2	0	0	0	0	0	0	-163.91	-59.53	2073.97	-480.00	46.00	-421.82	-163.24	0.00	3239.05	4665.49
00077	7	4	2	2	89	2	0	0	0	0	0	0	0	0	-163.91	-59.53	2073.97	-480.00	46.00	-421.82	-163.24	0.00	3239.05	4665.49
00078	7	4	2	2	0	0	0	0	0	0	0	0	0	0	-222.15	422.71	2659.93	1200.00	48.00	-278.70	-194.77	-29.29	2949.89	4862.54
00079	7	4	2	2	71	2	86	1	89	1	0	0	0	0	-382.55	648.52	2368.31	-2000.00	47.00	-865.39	-315.91	-315.91	2659.93	4106.11
00080	7	4	2	2	83	1	89	1	0	0	0	0	0	0	-334.91	510.66	2659.93	-3000.00	48.00	-985.78	-244.02	-244.02	2949.89	4395.43
00081	7	4	2	2	81	1	89	1	0	0	0	0	0	0	-639.22	754.62	2949.89	-2400.00	49.00	-729.43	-546.82	-546.82	3239.05	4665.49
00082	7	4	2	2	77	1	89	1	0	0	0	0	0	0	-639.22	754.62	2949.89	-2400.00	49.00	-729.43	-546.82	-384.09	3239.05	4979.67
00083	7	4	2	2	72	2	89	1	89	1	0	0	0	0	295.96	-133.03	2368.31	-3000.00	46.00	-466.49	236.36	349.04	3239.05	4665.49
00084	7	4	2	2	0	0	0	0	0	0	0	0	0	0	51.84	115.03	2659.93	-3000.00	48.00	-592.95	51.84	51.84	2949.89	4395.43
00085	7	4	2	2	72	2	89	1	89	1	0	0	0	0	51.84	115.03	2659.93	-3000.00	48.00	-592.95	51.84	150.50	2949.89	4862.54
00086	7	4	2	2	64	8	72	2	89	2	0	0	0	0	-97.63	75.12	1776.01	-388.80	44.00	-130.07	-52.00	48.55	2659.93	4106.11
00087	7	4	2	2	72	2	89	2	0	0	0	0	0	0	-164.05	-59.47	2073.97	-480.00	46.00	-422.01	-163.49	0.00	3239.05	4665.49
00088	7	4	2	2	89	2	0	0	0	0	0	0	0	0	-164.05	-59.47	2073.97	-480.00	46.00	-422.01	-163.49	0.00	3239.05	4665.49
00089	7	4	2	2	0	0	0	0	0	0	0	0	0	0	-222.15	422.71	2659.93	1200.00	48.00	-278.70	-194.77	-29.29	2949.89	4862.54
00090	7	4	2	2	88	1	89	1	0	0	0	0	0	0	-253.83	504.98	2368.31	-3000.00	47.00	-960.66	-173.23	-173.23	2659.93	4106.11
00091	7	4	2	2	71	2	83	1	89	1	0	0	0	0	-564.85	748.09	2659.93	-2400.00	48.00	-676.14	-483.57	-483.57	2949.89	4395.43
00092	7	4	2	2	89	1	0	0	0	0	0	0	0	0	-412.74	579.21	2659.93	-4000.00	48.00	-653.43	-307.71	-66.98	2949.89	4862.54
00093	7	4	2	2	72	2	89	1	89	1	0	0	0	0	234.40	7.93	2368.31	-3000.00	45.00	-467.29	234.40	294.01	2949.89	4395.43
00094	7	4	2	2	64	8	72	2	89	2	0	0	0	0	234.40	7.93	2368.31	-3000.00	45.00	-467.29	234.40	294.01	2949.89	4395.43
00095	7	4	2	2	64	8	72	2	89	2	0	0	0	0	-97.69	75.12	1776.01	-388.80	44.00	-130.14	-52.08	48.49	2659.93	4106.11
00096	7	4	2	2	72	2	89	2	0	0	0	0	0	0	-164.10	-59.45	2073.97	-480.00	46.00	-422.10	-163.59	0.00	3239.05	4665.49
00097	7	4	2	2	89	2	0	0	0	0	0	0	0	0	-164.10	-59.45	2073.97	-480.00	46.00	-422.10	-163.59	0.00	3239.05	4665.49
00098	7	4	2	2	0	0	0	0	0	0	0	0	0	0	-222.15	422.71	2659.93	1200.00	48.00	-278.70	-194.77	-29.29	2949.89	4862.54
00099	7	4	2	2	72	2	89	2	0	0	0	0	0	0	-306.28	-80.34	1012.22	-480.00	46.00	-396.58	-240.63	-252.27	1000.16	999.41
00100	7	4	2	2	89	2	0	0	0	0	0	0	0	0	28.08	-1182.56	1037.87	-4285.71	43.00	-122.17	547.86	302.14	1023.26	997.93
00101	7	4	2	2	72	2	89	2	0	0	0	0	0	0	0	0	1023.26	-2000.00	45.00	-328.67	92.68	92.68	1012.22	998.30
00102	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1023.26	-2000.00	45.00	-328.67	92.68	92.68	1012.22	998.30
00103	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1012.22	-3000.00	46.00	-533.98	64.91	64.91	1004.52	998.88
00104	7	4	2	2	72	2	89	2	0	0	0	0	0	0	0	0	1023.26	-3000.00	45.00	-424.35	219.30	219.30	1012.22	998.30
00105	7	4	2	2	72	2	89	2	0	0	0	0	0	0	0	0	1023.26	-3000.00	45.00	-424.35	219.30	219.30	1012.22	998.30
00106	7	4	2	2	89	2	0	0	0	0	0	0	0	0	11.69	190.73	1012.22	4000.00	47.00	226.39	-3.54	-128.71	1000.16	999.41
00107	7	4	2	2	72	2	88	1	89	1	0	0	0	0	-165.47	-255.44	2964.81	-480.00	45.00	-214.07	-14.02	-33.92	3073.14	2997.41
00108	7	4	2	2	64	8	72	2	89	2	0	0	0	0	33.06	527.68	1454.79	0.00	52.00	-122.23	33.06	510.95	1952.29	3028.30
00109	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	3058.85	-2000.00	44.00	-321.48	78.72	78.72	3083.64	3002.07
00110	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	3083.64	-3000.00	45.00	-516.05	49.72	49.72	3073.14	2997.41
00111	7	4	2	2	64	8	72	2	89	2	0	0	0	0	32.97	527.61	1454.79	0.00	52.00	-122.32	32.97	515.37	1952.29	3028.30
00112	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	3058.85	-3000.00	44.00	-417.25	204.65	204.65	3083.64	3002.07
00113	7	4	2	2	64	8	72	2	89	2	0	0	0	0	16.42	238.47	1454.79	-283.44	52.00	-38.63	103.05	689.61	1952.29	3028.30
00114	7	4	2	2	88	1	89	1	0	0	0	0	0	0	-61.36	481.43	2960.02	0.00	45.00	-167.95	-17.63	340.97	3456.62	5072.41
00115	7	4	2	2	89	2	0	0	0	0	0	0	0	0	-61.36	481.43	2960.02	0.00	45.00	-167.95	-17.63	340.97	3456.62	5072.41
00116	7	4	2	2	72	2	85	1	89	1	0	0	0	0	-350.28	-87.92	3456.62	-480.00	45.00	-610.09	-296.19	-112.96	4750.21	5050.64
00117	7	4	2	2	89	2	0	0	0	0	0	0	0	0	401.79	-97.23	2960.02	-3000.00	44.00	-581.58	278.27	507.89	4408.57	5072.41
00118	7	4	2	2	72	2	89	2	0	0	0	0	0	0	-273.30	-128.66	3456.62	-480.00	44.00	-413.56	-100.19	0.00	4408.57	5072.41
00119	7	4	2	2	86	1	89	1	0	0	0	0	0	0	-101.59	339.39	3947.18	-2000.00	45.00	-601.48	-10.80	-10.80	4408.57	5072.41
00120	7	4	2	2	89	1	89	1	0	0	0	0	0	0	-101.59	339.39	3947.18	-2000.00	45.00	-601.48	-10.80	-10.80	4408.57	5072.41
00121	7	4	2	2	89	1	0	0	0	0	0	0	0	0	0	0	4408.57	-3000.00	45.00	-676.60	0.00	0.00	4750.21	5050.64
00122	7	4	2	2	89	2	0	0	0	0	0	0	0	0	-366.40	-35.62	3456.62	-432.00	44.00	-330.47	-205.50	513.87	4408.57	5072.41
00123	7	4	2	2	89	1	0	0	0	0	0	0	0	0	25.24	197.58	3947.18	-3000.00	45.00	-696.93	25.24	25.24	4408.57	

SEQ CLS ROW
NUM TBL COL

00132	7	4	2	2	72	2	89	1	89	1	0	0	0	0	-105.90	326.73	789.43-2000.00	47.00	-561.76	-66.43	-66.43	886.64	1368.70		
00133	7	4	2	2	89	2	0	0	0	0	0	0	0	0	-155.76	274.17	886.64-3000.00	47.00	-737.36	-47.78	-26.58	983.29	1561.63		
00134	7	4	2	2	72	2	89	2	0	0	0	0	0	0	42.44	72.49	983.29-2000.00	49.00	-324.82	0.00	0.00	1079.68	1561.63		
00135	7	4	2	2	72	2	89	2	0	0	0	0	0	0	0.27	184.76	789.43-3000.00	47.00	-657.34	0.00	0.00	886.64	1368.70		
00136	7	4	2	2	87	1	89	1	0	0	0	0	0	0	0	1175.99-2000.00	48.00	-392.92	-12.51	-12.51	1272.32	1754.66			
00137	7	4	2	2	86	1	89	1	0	0	0	0	0	0	-357.56	471.63	983.29-2000.00	49.00	-722.42	-282.80	-243.17	1079.68	1754.66		
00138	7	4	2	2	72	2	88	1	89	1	0	0	0	0	-105.90	326.73	789.43-2000.00	47.00	-561.76	-66.43	-66.43	886.64	1368.70		
00139	7	4	2	2	88	1	89	1	0	0	0	0	0	0	-155.76	274.17	886.64-3000.00	47.00	-737.36	-47.78	-26.58	983.29	1561.63		
00140	7	4	2	2	72	2	89	2	0	0	0	0	0	0	42.44	72.49	983.29-2000.00	49.00	-324.82	0.00	0.00	1079.68	1561.63		
00141	7	4	2	2	72	2	88	1	89	1	0	0	0	0	0.27	184.76	789.43-3000.00	47.00	-657.34	0.00	0.00	886.64	1368.70		
00142	7	4	2	2	72	2	89	2	0	0	0	0	0	0	-340.08	-81.42	1020.31-480.00	46.00	-394.69	-239.27	-251.48	1003.84	999.01		
00143	7	4	2	2	72	2	89	2	0	0	0	0	0	0	0	1031.39-2000.00	45.00	-326.76	30.06	30.06	1020.31	998.15			
00144	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	1031.39-2000.00	45.00	-326.76	30.06	30.06	1020.31	998.15			
00145	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	1020.31-3000.00	46.00	-532.09	0.00	0.00	1010.57	998.49			
00146	7	4	2	2	72	2	89	2	0	0	0	0	0	0	0	1031.39-3000.00	45.00	-422.45	135.54	135.54	1020.31	998.15			
00147	7	4	2	2	72	2	89	2	0	0	0	0	0	0	0	1031.39-3000.00	45.00	-422.45	135.54	135.54	1020.31	998.15			
00148	7	4	2	2	88	1	89	1	0	0	0	0	0	0	-323.43	-147.34	2073.97-480.00	45.00	-448.84	-190.34	-87.17	2850.13	3030.39		
00149	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	2368.31-2000.00	44.00	-497.80	0.00	0.00	2645.14	3043.45			
00150	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	2645.14-3000.00	45.00	-623.84	0.00	0.00	2850.13	3030.39			
00151	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	2368.31-3000.00	44.00	-593.37	0.00	0.00	2645.14	3043.45			
00152	7	4	2	2	85	1	89	1	0	0	0	0	0	0	0	-287.87	610.71	1776.01	0.00	0.00	38.30	2073.97	4395.43		
00153	7	4	2	2	89	1	0	0	0	0	0	0	0	0	0	-415.58	674.94	2073.97	0.00	47.00	-421.18	-336.54	-116.11	2368.31	4665.49
00154	7	4	2	2	82	1	89	1	0	0	0	0	0	0	0	-214.09	113.16	2368.31-480.00	49.00	-634.07	-388.28	-111.94	4106.11	5033.95	
00155	7	4	2	2	83	1	89	1	0	0	0	0	0	0	0	-214.09	113.16	2368.31-480.00	49.00	-634.07	-388.28	-111.94	4106.11	5033.95	
00156	7	4	2	2	86	1	89	1	0	0	0	0	0	0	0	-287.87	610.71	1776.01	0.00	46.00	-313.50	-222.80	38.30	2073.97	4395.43
00157	7	4	2	2	89	1	0	0	0	0	0	0	0	0	0	-415.58	674.94	2073.97	0.00	47.00	-421.18	-336.54	-116.11	2368.31	4665.49
00158	7	4	2	2	82	1	89	1	0	0	0	0	0	0	0	-214.09	113.16	2368.31-480.00	49.00	-634.07	-388.28	-111.94	4106.11	5033.95	
00159	7	4	2	2	84	1	89	1	0	0	0	0	0	0	0	-214.09	113.16	2368.31-480.00	49.00	-634.07	-388.28	-111.94	4106.11	5033.95	
00160	7	4	2	2	64	8	72	2	89	2	0	0	0	0	0	-144.72	75.12	1171.37-480.00	44.00	-513.41	-212.61	0.00	2659.93	4106.11	
00161	7	4	2	2	89	2	0	0	0	0	0	0	0	0	0	-292.76	-178.46	2073.97-480.00	45.00	-422.14	-163.49	-33.86	2949.89	4395.43	
00162	7	4	2	2	72	2	89	2	0	0	0	0	0	0	0	-266.34	639.87	1474.42	0.00	45.00	-310.79	-213.84	0.00	1776.01	4106.11
00163	7	4	2	2	89	1	0	0	0	0	0	0	0	0	0	-316.22	574.54	2073.97	0.00	47.00	-321.73	-237.14	-16.73	2368.31	4665.49
00164	7	4	2	2	89	1	0	0	0	0	0	0	0	0	0	-550.79	743.34	2368.31	0.00	49.00	-534.89	-455.95	-110.36	2659.93	4862.54
00165	7	4	2	2	81	1	89	1	0	0	0	0	0	0	0	-545.06	545.33	2368.31-3789.47	48.00	-852.84	-474.05	-256.26	2949.89	4862.54	
00166	7	4	2	2	81	1	89	1	0	0	0	0	0	0	0	-724.30	720.21	2949.89-2571.43	49.00	-636.81	-515.18	-515.18	3239.05	4665.49	
00167	7	4	2	2	77	1	89	1	0	0	0	0	0	0	0	-724.30	720.21	2949.89-2571.43	49.00	-636.81	-515.18	-144.18	3239.05	4979.67	
00168	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	-688.68	219.50	2368.31-432.00	47.00	-558.85	-492.77	-492.77	2659.93	4106.11	
00169	7	4	2	2	84	1	89	1	0	0	0	0	0	0	0	-688.68	219.50	2368.31-432.00	47.00	-558.85	-492.77	0.00	2659.93	4665.49	
00170	7	4	2	2	89	1	0	0	0	0	0	0	0	0	0	-763.10	246.65	2949.89-432.00	49.00	-619.79	-562.98	-562.98	3239.05	4665.49	
00171	7	4	2	2	89	1	0	0	0	0	0	0	0	0	0	-624.30	639.92	2949.89-2000.00	50.00	-920.63	-433.24	-433.24	3239.05	4665.49	
00172	7	4	2	2	78	1	89	1	0	0	0	0	0	0	0	-624.30	639.92	2949.89-2000.00	50.00	-920.63	-433.24	-264.45	3239.05	5033.95	
00173	7	4	2	2	62	-19	64	8	72	2	89	2	0	0	0	-491.21	20.79	2073.97-480.00	45.00	-620.35	-361.50	-232.95	2949.89	4395.43	
00174	7	4	2	2	82	1	89	1	0	0	0	0	0	0	0	-424.30	442.30	2949.89-2000.00	49.00	-725.20	-240.16	-19.15	3239.05	4979.67	
00175	7	4	2	2	64	8	72	2	89	2	0	0	0	0	0	-76.74	24.07	1171.37-480.00	45.00	-513.23	-212.25	33.20	2949.89	4395.43	
00176	7	4	2	2	72	2	88	1	89	1	0	0	0	0	0	-480.45	648.52	2368.31-2000.00	46.00	-865.39	-315.91	-315.91	2659.93	4106.11	
00177	7	4	2	2	72	2	87	1	89	1	0	0	0	0	0	-480.45	648.52	2368.31-2000.00	46.00	-865.39	-315.91	-245.70	2659.93	4395.43	
00178	7	4	2	2	83	1	89	1	0	0	0	0	0	0	0	-468.46	510.66	2659.93-3000.00	48.00	-985.77	-244.02	-244.02	2949.89	4395.43	
00179	7	4	2	2	89	1	0	0	0	0	0	0	0	0	0	-754.30	754.62	2949.89-2400.00	49.00	-729.43	-546.82	-546.82	3239.05	4665.49	
00180	7	4	2	2	77	1	89	1	0	0	0	0	0	0	0	-754.30	754.62	2949.89-2400.00	49.00	-729.43	-546.82	-384.09	3239.05	4979.67	
00181	7	4	2	2	64	8	72	2	89	2	0	0	0	0	0	116.78	7.37	2368.31-3000.00	45.00	-466.49	116.78	160.88	2949.89	4395.43	
00182	7	4	2	2	64	8	72	2	89	2	0	0	0	0	0	-144.72	75.12	1171.37-480.00	44.00	-513.20	-212.28	0.00	2659.93	4106.11	
00183	7	4	2	2	89	1	89	1	0	0	0	0	0	0	0	-372.28	504.98	2368.31-3000.00	46.00	-960.66	-173.23	-173.23	2659.93	4106.11	
00184	7	4	2	2	88	1	89	1	0	0	0	0	0	0	0	-372.28	504.98	2368.31-3000.00	46.00	-960.66	-173.23	0.00	2659.93	4395.43	
00185	7	4	2	2	71	2	83	1	89	1	0	0	0	0	0	-684.28	748.09	2659.93-2400.00	48.00	-676.14	-483.57	-483.57	2949.89	4395.43	
00186	7	4	2	2	89	1	0	0	0	0	0	0	0	0	0	-567.05	579.21	2659.93-4000.00	48.00	-653.43	-307.71	-303.12	2949.89	4862.54	
00187	7	4	2	2	0	0	0	0	0	0	0	0	0	0	0	-585.97	348.59	2368.31-388.80	45.00	-467.29	-400.97	-400.97	2659.93	4106.11	
00188	7	4	2	2	64	8	72	2	89	2	0	0	0	0	0	-150.61	-43.95	1474.42-480.00	44.00	-410.67	-123.72	0.00	2659.93	4106.11	
00189	7	4	2	2	72	2	89	2	0	0	0	0	0	0	0	-340.74	-80.33	1012.25-480.00	46.00	-396.59	-240.64	-252.28	1000.15	999.39	
00190	7	4	2	2	72																				

SEQ NUM	CLS TBL	ROW COL																					
00198	7	4	2	2	89	2	0	0	0	0	0	0	0	-443.88	-35.62	2960.01	-480.00	44.00	-662.63	-330.47	358.53	4408.58	5072.42
00199	7	4	2	2	89	1	0	0	0	0	0	0	0	0	0	3947.18	-3000.00	44.00	-696.93	0.00	0.00	4408.58	5072.42
00200	7	4	2	2	72	2	89	2	0	0	0	0	0	-444.99	-34.89	2960.01	-480.00	44.00	-662.56	-331.09	-97.49	4408.58	5072.42
00201	7	4	3	3	72	2	89	2	0	0	0	0	0	139.40	155.49	789.44	-2000.00	46.00	-389.74	62.10	62.10	881.72	1014.49
00202	7	4	3	3	64	8	72	2	89	2	0	0	0	-130.05	-291.91	480.00	-1454.78	46.00	468.95	158.82	35.92	-1952.29	-4408.57
00203	7	4	3	3	89	1	0	0	0	0	0	0	0	-187.82	-1.28	886.65	-1500.00	49.00	-300.53	-100.87	-37.56	1272.32	1754.66
00204	7	4	3	3	89	1	0	0	0	0	0	0	0	146.23	-54.85	1200.00	-1658.13	50.00	261.64	2.14	2.14	-1658.13	-2140.76
00205	7	4	3	3	0	0	0	0	0	0	0	0	0	-187.82	-1.28	886.65	-1500.00	49.00	-300.53	-100.87	-37.56	1272.32	1754.66
00206	7	4	3	3	0	0	0	0	0	0	0	0	0	146.23	-54.85	1200.00	-1658.13	50.00	261.64	2.14	2.14	-1658.13	-2140.76
00207	7	4	3	3	0	0	0	0	0	0	0	0	0	-30.53	326.61	789.44	-2000.00	47.00	-561.47	-65.69	-65.69	886.65	1368.70
00208	7	4	3	3	89	2	0	0	0	0	0	0	0	0	349.92	-2457.37	46.00	238.41	119.23	119.23	-2457.37	-4750.21	
00209	7	4	3	3	89	1	89	1	0	0	0	0	0	-291.27	-389.57	886.65	-3000.00	48.00	-736.91	-46.44	-5.96	1176.00	1658.13
00210	7	4	3	3	89	1	0	0	0	0	0	0	0	216.04	-368.39	314.93	-2960.01	49.00	366.70	255.34	255.34	-2960.01	-4956.14
00211	7	4	3	3	89	2	0	0	0	0	0	0	0	213.45	-15.78	388.80	-2733.21	47.00	304.52	126.65	0.00	-3440.32	-5116.88
00212	7	4	3	3	89	1	0	0	0	0	0	0	0	-187.82	-1.28	886.65	-1500.00	49.00	-300.53	-100.87	-37.56	1272.32	1754.66
00213	7	4	3	3	89	1	0	0	0	0	0	0	0	146.23	-54.85	1200.00	-1658.13	50.00	261.64	2.14	2.14	-1658.13	-2140.76
00214	7	4	3	3	89	1	0	0	0	0	0	0	0	-187.82	-1.28	886.65	-1500.00	49.00	-300.53	-100.87	-37.56	1272.32	1754.66
00215	7	4	3	3	89	1	0	0	0	0	0	0	0	146.23	-54.85	1200.00	-1658.13	50.00	261.64	2.14	2.14	-1658.13	-2140.76
00216	7	4	3	3	89	1	0	0	0	0	0	0	0	-30.53	326.61	789.44	-2000.00	47.00	-561.47	-65.69	-65.69	886.65	1368.70
00217	7	4	3	3	88	1	89	1	0	0	0	0	0	0	349.92	-2457.37	46.00	238.41	119.23	119.23	-2457.37	-4750.21	
00218	7	4	3	3	88	1	89	1	0	0	0	0	0	-291.27	-389.57	886.65	-3000.00	48.00	-736.91	-46.44	-5.96	1176.00	1658.13
00219	7	4	3	3	89	1	0	0	0	0	0	0	0	216.04	-368.39	314.93	-2960.01	49.00	366.70	255.34	255.34	-2960.01	-4956.14
00220	7	4	3	3	88	1	89	1	0	0	0	0	0	213.45	-15.78	388.80	-2733.21	47.00	304.52	126.65	0.00	-3440.32	-5116.88
00221	7	4	3	3	0	0	0	0	0	0	0	0	0	0	1031.40	-2000.00	45.00	-326.56	94.82	94.82	1020.32	998.17	
00222	7	4	3	3	0	0	0	0	0	0	0	0	0	359.86	-51.10	1000.00	-1454.78	46.00	409.94	24.72	24.72	-1454.78	-3947.18
00223	7	4	3	3	89	1	0	0	0	0	0	0	0	-254.11	-216.52	2949.89	-480.00	49.00	-382.00	-163.47	-60.04	3816.96	4979.67
00224	7	4	3	3	87	1	89	1	0	0	0	0	0	430.07	-297.25	2526.32	-691.32	50.00	405.07	293.39	293.39	-691.32	-1010.73
00225	7	4	3	3	89	1	89	1	0	0	0	0	0	-313.94	571.58	2368.31	-2400.00	46.00	-428.31	-241.74	-241.74	2659.93	4106.11
00226	7	4	3	3	72	2	88	1	89	1	0	0	0	0	1714.29	-2659.93	46.00	500.42	424.21	424.21	-2659.93	4106.11	
00227	7	4	3	3	89	1	0	0	0	0	0	0	0	-517.92	639.18	2949.89	-2000.00	50.00	-918.95	-431.07	-431.07	3239.05	4665.49
00228	7	4	3	3	89	1	0	0	0	0	0	0	0	0	3555.56	-2368.31	48.00	603.98	315.04	315.04	-2368.31	-3816.96	
00229	7	4	3	3	71	2	86	1	89	1	0	0	0	-379.83	648.21	2368.31	-2000.00	47.00	-863.66	-313.05	-313.05	2659.93	4106.11
00230	7	4	3	3	86	1	89	1	0	0	0	0	0	0	2181.82	-2457.37	46.00	609.79	338.40	338.40	-2457.37	-4750.21	
00231	7	4	3	3	89	2	0	0	0	0	0	0	0	-43.83	-695.71	2368.31	-3000.00	46.00	-465.21	238.70	298.04	2949.89	4395.43
00232	7	4	3	3	89	2	0	0	0	0	0	0	0	540.39	-279.46	1714.29	-1952.29	47.00	360.10	226.66	226.66	-1952.29	-3083.64
00233	7	4	3	3	87	1	89	1	0	0	0	0	0	35.39	120.01	2368.31	-3000.00	47.00	-958.41	-168.66	35.39	2949.89	4395.43
00234	7	4	3	3	87	1	89	1	0	0	0	0	0	0	2181.82	-3440.32	47.00	496.45	175.60	175.60	-3440.32	-5116.88	
00235	7	4	3	3	0	0	0	0	0	0	0	0	0	0	1023.26	-2000.00	45.00	-328.50	92.99	92.99	1012.22	998.30	
00236	7	4	3	3	0	0	0	0	0	0	0	0	0	359.85	-51.17	1000.00	-1454.78	46.00	409.99	24.79	24.79	-1454.78	-3947.18
00237	7	4	3	3	86	1	89	1	0	0	0	0	0	-307.60	-198.44	3456.62	-480.00	47.00	-607.90	-293.59	231.98	4956.14	5028.84
00238	7	4	3	3	71	2	86	1	89	1	0	0	0	459.54	-284.94	3272.73	-1171.37	48.00	350.08	272.59	216.21	-1474.42	-2949.89
00239	7	4	3	3	89	1	89	1	0	0	0	0	0	-98.14	337.83	3947.18	-2000.00	46.00	-597.80	-5.92	-5.92	4408.57	5072.41
00240	7	4	3	3	89	1	89	1	0	0	0	0	0	0	3272.73	-1952.29	46.00	450.75	320.89	320.89	-1952.29	-4408.57	
00241	7	4	3	3	88	1	89	1	0	0	0	0	0	-342.39	-468.91	4408.57	-3000.00	47.00	-672.23	0.00	0.00	4956.14	5028.84
00242	7	4	3	3	72	2	88	1	89	1	0	0	0	720.87	-542.95	3200.00	-2457.37	48.00	562.39	457.23	457.23	-2457.37	-4750.21
00243	7	4	3	3	72	2	89	2	0	0	0	0	0	64.70	155.49	789.43	-2000.00	46.00	-389.74	0.60	0.60	881.71	1014.47
00244	7	4	3	3	64	8	72	2	89	2	0	0	0	-130.05	-321.82	480.00	-1454.78	46.00	468.95	158.82	35.92	-1952.29	-4408.57
00245	7	4	3	3	89	2	0	0	0	0	0	0	0	-33.75	15.46	881.71	-3000.00	49.00	-566.83	0.00	0.00	1010.71	1002.49
00246	7	4	3	3	89	2	0	0	0	0	0	0	0	-78.21	-248.76	432.00	-1952.28	49.00	407.21	284.13	0.00	-3456.62	-5053.61
00247	7	4	3	3	64	8	72	2	89	2	0	0	0	222.34	-141.84	432.00	-872.87	48.00	325.36	256.70	54.33	-1776.01	-3239.05
00248	7	4	3	3	89	1	0	0	0	0	0	0	0	0	1175.99	-2000.00	48.00	-392.73	-12.23	-12.23	1272.32	1754.66	
00249	7	4	3	3	0	0	0	0	0	0	0	0	0	263.10	-440.41	314.93	-1776.01	50.00	367.17	303.09	303.09	-1776.01	-3239.05
00250	7	4	3	3	0	0	0	0	0	0	0	0	0	-105.13	326.61	789.43	-2000.00	46.00	-561.48	-65.69	-65.69	886.64	1368.70
00251	7	4	3	3	89	2	0	0	0	0	0	0	0	0	388.80	-1952.29	46.00	362.63	238.41	238.41	-1952.29	-4408.57	
00252	7	4	3	3	88	1	89	1	0	0	0	0	0	-385.27	-380.18	886.64	-3000.00	47.00	-736.91	-46.44	-25.33	1079.68	1561.63
00253	7	4	3	3	0	0	0	0	0	0	0	0	0	268.01	-537.41	349.92	-2457.37	48.00	486.11	366.71	366.71	-2457.37	-4750.21
00254	7	4	3	3	0	0	0	0	0	0	0	0	0	12.11	72.41	983.29	-2000.00	48.00	-324.55	0.00	0.00	1079.68	1561.63
00255	7	4	3	3	89	2	0	0	0	0	0	0	0	-112.17	-158.46	432.00	-1454.78	48.00	346.04	223.10	0.00	-2761.84	-3050.44
00256	7	4	3	3	89	2	0	0	0	0	0	0	0	213.45	-102.47	432.00	-2036.70	47.00	481.85	304.52	0.00	-3440.32	-5116.90
00257	7	4	3	3	64	8	72	2	88	1	89	1	0	222.34	-141.84	432.00	-872.87	48.00	325.36	256.70	54.33	-1776.01	-3239.05
00258	7	4	3	3	89	1	0																

SEQ CLS ROW
NUM TBL COL

00263	7	4	3	3	0	0	0	0	0	0	0	0	0	268.01	-537.41	349.92-2457.37	48.00	486.11	366.71	366.71-2457.37-4750.21
00264	7	4	3	3	0	0	0	0	0	0	0	0	0	12.11	72.41	983.29-2000.00	48.00	-324.55	0.00	0.00 1079.68 1561.63
00265	7	4	3	3	89	2	0	0	0	0	0	0	0	-112.17	-158.46	432.00-1454.78	48.00	346.04	223.10	0.00-2761.84-3050.44
00266	7	4	3	3	88	1	89	1	0	0	0	0	0	213.45	-102.47	432.00-2036.70	47.00	481.85	304.52	0.00-3440.32-5116.90
00267	7	4	3	3	72	2	86	1	89	1	0	0	0	-504.56	382.01	2659.93-2181.82	49.00	-667.59	-451.96	-237.07 3527.98 4862.54
00268	7	4	3	3	72	2	86	1	89	1	0	0	0	-543.01	-682.61	2181.82-2949.90	49.00	667.59	451.96	237.07-3527.98-4862.54
00269	7	4	3	3	89	1	0	0	0	0	0	0	0	-645.52	639.18	2949.89-2000.00	50.00	-918.95	-431.07	-431.07 3239.05 4665.49
00270	7	4	3	3	89	1	0	0	0	0	0	0	0	3555.56	-2368.31		48.00	603.99	315.04	315.04-2368.31-3816.96
00271	7	4	3	3	71	2	88	1	89	1	0	0	0	-490.50	20.33	2073.97-480.00	46.00	-619.65	-360.55	-232.10 2949.89 4395.43
00272	7	4	3	3	88	1	89	1	0	0	0	0	0	637.19	-424.72	1714.29-1171.37	47.00	438.01	357.88	357.88-1171.37-2645.14
00273	7	4	3	3	64	8	72	2	89	2	0	0	0	-144.20	-49.92	1171.37-480.00	45.00	-513.05	-211.91	0.00 2659.93 4106.11
00274	7	4	3	3	89	2	0	0	0	0	0	0	0	321.17	-27.91	1500.00-342.35	46.00	288.77	227.42	30.83-784.47-1031.39
00275	7	4	3	3	71	2	86	1	89	1	0	0	0	-477.96	648.21	2368.31-2000.00	47.00	-863.66	-313.05	-313.05 2659.93 4106.11
00276	7	4	3	3	87	1	89	1	0	0	0	0	0			2181.82-2457.37	46.00	609.79	338.41	338.41-2457.37-4750.21
00277	7	4	3	3	86	1	89	1	0	0	0	0	0	-408.46	266.81	2659.93-3000.00	49.00	-983.51	-240.01	-119.31 3527.98 4862.54
00278	7	4	3	3	72	2	86	1	89	1	0	0	0	-467.72	-750.28	2181.82-2457.37	49.00	853.57	581.04	269.03-3456.62-5053.61
00279	7	4	3	3	89	1	0	0	0	0	0	0	0	-381.68	264.05	2368.31-3000.00	49.00	-957.10	-164.62	-118.00 3527.98 4862.54
00280	7	4	3	3	72	2	86	1	89	1	0	0	0	-554.33	-654.15	2181.82-2420.34	49.00	716.84	454.45	245.10-2964.81-3028.30
00281	7	4	3	3	86	1	89	1	0	0	0	0	0	-626.52	-204.56	2368.31-3000.00	46.00	-958.41	-168.66	0.00 2949.89 4395.43
00282	7	4	3	3	86	1	89	1	0	0	0	0	0	832.08	-653.32	1714.29-2733.21	47.00	683.40	496.45	496.45-2733.21-5073.13
00283	7	4	3	3	86	1	89	1	0	0	0	0	0	-406.82	-198.44	3456.62-480.00	47.00	-607.90	-293.59	62.49 4956.16 5028.85
00284	7	4	3	3	71	2	86	1	89	1	0	0	0	459.55	-390.93	3272.73-872.87	48.00	637.39	350.08	216.21-1474.42-2949.89
00285	7	4	4	4	0	0	0	0	0	0	0	0	0	-282.87	38.44	691.32-1615.16	45.00	-453.73	-137.38	147.99 881.72 1014.49
00286	7	4	4	4	89	2	0	0	0	0	0	0	0	435.83	-109.10	654.13-2036.70	46.00	329.68	72.63	72.63-2036.70-4925.39
00287	7	4	4	4	89	2	0	0	0	0	0	0	0	-285.34	189.00	789.44-1572.41	46.00	-420.31	-194.95	0.00 983.30 1465.14
00288	7	4	4	4	0	0	0	0	0	0	0	0	0	369.89	-106.43	1043.31-1952.29	47.00	304.19	62.97	62.97-1952.29-4408.57
00289	7	4	4	4	89	2	0	0	0	0	0	0	0	-421.11	132.60	886.65-2259.27	47.00	-442.53	-245.38	-15.77 1079.69 1561.62
00290	7	4	4	4	89	2	0	0	0	0	0	0	0	394.53	-191.53	1220.73-2457.37	48.00	310.02	134.28	134.28-2457.37-4750.21
00291	7	4	4	4	89	2	0	0	0	0	0	0	0	-141.78	-135.79	789.44-2753.63	46.00	-308.33	0.00	207.13 983.30 1465.14
00292	7	4	4	4	0	0	0	0	0	0	0	0	0	273.28	-5.90	1043.31-2733.21	47.00	246.04	0.00	0.00-2733.21-5073.12
00293	7	4	4	4	88	1	89	1	0	0	0	0	0	-285.34	189.00	789.44-1572.41	46.00	-420.31	-194.95	0.00 983.30 1465.14
00294	7	4	4	4	89	1	0	0	0	0	0	0	0	369.89	-106.43	1043.31-1952.29	47.00	304.19	62.97	62.97-1952.29-4408.57
00295	7	4	4	4	88	1	89	1	0	0	0	0	0	-421.11	132.60	886.65-2259.27	47.00	-442.53	-245.38	-15.77 1079.69 1561.62
00296	7	4	4	4	88	1	89	1	0	0	0	0	0	394.53	-191.53	1220.73-2457.37	48.00	310.02	134.28	134.28-2457.37-4750.21
00297	7	4	4	4	88	1	89	1	0	0	0	0	0	-141.78	-135.79	789.44-2753.63	46.00	-308.33	0.00	207.13 983.30 1465.14
00298	7	4	4	4	89	1	0	0	0	0	0	0	0	273.28	-5.90	1043.31-2733.21	47.00	246.04	0.00	0.00-2733.21-5073.12
00299	7	4	4	4	0	0	0	0	0	0	0	0	0	1031.40	-1572.41		45.00	-185.68	0.00	0.00 1020.32 998.17
00300	7	4	4	4	0	0	0	0	0	0	0	0	0	362.78	-54.02	1032.73-1454.78	46.00	176.77	27.20	27.20-1454.78-3947.18
00301	7	4	4	4	72	2	89	2	0	0	0	0	0	-255.41	-4.41	1039.09-1615.16	45.00	-359.91	-74.53	180.47 1020.32 998.17
00302	7	4	4	4	0	0	0	0	0	0	0	0	0	337.14	-11.24	1032.73-2036.70	46.00	173.32	0.00	0.00-2036.70-4925.39
00303	7	4	4	4	88	1	89	1	0	0	0	0	0			2368.31-1572.41	45.00	-355.16	-82.41	-82.41 2645.14 3043.45
00304	7	4	4	4	89	1	0	0	0	0	0	0	0	578.88	-275.75	2219.28-1454.78	46.00	428.61	233.22	233.22-1454.78-3947.18
00305	7	4	4	4	89	2	0	0	0	0	0	0	0	-282.64	155.85	2368.31-1169.26	46.00	-319.05	-95.47	0.00 2949.89 4395.43
00306	7	4	4	4	0	0	0	0	0	0	0	0	0	399.75	-131.45	2570.25-1171.37	47.00	300.44	120.43	120.43-1171.37-2645.15
00307	7	4	4	4	86	1	89	1	0	0	0	0	0	2659.93	-2259.27		46.00	-443.18	-198.80	-198.80 2949.89 4395.43
00308	7	4	4	4	86	1	89	1	0	0	0	0	0	691.31	-435.57	2570.25-1952.29	47.00	605.01	370.76	370.76-1952.29-4408.57
00309	7	4	4	4	86	1	89	1	0	0	0	0	0	-491.30	181.11	2368.31-2753.63	46.00	-606.63	-214.33	0.00 2949.89 4395.43
00310	7	4	4	4	86	1	89	1	0	0	0	0	0	593.06	-333.18	2570.25-2733.21	47.00	544.61	257.43	257.43-2733.21-5073.12
00311	7	4	4	4	0	0	0	0	0	0	0	0	0			1023.26-1572.41	45.00	-187.64	0.00	0.00 1012.22 998.30
00312	7	4	4	4	0	0	0	0	0	0	0	0	0	358.21	-49.53	1050.00-1454.78	46.00	169.23	22.48	22.48-1454.78-3947.18
00313	7	4	4	4	72	2	89	2	0	0	0	0	0	-256.16	-3.10	1035.72-1615.16	45.00	-360.51	-76.51	178.62 1012.22 998.30
00314	7	4	4	4	0	0	0	0	0	0	0	0	0	332.57	-6.78	1050.00-2036.70	46.00	165.80	0.00	0.00-2036.70-4925.39
00315	7	4	4	4	88	1	89	1	0	0	0	0	0			3947.18-1572.41	45.00	-455.84	-135.63	-135.63 4408.57 5072.41
00316	7	4	4	4	89	1	0	0	0	0	0	0	0	361.84	-508.61	3916.75-1454.78	46.00	584.04	300.20	300.20-1454.78-3947.18
00317	7	4	4	4	72	2	89	2	0	0	0	0	0	184.78	194.17	3456.62 3138.67	45.00	42.24	184.78	184.78 3947.18 5081.13
00318	7	4	4	4	89	2	0	0	0	0	0	0	0	-326.98	38.44	691.32-1615.16	45.00	-453.73	-137.38	70.53 881.71 1014.47
00319	7	4	4	4	0	0	0	0	0	0	0	0	0	418.98	-162.67	654.13-2036.70	46.00	329.67	72.63	72.63-2036.70-4925.41
00320	17	4	2	2	89	2	0	0	0	0	0	0	0	104.16	225.18	2073.97 2571.43	45.00	19.23	104.16	104.16 2368.31 3816.96
00321	17	4	2	2	72	2	89	2	0	0	0	0	0	104.16	225.18	2073.97 2571.43	45.00	19.23	104.16	146.17 2368.31 4106.11
00322	17	4	2	2	72	2	89	2	0	0	0	0	0	91.30	240.71	2073.97 2400.00	45.00	142.69	91.30	91.30 2368.31 3816.96
00323	17	4	2	2	72	2	89	2	0	0	0	0	0	91.30	240.71	2073.97 2400.00	45.00	142.69	91.30	166.84 2368.31 4106.11
00324	17	4	2	2	89	2	0	0	0	0	0	0	0	49.78	276.87	2073.97 2769.23	45.00	-32.24	49.78	49.78 2368.31 3816.96
00325	17	4	2	2	72	2	89	2	0	0	0	0	0	49.78	276.87	2073.97 2769.23	45.00	-32.24	49.78	108.27 2368.31 4106.11
00326	17	4	2	2	89	2	0	0	0											

SEQ NUM	CLS TBL	ROW COL																						
00327	17	4	2	2	72	2	89	2	0	0	0	0	0	0	151.30	180.42	2073.97	2400.00	45.00	66.35	151.30	167.90	2368.31	4106.11
00328	17	4	2	2	89	1	0	0	0	0	0	0	0	0	47.75	257.64	2073.97	4500.00	46.00	125.20	47.75	47.75	2368.31	3816.96
00329	17	4	2	2	89	2	0	0	0	0	0	0	0	0	34.84	291.10	2073.97	2823.53	45.00	-46.95	34.84	34.84	2368.31	3816.96
00330	17	4	2	2	72	2	89	2	0	0	0	0	0	0	34.84	291.10	2073.97	2823.53	45.00	-46.95	34.84	100.14	2368.31	4106.11
00331	17	4	2	2	89	2	0	0	0	0	0	0	0	0	151.30	180.33	2073.97	2400.00	45.00	66.36	151.30	151.30	2368.31	3816.96
00332	17	4	2	2	72	2	89	2	0	0	0	0	0	0	151.30	180.33	2073.97	2400.00	45.00	66.36	151.30	167.90	2368.31	4106.11
00333	17	4	2	2	72	1	89	1	0	0	0	0	0	0	81.37	293.98	3456.62	4615.38	45.00	3.55	81.37	154.35	3947.18	5072.41
00334	17	4	3	3	89	2	0	0	0	0	0	0	0	0	102.75	226.32	2073.97	2571.43	45.00	17.84	102.75	102.75	2368.31	3816.96
00335	17	4	3	3	0	0	0	0	0	0	0	0	0	0	-282.09	257.56	1714.29	3048.68	45.00	287.82	227.04	227.04	3048.68	3001.49
00336	17	4	3	3	89	2	0	0	0	0	0	0	0	0	72.91	253.22	2073.97	2769.23	45.00	-9.06	72.91	72.91	2368.31	3816.96
00337	17	4	3	3	89	2	0	0	0	0	0	0	0	0	131.30	200.39	2073.97	2400.00	45.00	46.35	131.30	131.30	2368.31	3816.96
00338	17	4	3	3	0	0	0	0	0	0	0	0	0	0	-280.72	256.44	1714.29	3058.85	45.00	266.27	227.47	227.47	3058.85	3011.93
00339	17	4	3	3	80	1	89	1	0	0	0	0	0	0	53.50	271.61	2073.97	2842.11	45.00	-28.15	53.50	53.50	2368.31	3816.96
00340	17	4	3	3	89	1	0	0	0	0	0	0	0	0	182.80	188.70	3456.62	5217.39	45.00	41.82	182.80	182.80	3947.18	5081.13
00341	17	4	4	4	89	2	0	0	0	0	0	0	0	0	-36.19	359.42	2073.97	3000.47	45.00	-102.10	-27.59	-27.59	2368.31	3816.96
00342	17	4	4	4	89	2	0	0	0	0	0	0	0	0	164.51	167.93	2073.97	2219.28	45.00	141.79	164.51	164.51	2368.31	3816.96
00343	17	4	4	4	72	2	89	2	0	0	0	0	0	0	-46.02	368.64	2073.97	3027.21	45.00	-130.67	-37.06	-37.06	2368.31	3816.96
00344	17	4	4	4	89	2	0	0	0	0	0	0	0	0	-41.24	364.45	2073.97	3023.64	45.00	-102.44	-32.32	-32.32	2368.31	3816.96
00345	17	4	4	4	89	2	0	0	0	0	0	0	0	0	-41.83	364.65	2073.97	3009.89	45.00	-127.37	-33.10	-33.10	2368.31	3816.96
00346	17	4	4	4	72	2	89	2	0	0	0	0	0	0	-73.84	395.31	2073.97	3138.67	45.00	-157.54	-63.36	-63.36	2368.31	3816.96

APPENDIX G
SUMMARY NMAC TABLES

MITRE encounter classes: 0,10 Date processed: 8/25/97
 Based on FAA Technical Center data of : AUGUST 1997 All TCAS Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**)= 1.00 Significance threshold (>>) = 2.0 %

Table 0.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

Table 0.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

Table 10.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

Table 10.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

MITRE encounter classes: 1,11 Date processed: 8/27/97
 Based on FAA Technical Center data of : AUGUST 1997 All TCAS Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>) = 2.0 %

Table 1.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

Table 1.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

Table 11.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

Table 11.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

MITRE encounter classes: 2,12 Date processed: 8/25/97
 Based on FAA Technical Center data of : AUGUST 1997 All TCAS Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>>) = 2.0 %

Table 2.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.579	0.000	0.000	0.347	0.000	0.000
One Mode C	1.620	** >> 3.125	** 1.852	-----	-----	-----

Table 2.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	1.707	0.451	0.580	0.838	0.757	0.515
One Mode C	7.796	5.219	3.157	-----	-----	-----

Table 12.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

Table 12.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.192	0.192	0.000	-----	-----	-----

MITRE encounter classes: 3,13 Date processed: 8/21/97
 Based on FAA Technical Center data of : AUGUST 1997 All TCAS Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>>) = 2.0 %

Table 3.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	4.484	3.804	0.951	-----	-----	-----

Table 3.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

Table 13.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.781	0.000	0.000	-----	-----	-----

Table 13.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.101	0.076	0.000	0.051	0.025	0.038
One Mode C	0.759	0.380	0.228	-----	-----	-----

MITRE encounter classes: 4,14 Date processed: 8/25/97
 Based on FAA Technical Center data of : AUGUST 1997 All TCAS Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>>) = 2.0 %

Table 4.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	** 1.667	0.000	-----	-----	-----

Table 4.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

Table 14.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

Table 14.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

MITRE encounter classes: 5,15 Date processed: 8/25/97
 Based on FAA Technical Center data of : AUGUST 1997 All TCAS Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>>) = 2.0 %

Table 5.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	** 0.063	0.000	0.000
One Mode C	6.281	** >> 7.538	3.832	-----	-----	-----

Table 5.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.367	0.051	0.089	0.196	0.146	0.070
One Mode C	3.457	2.229	1.317	-----	-----	-----

Table 15.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	16.176	** >> 17.647	14.706	-----	-----	-----

Table 15.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.728	0.081	0.081	0.142	0.142	0.081
One Mode C	0.364	0.202	0.162	-----	-----	-----

MITRE encounter classes: 6,16 Date processed: 8/25/97
 Based on FAA Technical Center data of : AUGUST 1997 All TCAS Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>>) = 2.0 %

Table 6.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.810	0.347	0.347	0.434	0.174	0.347
One Mode C	5.498	4.398	2.025	-----	-----	-----

Table 6.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.153	0.153	0.051	0.141	0.141	0.089
One Mode C	0.946	0.537	0.486	-----	-----	-----

Table 16.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

Table 16.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.039	0.000	0.000	0.000	0.000	0.000
One Mode C	0.786	0.472	0.157	-----	-----	-----

MITRE encounter classes: 7,17 Date processed: 8/25/97
 Based on FAA Technical Center data of : AUGUST 1997 All TCAS Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>>) = 2.0 %

Table 7.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.165	0.000	0.000	** 0.206	0.000	0.000
One Mode C	8.952	** >> 10.767	4.208	-----	-----	-----

Table 7.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	1.951	0.836	0.348	1.264	0.627	0.373
One Mode C	9.795	7.416	5.246	-----	-----	-----

Table 17.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	13.690	** >> 17.857	13.095	-----	-----	-----

Table 17.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.254	0.127	0.109	0.163	0.236	0.136
One Mode C	0.563	0.381	0.563	-----	-----	-----

MITRE encounter classes: 8,18 Date processed: 8/22/97
 Based on FAA Technical Center data of : AUGUST 1997 All TCAS Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>>) = 2.0 %

Table 8.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	1.157	0.231	0.154	0.733	0.212	0.193
One Mode C	6.250	** >> 7.137	3.279	-----	-----	-----

Table 8.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	1.649	0.780	0.570	1.039	0.855	0.719
One Mode C	5.884	4.306	2.745	-----	-----	-----

Table 18.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	0.000	-----	-----	-----

Table 18.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.410	0.217	0.024	0.301	0.133	0.048
One Mode C	1.977	1.302	0.627	-----	-----	-----

MITRE encounter classes: 9,19 Date processed: 8/25/97
 Based on FAA Technical Center data of : AUGUST 1997 All TCAS Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>) = 2.0 %

Table 9.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	6.822	2.591	3.109	-----	-----	-----

Table 9.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.280	0.078	0.031	0.164	0.117	0.047
One Mode C	0.109	0.093	0.062	-----	-----	-----

Table 19.3 - Percent of unresolved failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	6.491	0.000	0.000	-----	-----	-----

Table 19.4 - Percent of induced failures

	6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/ Ch7-100	6.04A/ Ch7-25	Ch7-25/ Ch7-100
TCAS-TCAS	0.486	0.176	0.041	0.284	0.176	0.128
One Mode C	2.026	0.945	0.513	-----	-----	-----

PROGRAM LLPRPU - Frequency (COUNT) of Multiple Valued Parameters;													(--) are excluded parameters.					Tue, 30 Sep 1997, Page		1
CLASS	ROW	AC1	AC2	AC1	AC2	Com	Nmb	Parameter	HI	CPA	AC1	AC2	AC1	AC2	AC1	AC2	ALT			
TBL	COL	EQ	EQ	RES	RES	Nmb	Com	Comb.Code	COUNT	SEP	RATE	RATE	ACC	ACC	TIM	TIM				
2	3	2	2	65	65	1	1	1	1	1000000000	(	5)	2	--	--	--	--		
2	3	2	2	65	65	1	1	2	1	0100000000	(	5)	--	0.00	--	--	--		
2	3	2	2	65	65	1	1	4	1	0010000000	(	1)	--	-400.0	--	--	--		
2	3	2	2	65	65	1	1	4	1	0010000000	(	2)	--	0.0	--	--	--		
2	3	2	2	65	65	1	1	4	1	0010000000	(	2)	--	400.0	--	--	--		
2	3	2	2	65	65	1	1	8	1	0001000000	(	5)	--	5000.0	--	--	--		
2	3	2	2	65	65	1	1	32	1	0000010000	(	5)	--	--	0.15	--	--		
2	3	2	2	65	65	1	1	128	1	0000000100	(	5)	--	--	--	-20.0	--		
2	3	2	2	65	65	1	1	256	1	0000000001	(	2)	--	--	--	--	7480.0		
2	3	2	2	65	65	1	1	256	1	0000000001	(	3)	--	--	--	--	3680.0		
2	4	2	2	65	65	1	1	1	1	1000000000	(	15)	1	--	--	--	--		
2	4	2	2	65	65	1	1	1	1	1000000000	(	38)	2	--	--	--	--		
2	4	2	2	65	65	1	1	2	1	0100000000	(	7)	--	-750.00	--	--	--		
2	4	2	2	65	65	1	1	2	1	0100000000	(	15)	--	-250.00	--	--	--		
2	4	2	2	65	65	1	1	2	1	0100000000	(	31)	--	-500.00	--	--	--		
2	4	2	2	65	65	1	1	4	1	0010000000	(	13)	--	400.0	--	--	--		
2	4	2	2	65	65	1	1	4	1	0010000000	(	19)	--	0.0	--	--	--		
2	4	2	2	65	65	1	1	4	1	0010000000	(	21)	--	-400.0	--	--	--		
2	4	2	2	65	65	1	1	8	1	0001000000	(	3)	--	3000.0	--	--	--		
2	4	2	2	65	65	1	1	8	1	0001000000	(	50)	--	5000.0	--	--	--		
2	4	2	2	65	65	1	1	32	1	0000010000	(	3)	--	--	0.15	--	--		
2	4	2	2	65	65	1	1	32	1	0000010000	(	22)	--	--	0.35	--	--		
2	4	2	2	65	65	1	1	32	1	0000010000	(	28)	--	--	0.25	--	--		
2	4	2	2	65	65	1	1	128	1	0000000100	(	4)	--	--	--	-25.0	--		
2	4	2	2	65	65	1	1	128	1	0000000100	(	49)	--	--	--	-20.0	--		
2	4	2	2	65	65	1	1	256	1	0000000001	(	8)	--	--	--	--	7480.0		
2	4	2	2	65	65	1	1	256	1	0000000001	(	9)	--	--	--	--	7520.0		
2	4	2	2	65	65	1	1	256	1	0000000001	(	17)	--	--	--	--	3680.0		
2	4	2	2	65	65	1	1	256	1	0000000001	(	19)	--	--	--	--	3720.0		
2	4	3	3	71	71	1	1	1	1	1000000000	(	7)	1	--	--	--	--		
2	4	3	3	71	71	1	1	1	1	1000000000	(	7)	2	--	--	--	--		
2	4	3	3	71	71	1	1	2	1	0100000000	(	4)	--	-750.00	--	--	--		
2	4	3	3	71	71	1	1	2	1	0100000000	(	10)	--	-500.00	--	--	--		
2	4	3	3	71	71	1	1	4	1	0010000000	(	6)	--	-400.0	--	--	--		
2	4	3	3	71	71	1	1	4	1	0010000000	(	8)	--	0.0	--	--	--		
2	4	3	3	71	71	1	1	8	1	0001000000	(	14)	--	5000.0	--	--	--		
2	4	3	3	71	71	1	1	32	1	0000010000	(	6)	--	--	0.35	--	--		
2	4	3	3	71	71	1	1	32	1	0000010000	(	8)	--	--	0.25	--	--		
2	4	3	3	71	71	1	1	128	1	0000000100	(	14)	--	--	--	-20.0	--		
2	4	3	3	71	71	1	1	256	1	0000000001	(	2)	--	--	--	--	7480.0		
2	4	3	3	71	71	1	1	256	1	0000000001	(	2)	--	--	--	--	7520.0		
2	4	3	3	71	71	1	1	256	1	0000000001	(	4)	--	--	--	--	3680.0		
2	4	3	3	71	71	1	1	256	1	0000000001	(	6)	--	--	--	--	3720.0		
2	4	4	4	75	75	1	1	1	1	1000000000	(	9)	1	--	--	--	--		
2	4	4	4	75	75	1	1	1	1	1000000000	(	9)	2	--	--	--	--		
2	4	4	4	75	75	1	1	2	1	0100000000	(	4)	--	-750.00	--	--	--		
2	4	4	4	75	75	1	1	2	1	0100000000	(	14)	--	-500.00	--	--	--		
2	4	4	4	75	75	1	1	4	1	0010000000	(	2)	--	400.0	--	--	--		
2	4	4	4	75	75	1	1	4	1	0010000000	(	8)	--	0.0	--	--	--		
2	4	4	4	75	75	1	1	4	1	0010000000	(	8)	--	-400.0	--	--	--		
2	4	4	4	75	75	1	1	8	1	0001000000	(	18)	--	5000.0	--	--	--		
2	4	4	4	75	75	1	1	32	1	0000010000	(	6)	--	--	0.35	--	--		
2	4	4	4	75	75	1	1	32	1	0000010000	(	12)	--	--	0.25	--	--		
2	4	4	4	75	75	1	1	128	1	0000000100	(	18)	--	--	--	-20.0	--		
2	4	4	4	75	75	1	1	256	1	0000000001	(	2)	--	--	--	--	7480.0		
2	4	4	4	75	75	1	1	256	1	0000000001	(	2)	--	--	--	--	7520.0		
2	4	4	4	75	75	1	1	256	1	0000000001	(	6)	--	--	--	--	3720.0		
2	4	4	4	75	75	1	1	256	1	0000000001	(	8)	--	--	--	--	3680.0		
5	4	2	2	65	65	1	1	1	1	1000000000	(	2)	1	--	--	--	--		
5	4	2	2	65	65	1	1	1	1	1000000000	(	27)	2	--	--	--	--		
5	4	2	2	65	65	1	1	2	1	0100000000	(	8)	--	-500.00	--	--	--		
5	4	2	2	65	65	1	1	2	1	0100000000	(	10)	--	-750.00	--	--	--		

APPENDIX H. NMACs AS A FUNCTION OF PARAMETER VALUES

I-H

CLASS	TBL	ROW	COL	AC1 EQ	AC2 EQ	AC1 RES	AC2 RES	Com Nmb	Parameter	Com Comb.Code	COUNT	HI ID	CPA SEP	AC1 RATE	AC2 RATE	AC1 ACC	AC2 ACC	AC1 TIM	AC2 TIM	AC1 ALT
5	4	2	2	65	65	1	1	2	1	010000000	(11)	--	-250.00	--	--	--	--	--	--	--
5	4	2	2	65	65	1	1	4	1	001000000	(4)	--	--	3000.0	--	--	--	--	--	--
5	4	2	2	65	65	1	1	4	1	001000000	(4)	--	--	-3000.0	--	--	--	--	--	--
5	4	2	2	65	65	1	1	4	1	001000000	(8)	--	--	1000.0	--	--	--	--	--	--
5	4	2	2	65	65	1	1	4	1	001000000	(13)	--	--	-1000.0	--	--	--	--	--	--
5	4	2	2	65	65	1	1	8	1	000100000	(1)	--	--	--	3000.0	--	--	--	--	--
5	4	2	2	65	65	1	1	8	1	000100000	(28)	--	--	--	5000.0	--	--	--	--	--
5	4	2	2	65	65	1	1	32	1	000001000	(2)	--	--	--	--	--	0.15	--	--	--
5	4	2	2	65	65	1	1	32	1	000001000	(9)	--	--	--	--	--	0.35	--	--	--
5	4	2	2	65	65	1	1	32	1	000001000	(18)	--	--	--	--	--	0.25	--	--	--
5	4	2	2	65	65	1	1	128	1	000000010	(2)	--	--	--	--	--	--	--	-25.0	--
5	4	2	2	65	65	1	1	128	1	000000010	(27)	--	--	--	--	--	--	--	-20.0	--
5	4	2	2	65	65	1	1	256	1	000000001	(3)	--	--	--	--	--	--	--	--	7480.0
5	4	2	2	65	65	1	1	256	1	000000001	(4)	--	--	--	--	--	--	--	--	7520.0
5	4	2	2	65	65	1	1	256	1	000000001	(11)	--	--	--	--	--	--	--	--	3680.0
5	4	2	2	65	65	1	1	256	1	000000001	(11)	--	--	--	--	--	--	--	--	3720.0
5	4	3	3	71	71	1	1	1	1	100000000	(2)	--	1	--	--	--	--	--	--	--
5	4	3	3	71	71	1	1	1	1	100000000	(2)	--	2	--	--	--	--	--	--	--
5	4	3	3	71	71	1	1	2	1	010000000	(4)	--	-750.00	--	--	--	--	--	--	--
5	4	3	3	71	71	1	1	4	1	001000000	(4)	--	--	-1000.0	--	--	--	--	--	--
5	4	3	3	71	71	1	1	8	1	000100000	(4)	--	--	--	5000.0	--	--	--	--	--
5	4	3	3	71	71	1	1	32	1	000001000	(4)	--	--	--	--	--	0.25	--	--	--
5	4	3	3	71	71	1	1	128	1	000000010	(4)	--	--	--	--	--	--	--	-20.0	--
5	4	3	3	71	71	1	1	256	1	000000001	(2)	--	--	--	--	--	--	--	--	3680.0
5	4	3	3	71	71	1	1	256	1	000000001	(2)	--	--	--	--	--	--	--	--	3720.0
5	4	4	4	75	75	1	1	1	1	100000000	(3)	--	1	--	--	--	--	--	--	--
5	4	4	4	75	75	1	1	1	1	100000000	(4)	--	2	--	--	--	--	--	--	--
5	4	4	4	75	75	1	1	2	1	010000000	(1)	--	500.00	--	--	--	--	--	--	--
5	4	4	4	75	75	1	1	2	1	010000000	(6)	--	-750.00	--	--	--	--	--	--	--
5	4	4	4	75	75	1	1	4	1	001000000	(1)	--	--	5000.0	--	--	--	--	--	--
5	4	4	4	75	75	1	1	4	1	001000000	(6)	--	--	-1000.0	--	--	--	--	--	--
5	4	4	4	75	75	1	1	8	1	000100000	(1)	--	--	--	3000.0	--	--	--	--	--
5	4	4	4	75	75	1	1	8	1	000100000	(6)	--	--	--	5000.0	--	--	--	--	--
5	4	4	4	75	75	1	1	32	1	000001000	(3)	--	--	--	--	--	0.35	--	--	--
5	4	4	4	75	75	1	1	32	1	000001000	(4)	--	--	--	--	--	0.25	--	--	--
5	4	4	4	75	75	1	1	128	1	000000010	(7)	--	--	--	--	--	--	--	-20.0	--
5	4	4	4	75	75	1	1	256	1	000000001	(3)	--	--	--	--	--	--	--	--	3720.0
5	4	4	4	75	75	1	1	256	1	000000001	(4)	--	--	--	--	--	--	--	--	3680.0
6	3	2	2	65	65	1	1	1	1	100000000	(3)	--	1	--	--	--	--	--	--	--
6	3	2	2	65	65	1	1	1	1	100000000	(11)	--	2	--	--	--	--	--	--	--
6	3	2	2	65	65	1	1	2	1	010000000	(14)	--	0.00	--	--	--	--	--	--	--
6	3	2	2	65	65	1	1	4	1	001000000	(4)	--	--	-5000.0	--	--	--	--	--	--
6	3	2	2	65	65	1	1	4	1	001000000	(10)	--	--	5000.0	--	--	--	--	--	--
6	3	2	2	65	65	1	1	8	1	000100000	(1)	--	--	--	-3000.0	--	--	--	--	--
6	3	2	2	65	65	1	1	8	1	000100000	(13)	--	--	--	-5000.0	--	--	--	--	--
6	3	2	2	65	65	1	1	32	1	000001000	(2)	--	--	--	--	--	0.35	--	--	--
6	3	2	2	65	65	1	1	32	1	000001000	(12)	--	--	--	--	--	0.15	--	--	--
6	3	2	2	65	65	1	1	128	1	000000010	(3)	--	--	--	--	--	--	--	-25.0	--
6	3	2	2	65	65	1	1	128	1	000000010	(4)	--	--	--	--	--	--	--	-30.0	--
6	3	2	2	65	65	1	1	128	1	000000010	(7)	--	--	--	--	--	--	--	-20.0	--
6	3	2	2	65	65	1	1	256	1	000000001	(1)	--	--	--	--	--	--	--	--	7480.0
6	3	2	2	65	65	1	1	256	1	000000001	(3)	--	--	--	--	--	--	--	--	3680.0
6	3	2	2	65	65	1	1	256	1	000000001	(4)	--	--	--	--	--	--	--	--	7520.0
6	3	2	2	65	65	1	1	256	1	000000001	(6)	--	--	--	--	--	--	--	--	3720.0
6	3	3	3	71	71	1	1	1	1	100000000	(2)	--	1	--	--	--	--	--	--	--
6	3	3	3	71	71	1	1	1	1	100000000	(4)	--	2	--	--	--	--	--	--	--
6	3	3	3	71	71	1	1	2	1	010000000	(6)	--	0.00	--	--	--	--	--	--	--
6	3	3	3	71	71	1	1	4	1	001000000	(1)	--	--	3000.0	--	--	--	--	--	--
6	3	3	3	71	71	1	1	4	1	001000000	(5)	--	--	5000.0	--	--	--	--	--	--
6	3	3	3	71	71	1	1	8	1	000100000	(6)	--	--	--	-5000.0	--	--	--	--	--
6	3	3	3	71	71	1	1	32	1	000001000	(1)	--	--	--	--	--	0.25	--	--	--
6	3	3	3	71	71	1	1	32	1	000001000	(5)	--	--	--	--	--	0.15	--	--	--

H-2

CLASS	TBL	ROW	COL	AC1 EQ	AC2 EQ	AC1 RES	AC2 RES	Com Nmb	Parameter Comb.Code	COUNT	HI ID	CPA SEP	AC1 RATE	AC2 RATE	AC1 ACC	AC2 ACC	AC1 TIM	AC2 TIM	AC1 ALT
7	3	2	2	65	65	1	1	32	1 000001000	(4)	--	--	--	--	--	-0.05	--	--	--
7	3	2	2	65	65	1	1	128	1 000000010	(4)	--	--	--	--	--	--	--	-20.0	--
7	3	2	2	65	65	1	1	256	1 000000001	(4)	--	--	--	--	--	--	--	--	3700.0
7	4	2	2	65	65	1	1	1	1 100000000	(92)	--	--	--	--	--	--	--	--	--
7	4	2	2	65	65	1	1	1	1 100000000	(104)	--	--	--	--	--	--	--	--	--
7	4	2	2	65	65	1	1	2	1 010000000	(2)	--	-250.00	--	--	--	--	--	--	--
7	4	2	2	65	65	1	1	2	1 010000000	(53)	--	250.00	--	--	--	--	--	--	--
7	4	2	2	65	65	1	1	2	1 010000000	(58)	--	500.00	--	--	--	--	--	--	--
7	4	2	2	65	65	1	1	2	1 010000000	(83)	--	750.00	--	--	--	--	--	--	--
7	4	2	2	65	65	1	1	4	1 001000000	(35)	--	--	--	--	--	--	--	--	--
7	4	2	2	65	65	1	1	4	1 001000000	(38)	--	--	3000.0	--	--	--	--	--	--
7	4	2	2	65	65	1	1	4	1 001000000	(123)	--	--	1000.0	--	--	--	--	--	--
7	4	2	2	65	65	1	1	8	1 000100000	(2)	--	--	5000.0	--	--	--	--	--	--
7	4	2	2	65	65	1	1	8	1 000100000	(3)	--	--	1000.0	--	--	--	--	--	--
7	4	2	2	65	65	1	1	8	1 000100000	(26)	--	--	-1000.0	--	--	--	--	--	--
7	4	2	2	65	65	1	1	8	1 000100000	(38)	--	--	-3000.0	--	--	--	--	--	--
7	4	2	2	65	65	1	1	8	1 000100000	(127)	--	--	-5000.0	--	--	--	--	--	--
7	4	2	2	65	65	1	1	16	1 000010000	(39)	--	--	--	--	0.25	--	--	--	--
7	4	2	2	65	65	1	1	16	1 000010000	(48)	--	--	--	--	0.05	--	--	--	--
7	4	2	2	65	65	1	1	16	1 000010000	(109)	--	--	--	--	0.15	--	--	--	--
7	4	2	2	65	65	1	1	32	1 000001000	(1)	--	--	--	--	--	0.15	--	--	--
7	4	2	2	65	65	1	1	32	1 000001000	(1)	--	--	--	--	--	0.25	--	--	--
7	4	2	2	65	65	1	1	32	1 000001000	(3)	--	--	--	--	--	0.35	--	--	--
7	4	2	2	65	65	1	1	32	1 000001000	(38)	--	--	--	--	--	-0.35	--	--	--
7	4	2	2	65	65	1	1	32	1 000001000	(41)	--	--	--	--	--	-0.05	--	--	--
7	4	2	2	65	65	1	1	32	1 000001000	(48)	--	--	--	--	--	-0.15	--	--	--
7	4	2	2	65	65	1	1	32	1 000001000	(64)	--	--	--	--	--	-0.25	--	--	--
7	4	2	2	65	65	1	1	128	1 000000010	(15)	--	--	--	--	--	--	-30.0	--	--
7	4	2	2	65	65	1	1	128	1 000000010	(25)	--	--	--	--	--	--	-25.0	--	--
7	4	2	2	65	65	1	1	128	1 000000010	(156)	--	--	--	--	--	--	-20.0	--	--
7	4	2	2	65	65	1	1	256	1 000000001	(75)	--	--	--	--	--	--	--	-30.0	--
7	4	2	2	65	65	1	1	256	1 000000001	(121)	--	--	--	--	--	--	--	-25.0	--
7	4	2	2	65	65	1	1	256	1 000000001	(121)	--	--	--	--	--	--	--	-20.0	7500.0
7	4	2	2	65	65	1	1	256	1 000000001	(121)	--	--	--	--	--	--	--	--	3700.0
7	4	3	3	71	71	1	1	1	1 100000000	(39)	--	2	--	--	--	--	--	--	--
7	4	3	3	71	71	1	1	1	1 100000000	(45)	--	1	--	--	--	--	--	--	--
7	4	3	3	71	71	1	1	2	1 010000000	(16)	--	250.00	--	--	--	--	--	--	--
7	4	3	3	71	71	1	1	2	1 010000000	(24)	--	500.00	--	--	--	--	--	--	--
7	4	3	3	71	71	1	1	2	1 010000000	(44)	--	750.00	--	--	--	--	--	--	--
7	4	3	3	71	71	1	1	4	1 001000000	(10)	--	--	1000.0	--	--	--	--	--	--
7	4	3	3	71	71	1	1	4	1 001000000	(19)	--	--	3000.0	--	--	--	--	--	--
7	4	3	3	71	71	1	1	4	1 001000000	(55)	--	--	5000.0	--	--	--	--	--	--
7	4	3	3	71	71	1	1	8	1 000100000	(4)	--	--	--	-1000.0	--	--	--	--	--
7	4	3	3	71	71	1	1	8	1 000100000	(14)	--	--	--	-3000.0	--	--	--	--	--
7	4	3	3	71	71	1	1	8	1 000100000	(66)	--	--	--	-5000.0	--	--	--	--	--
7	4	3	3	71	71	1	1	16	1 000010000	(10)	--	--	--	--	0.25	--	--	--	--
7	4	3	3	71	71	1	1	16	1 000010000	(30)	--	--	--	--	0.15	--	--	--	--
7	4	3	3	71	71	1	1	16	1 000010000	(44)	--	--	--	--	0.05	--	--	--	--
7	4	3	3	71	71	1	1	32	1 000001000	(8)	--	--	--	--	--	-0.35	--	--	--
7	4	3	3	71	71	1	1	32	1 000001000	(10)	--	--	--	--	--	-0.05	--	--	--
7	4	3	3	71	71	1	1	32	1 000001000	(22)	--	--	--	--	--	-0.15	--	--	--
7	4	3	3	71	71	1	1	32	1 000001000	(44)	--	--	--	--	--	-0.25	--	--	--
7	4	3	3	71	71	1	1	128	1 000000010	(4)	--	--	--	--	--	--	-25.0	--	--
7	4	3	3	71	71	1	1	128	1 000000010	(8)	--	--	--	--	--	--	-30.0	--	--
7	4	3	3	71	71	1	1	128	1 000000010	(72)	--	--	--	--	--	--	-20.0	--	--
7	4	3	3	71	71	1	1	256	1 000000001	(42)	--	--	--	--	--	--	--	-30.0	3700.0
7	4	3	3	71	71	1	1	256	1 000000001	(42)	--	--	--	--	--	--	--	-25.0	7500.0
7	4	4	4	75	75	1	1	1	1 100000000	(17)	--	1	--	--	--	--	--	--	--
7	4	4	4	75	75	1	1	1	1 100000000	(18)	--	2	--	--	--	--	--	--	--
7	4	4	4	75	75	1	1	2	1 010000000	(5)	--	500.00	--	--	--	--	--	--	--
7	4	4	4	75	75	1	1	2	1 010000000	(30)	--	750.00	--	--	--	--	--	--	--
7	4	4	4	75	75	1	1	4	1 001000000	(8)	--	--	3000.0	--	--	--	--	--	--
7	4	4	4	75	75	1	1	4	1 001000000	(12)	--	--	1000.0	--	--	--	--	--	--
7	4	4	4	75	75	1	1	4	1 001000000	(15)	--	--	5000.0	--	--	--	--	--	--
7	4	4	4	75	75	1	1	8	1 000100000	(1)	--	--	--	3000.0	--	--	--	--	--

4-H

CLASS	ROW	AC1	AC2	AC1	AC2	Com	Nmb	Parameter	HI	CPA	AC1	AC2	AC1	AC2	AC1	AC2	AC1	AC2	ALT
TBL	COL	EQ	EQ	RES	RES	Nmb	Com	Comb.Code	COUNT	SEP	RATE	RATE	ACC	ACC	TIM	TIM	TIM	TIM	ALT
7	4	4	4	75	75	1	1	8	1	0001000000	(	2)	--	--	--	--	--	--	--
7	4	4	4	75	75	1	1	8	1	0001000000	(	32)	--	--	-3000.0	--	--	--	--
7	4	4	4	75	75	1	1	16	1	0001000000	(	7)	--	--	-5000.0	--	--	--	--
7	4	4	4	75	75	1	1	16	1	0000100000	(	12)	--	--	0.25	--	--	--	--
7	4	4	4	75	75	1	1	16	1	0000100000	(	16)	--	--	0.15	--	--	--	--
7	4	4	4	75	75	1	1	32	1	0000010000	(	1)	--	--	0.05	--	--	--	--
7	4	4	4	75	75	1	1	32	1	0000010000	(	2)	--	--	--	0.35	--	--	--
7	4	4	4	75	75	1	1	32	1	0000010000	(	14)	--	--	--	-0.15	--	--	--
7	4	4	4	75	75	1	1	32	1	0000010000	(	18)	--	--	--	-0.35	--	--	--
7	4	4	4	75	75	1	1	32	1	0000010000	(	1)	--	--	--	-0.25	--	--	--
7	4	4	4	75	75	1	1	128	1	0000000100	(	1)	--	--	--	--	--	-25.0	--
7	4	4	4	75	75	1	1	128	1	0000000100	(	34)	--	--	--	--	--	-20.0	--
7	4	4	4	75	75	1	1	256	1	0000000001	(	2)	--	--	--	--	--	--	7500.0
7	4	4	4	75	75	1	1	256	1	0000000001	(	33)	--	--	--	--	--	--	3700.0
8	3	2	2	65	65	1	1	1	1	1000000000	(	6)	--	--	--	--	--	--	--
8	3	2	2	65	65	1	1	1	1	1000000000	(	24)	--	--	--	--	--	--	--
8	3	2	2	65	65	1	1	2	1	0100000000	(	30)	--	0.00	--	--	--	--	--
8	3	2	2	65	65	1	1	4	1	0010000000	(	8)	--	-5000.0	--	--	--	--	--
8	3	2	2	65	65	1	1	4	1	0010000000	(	11)	--	-1000.0	--	--	--	--	--
8	3	2	2	65	65	1	1	4	1	0010000000	(	11)	--	-3000.0	--	--	--	--	--
8	3	2	2	65	65	1	1	8	1	0001000000	(	7)	--	--	5000.0	--	--	--	--
8	3	2	2	65	65	1	1	8	1	0001000000	(	23)	--	-5000.0	--	--	--	--	--
8	3	2	2	65	65	1	1	16	1	0000100000	(	8)	--	--	0.05	--	--	--	--
8	3	2	2	65	65	1	1	16	1	0000100000	(	9)	--	--	0.25	--	--	--	--
8	3	2	2	65	65	1	1	16	1	0000100000	(	13)	--	--	0.15	--	--	--	--
8	3	2	2	65	65	1	1	32	1	0000010000	(	3)	--	--	--	-0.25	--	--	--
8	3	2	2	65	65	1	1	32	1	0000010000	(	7)	--	--	--	0.15	--	--	--
8	3	2	2	65	65	1	1	32	1	0000010000	(	20)	--	--	--	-0.15	--	--	--
8	3	2	2	65	65	1	1	128	1	0000000100	(	4)	--	--	--	--	--	-25.0	--
8	3	2	2	65	65	1	1	128	1	0000000100	(	26)	--	--	--	--	--	-20.0	--
8	3	2	2	65	65	1	1	256	1	0000000001	(	13)	--	--	--	--	--	--	7500.0
8	3	2	2	65	65	1	1	256	1	0000000001	(	17)	--	--	--	--	--	--	3700.0
8	3	3	3	71	71	1	1	1	1	1000000000	(	3)	--	--	--	--	--	--	--
8	3	3	3	71	71	1	1	1	1	1000000000	(	3)	--	--	--	--	--	--	--
8	3	3	3	71	71	1	1	2	1	0100000000	(	6)	--	0.00	--	--	--	--	--
8	3	3	3	71	71	1	1	4	1	0010000000	(	2)	--	-3000.0	--	--	--	--	--
8	3	3	3	71	71	1	1	4	1	0010000000	(	4)	--	-5000.0	--	--	--	--	--
8	3	3	3	71	71	1	1	8	1	0001000000	(	6)	--	--	-5000.0	--	--	--	--
8	3	3	3	71	71	1	1	16	1	0000100000	(	2)	--	--	0.05	--	--	--	--
8	3	3	3	71	71	1	1	16	1	0000100000	(	4)	--	--	0.15	--	--	--	--
8	3	3	3	71	71	1	1	32	1	0000010000	(	2)	--	--	--	-0.25	--	--	--
8	3	3	3	71	71	1	1	32	1	0000010000	(	4)	--	--	--	-0.15	--	--	--
8	3	3	3	71	71	1	1	128	1	0000000100	(	6)	--	--	--	--	--	-20.0	--
8	3	3	3	71	71	1	1	256	1	0000000001	(	2)	--	--	--	--	--	--	7500.0
8	3	3	3	71	71	1	1	256	1	0000000001	(	4)	--	--	--	--	--	--	3700.0
8	3	4	4	75	75	1	1	1	1	1000000000	(	2)	--	--	--	--	--	--	--
8	3	4	4	75	75	1	1	1	1	1000000000	(	2)	--	--	--	--	--	--	--
8	3	4	4	75	75	1	1	2	1	0100000000	(	4)	--	0.00	--	--	--	--	--
8	3	4	4	75	75	1	1	4	1	0010000000	(	4)	--	-5000.0	--	--	--	--	--
8	3	4	4	75	75	1	1	8	1	0001000000	(	4)	--	--	-5000.0	--	--	--	--
8	3	4	4	75	75	1	1	16	1	0000100000	(	4)	--	--	0.15	--	--	--	--
8	3	4	4	75	75	1	1	32	1	0000010000	(	4)	--	--	--	-0.15	--	--	--
8	3	4	4	75	75	1	1	128	1	0000000100	(	4)	--	--	--	--	--	-20.0	--
8	3	4	4	75	75	1	1	256	1	0000000001	(	2)	--	--	--	--	--	--	3700.0
8	3	4	4	75	75	1	1	256	1	0000000001	(	2)	--	--	--	--	--	--	7500.0
8	4	2	2	65	65	1	1	1	1	1000000000	(	74)	--	--	--	--	--	--	--
8	4	2	2	65	65	1	1	1	1	1000000000	(	114)	--	--	--	--	--	--	--
8	4	2	2	65	65	1	1	2	1	0100000000	(	5)	--	-750.00	--	--	--	--	--
8	4	2	2	65	65	1	1	2	1	0100000000	(	7)	--	-250.00	--	--	--	--	--
8	4	2	2	65	65	1	1	2	1	0100000000	(	21)	--	-500.00	--	--	--	--	--
8	4	2	2	65	65	1	1	2	1	0100000000	(	28)	--	250.00	--	--	--	--	--
8	4	2	2	65	65	1	1	2	1	0100000000	(	51)	--	750.00	--	--	--	--	--
8	4	2	2	65	65	1	1	2	1	0100000000	(	76)	--	500.00	--	--	--	--	--

H-5

CLASS	ROW	COL	AC1	AC2	AC1	AC2	Com	Nmb	Com	Comb.Code	COUNT	HI	CPA	AC1	AC2	AC1	AC2	AC1	AC2	AC1	AC2	ALT
TBL			EQ	EQ	RES	RES	Nmb	Com				ID	SEP	RATE	RATE	ACC	ACC	TIM	TIM			
8	4	2	2	65	65	1	1	4	1	0010000000	(56)	--	--	-3000.0	--	--	--	--	--	--	--	--
8	4	2	2	65	65	1	1	4	1	0010000000	(61)	--	--	-5000.0	--	--	--	--	--	--	--	--
8	4	2	2	65	65	1	1	4	1	0010000000	(71)	--	--	-1000.0	--	--	--	--	--	--	--	--
8	4	2	2	65	65	1	1	8	1	0001000000	(2)	--	--	--	3000.0	--	--	--	--	--	--	--
8	4	2	2	65	65	1	1	8	1	0001000000	(5)	--	--	--	-1000.0	--	--	--	--	--	--	--
8	4	2	2	65	65	1	1	8	1	0001000000	(8)	--	--	--	-3000.0	--	--	--	--	--	--	--
8	4	2	2	65	65	1	1	8	1	0001000000	(30)	--	--	--	5000.0	--	--	--	--	--	--	--
8	4	2	2	65	65	1	1	8	1	0001000000	(143)	--	--	--	-5000.0	--	--	--	--	--	--	--
8	4	2	2	65	65	1	1	16	1	0000100000	(43)	--	--	--	--	0.05	--	--	--	--	--	--
8	4	2	2	65	65	1	1	16	1	0000100000	(64)	--	--	--	--	0.25	--	--	--	--	--	--
8	4	2	2	65	65	1	1	16	1	0000100000	(81)	--	--	--	--	0.15	--	--	--	--	--	--
8	4	2	2	65	65	1	1	32	1	0000010000	(2)	--	--	--	--	--	0.15	--	--	--	--	--
8	4	2	2	65	65	1	1	32	1	0000010000	(4)	--	--	--	--	--	0.05	--	--	--	--	--
8	4	2	2	65	65	1	1	32	1	0000010000	(9)	--	--	--	--	--	0.35	--	--	--	--	--
8	4	2	2	65	65	1	1	32	1	0000010000	(17)	--	--	--	--	--	0.25	--	--	--	--	--
8	4	2	2	65	65	1	1	32	1	0000010000	(40)	--	--	--	--	--	-0.15	--	--	--	--	--
8	4	2	2	65	65	1	1	32	1	0000010000	(49)	--	--	--	--	--	-0.35	--	--	--	--	--
8	4	2	2	65	65	1	1	32	1	0000010000	(67)	--	--	--	--	--	-0.25	--	--	--	--	--
8	4	2	2	65	65	1	1	128	1	0000000010	(22)	--	--	--	--	--	--	--	--	--	-30.0	--
8	4	2	2	65	65	1	1	128	1	0000000010	(38)	--	--	--	--	--	--	--	--	--	-25.0	--
8	4	2	2	65	65	1	1	128	1	0000000010	(128)	--	--	--	--	--	--	--	--	--	-20.0	--
8	4	2	2	65	65	1	1	256	1	0000000001	(75)	--	--	--	--	--	--	--	--	--	--	7500.0
8	4	2	2	65	65	1	1	256	1	0000000001	(113)	--	--	--	--	--	--	--	--	--	--	3700.0
8	4	3	3	71	71	1	1	1	1	1000000000	(44)	--	1	--	--	--	--	--	--	--	--	--
8	4	3	3	71	71	1	1	1	1	1000000000	(45)	--	2	--	--	--	--	--	--	--	--	--
8	4	3	3	71	71	1	1	2	1	0100000000	(12)	--	250.00	--	--	--	--	--	--	--	--	--
8	4	3	3	71	71	1	1	2	1	0100000000	(12)	--	-500.00	--	--	--	--	--	--	--	--	--
8	4	3	3	71	71	1	1	2	1	0100000000	(17)	--	750.00	--	--	--	--	--	--	--	--	--
8	4	3	3	71	71	1	1	2	1	0100000000	(48)	--	500.00	--	--	--	--	--	--	--	--	--
8	4	3	3	71	71	1	1	4	1	0010000000	(17)	--	--	-3000.0	--	--	--	--	--	--	--	--
8	4	3	3	71	71	1	1	4	1	0010000000	(22)	--	--	-1000.0	--	--	--	--	--	--	--	--
8	4	3	3	71	71	1	1	4	1	0010000000	(50)	--	--	-5000.0	--	--	--	--	--	--	--	--
8	4	3	3	71	71	1	1	8	1	0001000000	(2)	--	--	--	-3000.0	--	--	--	--	--	--	--
8	4	3	3	71	71	1	1	8	1	0001000000	(12)	--	--	--	5000.0	--	--	--	--	--	--	--
8	4	3	3	71	71	1	1	8	1	0001000000	(75)	--	--	--	-5000.0	--	--	--	--	--	--	--
8	4	3	3	71	71	1	1	16	1	0000100000	(11)	--	--	--	--	0.05	--	--	--	--	--	--
8	4	3	3	71	71	1	1	16	1	0000100000	(28)	--	--	--	--	0.25	--	--	--	--	--	--
8	4	3	3	71	71	1	1	16	1	0000100000	(50)	--	--	--	--	0.15	--	--	--	--	--	--
8	4	3	3	71	71	1	1	32	1	0000010000	(12)	--	--	--	--	--	0.25	--	--	--	--	--
8	4	3	3	71	71	1	1	32	1	0000010000	(15)	--	--	--	--	--	-0.35	--	--	--	--	--
8	4	3	3	71	71	1	1	32	1	0000010000	(20)	--	--	--	--	--	-0.15	--	--	--	--	--
8	4	3	3	71	71	1	1	32	1	0000010000	(42)	--	--	--	--	--	-0.25	--	--	--	--	--
8	4	3	3	71	71	1	1	128	1	0000000010	(4)	--	--	--	--	--	--	--	--	--	-30.0	--
8	4	3	3	71	71	1	1	128	1	0000000010	(16)	--	--	--	--	--	--	--	--	--	-25.0	--
8	4	3	3	71	71	1	1	128	1	0000000010	(69)	--	--	--	--	--	--	--	--	--	-20.0	--
8	4	3	3	71	71	1	1	256	1	0000000001	(38)	--	--	--	--	--	--	--	--	--	--	7500.0
8	4	3	3	71	71	1	1	256	1	0000000001	(51)	--	--	--	--	--	--	--	--	--	--	3700.0
8	4	4	4	75	75	1	1	1	1	1000000000	(32)	--	1	--	--	--	--	--	--	--	--	--
8	4	4	4	75	75	1	1	1	1	1000000000	(33)	--	2	--	--	--	--	--	--	--	--	--
8	4	4	4	75	75	1	1	2	1	0100000000	(6)	--	250.00	--	--	--	--	--	--	--	--	--
8	4	4	4	75	75	1	1	2	1	0100000000	(12)	--	-500.00	--	--	--	--	--	--	--	--	--
8	4	4	4	75	75	1	1	2	1	0100000000	(21)	--	750.00	--	--	--	--	--	--	--	--	--
8	4	4	4	75	75	1	1	2	1	0100000000	(26)	--	500.00	--	--	--	--	--	--	--	--	--
8	4	4	4	75	75	1	1	4	1	0010000000	(17)	--	--	-3000.0	--	--	--	--	--	--	--	--
8	4	4	4	75	75	1	1	4	1	0010000000	(22)	--	--	-1000.0	--	--	--	--	--	--	--	--
8	4	4	4	75	75	1	1	4	1	0010000000	(26)	--	--	-5000.0	--	--	--	--	--	--	--	--
8	4	4	4	75	75	1	1	8	1	0001000000	(12)	--	--	--	5000.0	--	--	--	--	--	--	--
8	4	4	4	75	75	1	1	8	1	0001000000	(53)	--	--	--	-5000.0	--	--	--	--	--	--	--
8	4	4	4	75	75	1	1	16	1	0000100000	(11)	--	--	--	--	0.05	--	--	--	--	--	--
8	4	4	4	75	75	1	1	16	1	0000100000	(26)	--	--	--	--	0.25	--	--	--	--	--	--
8	4	4	4	75	75	1	1	16	1	0000100000	(28)	--	--	--	--	0.15	--	--	--	--	--	--
8	4	4	4	75	75	1	1	32	1	0000010000	(2)	--	--	--	--	--	-0.15	--	--	--	--	--
8	4	4	4	75	75	1	1	32	1	0000010000	(12)	--	--	--	--	--	0.25	--	--	--	--	--
8	4	4	4	75	75	1	1	32	1	0000010000	(15)	--	--	--	--	--	-0.35	--	--	--	--	--

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PROGRAM CLASS											LLRPU ROW											- Frequency (COUNT) of Multiple Valued Parameters;											(--) are excluded parameters.											Tue, 30 Sep 1997, Page 7										
TBL	COL	EQ	EQ	RES	RES	Com Numb	Com	Parameter Comb.Code	COUNT	HI ID	CPA SEP	AC1 RATE	AC2 RATE	AC1 ACC	AC2 ACC	AC1 TIM	AC2 TIM	AC1 ALT																																				
8	4	4	4	75	75	1	1	32	1	000001000	(	36)	--	--	--	--	-0.25	--	--																																		
8	4	4	4	75	75	1	1	128	1	000000010	(	2)	--	--	--	--	--	-25.0	--																																		
8	4	4	4	75	75	1	1	128	1	000000010	(	63)	--	--	--	--	--	-20.0	--																																		
8	4	4	4	75	75	1	1	256	1	000000001	(	28)	--	--	--	--	--	7500.0	--																																		
8	4	4	4	75	75	1	1	256	1	000000001	(	37)	--	--	--	--	--	3700.0	--																																		
9	4	2	2	65	65	1	1	1	1	100000000	(	7)	2	--	--	--	--	--	--																																		
9	4	2	2	65	65	1	1	1	1	100000000	(	11)	1	--	--	--	--	--	--																																		
9	4	2	2	65	65	1	1	2	1	010000000	(	1)	--	250.00	--	--	--	--	--																																		
9	4	2	2	65	65	1	1	2	1	010000000	(	1)	--	500.00	--	--	--	--	--																																		
9	4	2	2	65	65	1	1	2	1	010000000	(	1)	--	-500.00	--	--	--	--	--																																		
9	4	2	2	65	65	1	1	2	1	010000000	(	1)	--	1000.00	--	--	--	--	--																																		
9	4	2	2	65	65	1	1	2	1	010000000	(	14)	--	-250.00	--	--	--	--	--																																		
9	4	2	2	65	65	1	1	4	1	001000000	(	1)	--	1000.0	--	--	--	--	--																																		
9	4	2	2	65	65	1	1	4	1	001000000	(	17)	--	5000.0	--	--	--	--	--																																		
9	4	2	2	65	65	1	1	8	1	000100000	(	1)	--	--	5000.0	--	--	--	--																																		
9	4	2	2	65	65	1	1	8	1	000100000	(	1)	--	--	-3000.0	--	--	--	--																																		
9	4	2	2	65	65	1	1	8	1	000100000	(	3)	--	--	3000.0	--	--	--	--																																		
9	4	2	2	65	65	1	1	8	1	000100000	(	13)	--	--	-5000.0	--	--	--	--																																		
9	4	2	2	65	65	1	1	16	1	000010000	(	7)	--	--	--	-0.15	--	--	--																																		
9	4	2	2	65	65	1	1	16	1	000010000	(	11)	--	--	--	-0.05	--	--	--																																		
9	4	2	2	65	65	1	1	32	1	000001000	(	1)	--	--	--	-0.05	--	--	--																																		
9	4	2	2	65	65	1	1	32	1	000001000	(	1)	--	--	--	-0.15	--	--	--																																		
9	4	2	2	65	65	1	1	32	1	000001000	(	2)	--	--	--	0.25	--	--	--																																		
9	4	2	2	65	65	1	1	32	1	000001000	(	2)	--	--	--	-0.25	--	--	--																																		
9	4	2	2	65	65	1	1	32	1	000001000	(	3)	--	--	--	0.15	--	--	--																																		
9	4	2	2	65	65	1	1	32	1	000001000	(	4)	--	--	--	0.35	--	--	--																																		
9	4	2	2	65	65	1	1	32	1	000001000	(	5)	--	--	--	0.05	--	--	--																																		
9	4	2	2	65	65	1	1	128	1	000000010	(	2)	--	--	--	--	-30.0	--	--																																		
9	4	2	2	65	65	1	1	128	1	000000010	(	8)	--	--	--	--	-20.0	--	--																																		
9	4	2	2	65	65	1	1	128	1	000000010	(	8)	--	--	--	--	-25.0	--	--																																		
9	4	2	2	65	65	1	1	256	1	000000001	(	4)	--	--	--	--	7500.0	--	--																																		
9	4	2	2	65	65	1	1	256	1	000000001	(	14)	--	--	--	--	3700.0	--	--																																		
9	4	3	3	71	71	1	1	1	1	100000000	(	2)	1	--	--	--	--	--	--																																		
9	4	3	3	71	71	1	1	1	1	100000000	(	3)	2	--	--	--	--	--	--																																		
9	4	3	3	71	71	1	1	2	1	010000000	(	5)	--	-250.00	--	--	--	--	--																																		
9	4	3	3	71	71	1	1	4	1	001000000	(	5)	--	--	5000.0	--	--	--	--																																		
9	4	3	3	71	71	1	1	8	1	000100000	(	5)	--	--	-5000.0	--	--	--	--																																		
9	4	3	3	71	71	1	1	16	1	000010000	(	2)	--	--	--	-0.15	--	--	--																																		
9	4	3	3	71	71	1	1	16	1	000010000	(	3)	--	--	--	-0.05	--	--	--																																		
9	4	3	3	71	71	1	1	32	1	000001000	(	1)	--	--	--	0.15	--	--	--																																		
9	4	3	3	71	71	1	1	32	1	000001000	(	1)	--	--	--	0.25	--	--	--																																		
9	4	3	3	71	71	1	1	32	1	000001000	(	1)	--	--	--	0.35	--	--	--																																		
9	4	3	3	71	71	1	1	32	1	000001000	(	2)	--	--	--	0.05	--	--	--																																		
9	4	3	3	71	71	1	1	128	1	000000010	(	1)	--	--	--	--	-30.0	--	--																																		
9	4	3	3	71	71	1	1	128	1	000000010	(	2)	--	--	--	--	-20.0	--	--																																		
9	4	3	3	71	71	1	1	128	1	000000010	(	2)	--	--	--	--	-25.0	--	--																																		
9	4	3	3	71	71	1	1	256	1	000000001	(	5)	--	--	--	--	3700.0	--	--																																		
9	4	4	4	75	75	1	1	1	1	100000000	(	1)	1	--	--	--	--	--	--																																		
9	4	4	4	75	75	1	1	1	1	100000000	(	1)	2	--	--	--	--	--	--																																		
9	4	4	4	75	75	1	1	2	1	010000000	(	2)	--	-250.00	--	--	--	--	--																																		
9	4	4	4	75	75	1	1	4	1	001000000	(	2)	--	--	5000.0	--	--	--	--																																		
9	4	4	4	75	75	1	1	8	1	000100000	(	2)	--	--	-5000.0	--	--	--	--																																		
9	4	4	4	75	75	1	1	16	1	000010000	(	1)	--	--	--	-0.05	--	--	--																																		
9	4	4	4	75	75	1	1	16	1	000010000	(	1)	--	--	--	-0.15	--	--	--																																		
9	4	4	4	75	75	1	1	32	1	000001000	(	1)	--	--	--	0.05	--	--	--																																		
9	4	4	4	75	75	1	1	32	1	000001000	(	1)	--	--	--	0.25	--	--	--																																		
9	4	4	4	75	75	1	1	128	1	000000010	(	1)	--	--	--	--	-20.0	--	--																																		
9	4	4	4	75	75	1	1	128	1	000000010	(	1)	--	--	--	--	-30.0	--	--																																		
9	4	4	4	75	75	1	1	256	1	000000001	(	2)	--	--	--	--	3700.0	--	--																																		
13	4	2	2	65	65	1	1	1	1	100000000	(2)	1	--	--	--	--	--	--																																			
13	4	2	2	65	65	1	1	1	1	100000000	(2)	2	--	--	--	--	--	--																																			
13	4	2	2	65	65	1	1	2	1	010000000	(4)	--	500.00	--	--	--	--	--																																			

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CLASS	TBL	ROW	COL	AC1 EQ	AC2 EQ	AC1 RES	AC2 RES	Com Nmb	Parameter Comb.Code	COUNT	HI ID	CPA SEP	AC1 RATE	AC2 RATE	AC1 ACC	AC2 ACC	AC1 TIM	AC2 TIM	AC1 ALT
13	4	2	2	65	65	1	1	4	1	0010000000 (	--	--	0.0	--	--	--	--	--	--
13	4	2	2	65	65	1	1	8	1	0001000000 (	--	--	--	5000.0	--	--	--	--	--
13	4	2	2	65	65	1	1	32	1	0000010000 (	--	--	--	--	--	-0.35	--	--	--
13	4	2	2	65	65	1	1	32	1	0000010000 (	--	--	--	--	--	-0.25	--	--	--
13	4	2	2	65	65	1	1	128	1	0000000010 (	--	--	--	--	--	--	-20.0	--	--
13	4	2	2	65	65	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	3680.0
13	4	2	2	65	65	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	3720.0
13	4	3	3	71	71	1	1	1	1	1000000000 (	1	--	--	--	--	--	--	--	--
13	4	3	3	71	71	1	1	1	1	1000000000 (	2	--	--	--	--	--	--	--	--
13	4	3	3	71	71	1	1	2	1	0100000000 (	--	250.00	--	--	--	--	--	--	--
13	4	3	3	71	71	1	1	4	1	0010000000 (	--	--	0.0	--	--	--	--	--	--
13	4	3	3	71	71	1	1	4	1	0010000000 (	--	--	400.0	--	--	--	--	--	--
13	4	3	3	71	71	1	1	8	1	0001000000 (	--	--	--	5000.0	--	--	--	--	--
13	4	3	3	71	71	1	1	32	1	0000010000 (	--	--	--	--	--	-0.25	--	--	--
13	4	3	3	71	71	1	1	32	1	0000010000 (	--	--	--	--	--	-0.35	--	--	--
13	4	3	3	71	71	1	1	128	1	0000000010 (	--	--	--	--	--	--	-20.0	--	--
13	4	3	3	71	71	1	1	128	1	0000000010 (	--	--	--	--	--	--	-25.0	--	--
13	4	3	3	71	71	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	3680.0
13	4	3	3	71	71	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	3720.0
13	4	3	3	71	71	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	7520.0
15	4	2	2	65	65	1	1	1	1	1000000000 (	1	--	--	--	--	--	--	--	--
15	4	2	2	65	65	1	1	1	1	1000000000 (	2	--	--	--	--	--	--	--	--
15	4	2	2	65	65	1	1	2	1	0100000000 (	--	-250.00	--	--	--	--	--	--	--
15	4	2	2	65	65	1	1	2	1	0100000000 (	--	-750.00	--	--	--	--	--	--	--
15	4	2	2	65	65	1	1	2	1	0100000000 (	--	-500.00	--	--	--	--	--	--	--
15	4	2	2	65	65	1	1	4	1	0010000000 (	--	--	5000.0	--	--	--	--	--	--
15	4	2	2	65	65	1	1	4	1	0010000000 (	--	--	3000.0	--	--	--	--	--	--
15	4	2	2	65	65	1	1	8	1	0001000000 (	--	--	--	5000.0	--	--	--	--	--
15	4	2	2	65	65	1	1	32	1	0000010000 (	--	--	--	--	--	0.15	--	--	--
15	4	2	2	65	65	1	1	32	1	0000010000 (	--	--	--	--	--	0.25	--	--	--
15	4	2	2	65	65	1	1	32	1	0000010000 (	--	--	--	--	--	0.35	--	--	--
15	4	2	2	65	65	1	1	128	1	0000000010 (	--	--	--	--	--	--	-25.0	--	--
15	4	2	2	65	65	1	1	128	1	0000000010 (	13	--	--	--	--	--	-20.0	--	--
15	4	2	2	65	65	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	7480.0
15	4	2	2	65	65	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	7520.0
15	4	2	2	65	65	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	3720.0
15	4	2	2	65	65	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	3680.0
15	4	3	3	71	71	1	1	1	1	1000000000 (	1	--	--	--	--	--	--	--	--
15	4	3	3	71	71	1	1	2	1	0100000000 (	--	-500.00	--	--	--	--	--	--	--
15	4	3	3	71	71	1	1	4	1	0010000000 (	--	--	5000.0	--	--	--	--	--	--
15	4	3	3	71	71	1	1	8	1	0001000000 (	--	--	--	5000.0	--	--	--	--	--
15	4	3	3	71	71	1	1	32	1	0000010000 (	--	--	--	--	--	0.25	--	--	--
15	4	3	3	71	71	1	1	32	1	0000010000 (	--	--	--	--	--	0.35	--	--	--
15	4	3	3	71	71	1	1	128	1	0000000010 (	--	--	--	--	--	--	-20.0	--	--
15	4	3	3	71	71	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	3680.0
15	4	3	3	71	71	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	3720.0
15	4	4	4	75	75	1	1	1	1	1000000000 (	1	--	--	--	--	--	--	--	--
15	4	4	4	75	75	1	1	2	1	0100000000 (	--	-500.00	--	--	--	--	--	--	--
15	4	4	4	75	75	1	1	4	1	0010000000 (	--	--	5000.0	--	--	--	--	--	--
15	4	4	4	75	75	1	1	8	1	0001000000 (	--	--	--	5000.0	--	--	--	--	--
15	4	4	4	75	75	1	1	32	1	0000010000 (	--	--	--	--	--	0.25	--	--	--
15	4	4	4	75	75	1	1	128	1	0000000010 (	--	--	--	--	--	--	-20.0	--	--
15	4	4	4	75	75	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	3680.0
15	4	4	4	75	75	1	1	256	1	0000000001 (	--	--	--	--	--	--	--	--	3720.0
16	4	2	2	65	65	1	1	1	1	1000000000 (	2	--	--	--	--	--	--	--	--
16	4	2	2	65	65	1	1	2	1	0100000000 (	--	-500.00	--	--	--	--	--	--	--
16	4	2	2	65	65	1	1	4	1	0010000000 (	--	--	1000.0	--	--	--	--	--	--
16	4	2	2	65	65	1	1	8	1	0001000000 (	--	--	--	-3000.0	--	--	--	--	--
16	4	2	2	65	65	1	1	32	1	0000010000 (--	--	--	--	--	0.35	--	--	--
16	4	2	2	65	65	1	1	128	1	0000000010 (--	--	--	--	--	--	-25.0	--	--
16	4	2	2	65	65	1	1	256	1	0000000001 (--	--	--	--	--	--	--	--	3720.0

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PROGRAM LLPRPU - Frequency (COUNT) of Multiple Valued Parameters;													(-- are excluded parameters. Tue, 30 Sep 1997, Page 9									
CLASS	ROW	AC1	AC2	AC1	AC2	Com	Nmb	Parameter	HI	CPA	AC1	AC2	AC1	AC2	AC1	AC2	AC1					
TBL	COL	EQ	EQ	RES	RES	Nmb	Com	Comb.Code	COUNT	SEP	RATE	RATE	ACC	ACC	TIM	TIM	ALT					
17	4	2	2	65	65	1	1	1	1	1000000000	(	7)		1	--	--	--	--			
17	4	2	2	65	65	1	1	1	1	1000000000	(	7)		2	--	--	--	--			
17	4	2	2	65	65	1	1	2	1	0100000000	(	1)	--		250.00	--	--	--			
17	4	2	2	65	65	1	1	2	1	0100000000	(	13)	--		500.00	--	--	--			
17	4	2	2	65	65	1	1	4	1	0010000000	(	14)	--			5000.0	--	--			
17	4	2	2	65	65	1	1	8	1	0001000000	(	2)	--				5000.0	--			
17	4	2	2	65	65	1	1	8	1	0001000000	(	12)	--				3000.0	--			
17	4	2	2	65	65	1	1	16	1	0000100000	(	1)	--				0.25	--			
17	4	2	2	65	65	1	1	16	1	0000100000	(	13)	--				0.15	--			
17	4	2	2	65	65	1	1	32	1	0000010000	(	4)	--					0.15	--		
17	4	2	2	65	65	1	1	32	1	0000010000	(	5)	--					0.25	--		
17	4	2	2	65	65	1	1	32	1	0000010000	(	5)	--					0.35	--		
17	4	2	2	65	65	1	1	128	1	0000000100	(	7)	--						-25.0	--	
17	4	2	2	65	65	1	1	128	1	0000000100	(	7)	--							-30.0	--
17	4	2	2	65	65	1	1	256	1	0000000001	(	14)	--								3700.0
17	4	3	3	71	71	1	1	1	1	1000000000	(	2)		1	--	--	--	--	--	--	--
17	4	3	3	71	71	1	1	1	1	1000000000	(	5)		2	--	--	--	--	--	--	--
17	4	3	3	71	71	1	1	2	1	0100000000	(	7)	--		500.00	--	--	--	--	--	--
17	4	3	3	71	71	1	1	4	1	0010000000	(	7)	--			5000.0	--	--	--	--	--
17	4	3	3	71	71	1	1	8	1	0001000000	(	1)	--				5000.0	--	--	--	--
17	4	3	3	71	71	1	1	8	1	0001000000	(	6)	--				3000.0	--	--	--	--
17	4	3	3	71	71	1	1	16	1	0000100000	(	1)	--					0.25	--	--	--
17	4	3	3	71	71	1	1	16	1	0000100000	(	6)	--					0.15	--	--	--
17	4	3	3	71	71	1	1	32	1	0000010000	(	2)	--						0.15	--	--
17	4	3	3	71	71	1	1	32	1	0000010000	(	2)	--						0.35	--	--
17	4	3	3	71	71	1	1	32	1	0000010000	(	3)	--						0.25	--	--
17	4	3	3	71	71	1	1	128	1	0000000100	(	2)	--							-25.0	--
17	4	3	3	71	71	1	1	128	1	0000000100	(	5)	--							-30.0	--
17	4	3	3	71	71	1	1	256	1	0000000001	(	7)	--								3700.0
17	4	4	4	75	75	1	1	1	1	1000000000	(	6)		2	--	--	--	--	--	--	--
17	4	4	4	75	75	1	1	2	1	0100000000	(	6)	--		500.00	--	--	--	--	--	--
17	4	4	4	75	75	1	1	4	1	0010000000	(	6)	--			5000.0	--	--	--	--	--
17	4	4	4	75	75	1	1	8	1	0001000000	(	6)	--				3000.0	--	--	--	--
17	4	4	4	75	75	1	1	16	1	0000100000	(	6)	--					0.15	--	--	--
17	4	4	4	75	75	1	1	32	1	0000010000	(	2)	--						0.15	--	--
17	4	4	4	75	75	1	1	32	1	0000010000	(	2)	--						0.25	--	--
17	4	4	4	75	75	1	1	32	1	0000010000	(	2)	--						0.35	--	--
17	4	4	4	75	75	1	1	128	1	0000000100	(	3)	--							-25.0	--
17	4	4	4	75	75	1	1	128	1	0000000100	(	3)	--							-30.0	--
17	4	4	4	75	75	1	1	256	1	0000000001	(	6)	--								3700.0
18	4	2	2	65	65	1	1	1	1	1000000000	(	7)		2	--	--	--	--	--	--	--
18	4	2	2	65	65	1	1	1	1	1000000000	(	10)		1	--	--	--	--	--	--	--
18	4	2	2	65	65	1	1	2	1	0100000000	(	2)	--		250.00	--	--	--	--	--	--
18	4	2	2	65	65	1	1	2	1	0100000000	(	7)	--		750.00	--	--	--	--	--	--
18	4	2	2	65	65	1	1	2	1	0100000000	(	8)	--		500.00	--	--	--	--	--	--
18	4	2	2	65	65	1	1	4	1	0010000000	(	4)	--				-3000.0	--	--	--	--
18	4	2	2	65	65	1	1	4	1	0010000000	(	13)	--				-5000.0	--	--	--	--
18	4	2	2	65	65	1	1	8	1	0001000000	(	1)	--						3000.0	--	--
18	4	2	2	65	65	1	1	8	1	0001000000	(	4)	--						1000.0	--	--
18	4	2	2	65	65	1	1	8	1	0001000000	(	6)	--						-3000.0	--	--
18	4	2	2	65	65	1	1	8	1	0001000000	(	6)	--						-5000.0	--	--
18	4	2	2	65	65	1	1	16	1	0000100000	(	4)	--							0.05	--
18	4	2	2	65	65	1	1	16	1	0000100000	(	4)	--							0.25	--
18	4	2	2	65	65	1	1	16	1	0000100000	(	9)	--							0.15	--
18	4	2	2	65	65	1	1	32	1	0000010000	(1)	--								0.05	--
18	4	2	2	65	65	1	1	32	1	0000010000	(1)	--								0.15	--
18	4	2	2	65	65	1	1	32	1	0000010000	(1)	--								0.35	--
18	4	2	2	65	65	1	1	32	1	0000010000	(2)	--								0.25	--
18	4	2	2	65	65	1	1	32	1	0000010000	(4)	--								-0.05	--
18	4	2	2	65	65	1	1	32	1	0000010000	(4)	--								-0.25	--
18	4	2	2	65	65	1	1	32	1	0000010000	(4)	--								-0.35	--
18	4	2	2	65	65	1	1	128	1	0000000100	(2)	--								-30.0	--

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CLASS	TBL	ROW	COL	AC1 EQ	AC2 EQ	AC1 RES	AC2 RES	Com Nmb	Parameter Comb.Code	COUNT	HI ID	CPA SEP	AC1 RATE	AC2 RATE	AC1 ACC	AC2 ACC	AC1 TIM	AC2 TIM	AC1 ALT	
18	4	2	2	65	65	1	1	128	1	0000000010	(5)	--	--	--	--	--	--	--	-25.0	--
18	4	2	2	65	65	1	1	128	1	0000000010	(10)	--	--	--	--	--	--	--	-20.0	--
18	4	2	2	65	65	1	1	256	1	0000000001	(2)	--	--	--	--	--	--	--	--	7500.0
18	4	2	2	65	65	1	1	256	1	0000000001	(15)	--	--	--	--	--	--	--	--	3700.0
18	4	3	3	71	71	1	1	1	1	1000000000	(3)	2	--	--	--	--	--	--	--	--
18	4	3	3	71	71	1	1	1	1	1000000000	(6)	1	--	--	--	--	--	--	--	--
18	4	3	3	71	71	1	1	2	1	0100000000	(3)	--	500.00	--	--	--	--	--	--	--
18	4	3	3	71	71	1	1	2	1	0100000000	(6)	--	750.00	--	--	--	--	--	--	--
18	4	3	3	71	71	1	1	4	1	0010000000	(9)	--	--	-5000.0	--	--	--	--	--	--
18	4	3	3	71	71	1	1	8	1	0001000000	(2)	--	--	--	-5000.0	--	--	--	--	--
18	4	3	3	71	71	1	1	8	1	0001000000	(3)	--	--	--	-1000.0	--	--	--	--	--
18	4	3	3	71	71	1	1	8	1	0001000000	(4)	--	--	--	-3000.0	--	--	--	--	--
18	4	3	3	71	71	1	1	16	1	0000100000	(3)	--	--	--	--	0.25	--	--	--	--
18	4	3	3	71	71	1	1	16	1	0000100000	(6)	--	--	--	--	0.15	--	--	--	--
18	4	3	3	71	71	1	1	32	1	0000010000	(1)	--	--	--	--	--	-0.25	--	--	--
18	4	3	3	71	71	1	1	32	1	0000010000	(1)	--	--	--	--	--	-0.35	--	--	--
18	4	3	3	71	71	1	1	32	1	0000010000	(3)	--	--	--	--	--	-0.15	--	--	--
18	4	3	3	71	71	1	1	32	1	0000010000	(4)	--	--	--	--	--	-0.05	--	--	--
18	4	3	3	71	71	1	1	128	1	0000000010	(4)	--	--	--	--	--	--	-25.0	--	--
18	4	3	3	71	71	1	1	128	1	0000000010	(5)	--	--	--	--	--	--	-20.0	--	--
18	4	3	3	71	71	1	1	256	1	0000000001	(3)	--	--	--	--	--	--	--	--	3700.0
18	4	3	3	71	71	1	1	256	1	0000000001	(6)	--	--	--	--	--	--	--	--	7500.0
18	4	4	4	75	75	1	1	1	1	1000000000	(1)	1	--	--	--	--	--	--	--	--
18	4	4	4	75	75	1	1	2	1	0100000000	(1)	--	750.00	--	--	--	--	--	--	--
18	4	4	4	75	75	1	1	4	1	0010000000	(1)	--	--	-5000.0	--	--	--	--	--	--
18	4	4	4	75	75	1	1	8	1	0001000000	(1)	--	--	--	-3000.0	--	--	--	--	--
18	4	4	4	75	75	1	1	16	1	0000100000	(1)	--	--	--	--	0.15	--	--	--	--
18	4	4	4	75	75	1	1	32	1	0000010000	(1)	--	--	--	--	--	-0.25	--	--	--
18	4	4	4	75	75	1	1	128	1	0000000010	(1)	--	--	--	--	--	--	-20.0	--	--
18	4	4	4	75	75	1	1	256	1	0000000001	(1)	--	--	--	--	--	--	--	--	7500.0
19	4	2	2	65	65	1	1	1	1	1000000000	(16)	2	--	--	--	--	--	--	--	--
19	4	2	2	65	65	1	1	1	1	1000000000	(20)	1	--	--	--	--	--	--	--	--
19	4	2	2	65	65	1	1	2	1	0100000000	(2)	--	1000.00	--	--	--	--	--	--	--
19	4	2	2	65	65	1	1	2	1	0100000000	(6)	--	500.00	--	--	--	--	--	--	--
19	4	2	2	65	65	1	1	2	1	0100000000	(9)	--	-750.00	--	--	--	--	--	--	--
19	4	2	2	65	65	1	1	2	1	0100000000	(19)	--	-500.00	--	--	--	--	--	--	--
19	4	2	2	65	65	1	1	4	1	0010000000	(3)	--	--	1000.0	--	--	--	--	--	--
19	4	2	2	65	65	1	1	4	1	0010000000	(9)	--	--	5000.0	--	--	--	--	--	--
19	4	2	2	65	65	1	1	4	1	0010000000	(24)	--	--	3000.0	--	--	--	--	--	--
19	4	2	2	65	65	1	1	8	1	0001000000	(3)	--	--	--	5000.0	--	--	--	--	--
19	4	2	2	65	65	1	1	8	1	0001000000	(7)	--	--	--	-3000.0	--	--	--	--	--
19	4	2	2	65	65	1	1	8	1	0001000000	(8)	--	--	--	3000.0	--	--	--	--	--
19	4	2	2	65	65	1	1	8	1	0001000000	(18)	--	--	--	-5000.0	--	--	--	--	--
19	4	2	2	65	65	1	1	16	1	0000100000	(15)	--	--	--	--	-0.05	--	--	--	--
19	4	2	2	65	65	1	1	16	1	0000100000	(21)	--	--	--	--	-0.15	--	--	--	--
19	4	2	2	65	65	1	1	32	1	0000010000	(1)	--	--	--	--	--	-0.35	--	--	--
19	4	2	2	65	65	1	1	32	1	0000010000	(3)	--	--	--	--	--	0.05	--	--	--
19	4	2	2	65	65	1	1	32	1	0000010000	(3)	--	--	--	--	--	-0.25	--	--	--
19	4	2	2	65	65	1	1	32	1	0000010000	(6)	--	--	--	--	--	0.15	--	--	--
19	4	2	2	65	65	1	1	32	1	0000010000	(7)	--	--	--	--	--	0.35	--	--	--
19	4	2	2	65	65	1	1	32	1	0000010000	(7)	--	--	--	--	--	-0.15	--	--	--
19	4	2	2	65	65	1	1	32	1	0000010000	(9)	--	--	--	--	0.25	--	--	--	--
19	4	2	2	65	65	1	1	128	1	0000000010	(7)	--	--	--	--	--	--	-25.0	--	--
19	4	2	2	65	65	1	1	128	1	0000000010	(7)	--	--	--	--	--	--	-30.0	--	--
19	4	2	2	65	65	1	1	128	1	0000000010	(22)	--	--	--	--	--	--	-20.0	--	--
19	4	2	2	65	65	1	1	256	1	0000000001	(14)	--	--	--	--	--	--	--	--	7500.0
19	4	2	2	65	65	1	1	256	1	0000000001	(22)	--	--	--	--	--	--	--	--	3700.0
19	4	3	3	71	71	1	1	1	1	1000000000	(3)	2	--	--	--	--	--	--	--	--
19	4	3	3	71	71	1	1	1	1	1000000000	(10)	1	--	--	--	--	--	--	--	--
19	4	3	3	71	71	1	1	2	1	0100000000	(2)	--	-250.00	--	--	--	--	--	--	--
19	4	3	3	71	71	1	1	2	1	0100000000	(11)	--	-500.00	--	--	--	--	--	--	--
19	4	3	3	71	71	1	1	4	1	0010000000	(2)	--	--	1000.0	--	--	--	--	--	--

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PROGRAM LLPRPU - Frequency (COUNT) of Multiple Valued Parameters;																		
CLASS	ROW	COL	AC1 EQ	AC2 EQ	AC1 RES	AC2 RES	Com Nmb	Parameter	HI ID	CPA SEP	AC1 RATE	AC2 RATE	AC1 ACC	AC2 ACC	AC1 TIM	AC2 TIM	AC1 ALT	
19	4	3	3	71	71	1	1	4	1	001000000	(11)	--	--	5000.0	--	--	--	--
19	4	3	3	71	71	1	1	8	1	000100000	(2)	--	--	--	-3000.0	--	--	--
19	4	3	3	71	71	1	1	8	1	000100000	(11)	--	--	--	-5000.0	--	--	--
19	4	3	3	71	71	1	1	16	1	000010000	(2)	--	--	--	--	-0.05	--	--
19	4	3	3	71	71	1	1	16	1	000010000	(11)	--	--	--	--	-0.15	--	--
19	4	3	3	71	71	1	1	32	1	000001000	(3)	--	--	--	--	0.35	--	--
19	4	3	3	71	71	1	1	32	1	000001000	(4)	--	--	--	--	0.25	--	--
19	4	3	3	71	71	1	1	32	1	000001000	(6)	--	--	--	--	0.15	--	--
19	4	3	3	71	71	1	1	128	1	000000010	(6)	--	--	--	--	--	-25.0	--
19	4	3	3	71	71	1	1	128	1	000000010	(7)	--	--	--	--	--	-20.0	--
19	4	3	3	71	71	1	1	256	1	000000001	(6)	--	--	--	--	--	--	7500.0
19	4	3	3	71	71	1	1	256	1	000000001	(7)	--	--	--	--	--	--	3700.0
19	4	4	4	75	75	1	1	1	1	100000000	(1)	--	--	--	--	--	--	--
19	4	4	4	75	75	1	1	1	1	100000000	(2)	--	--	--	--	--	--	--
19	4	4	4	75	75	1	1	2	1	010000000	(3)	--	-250.00	--	--	--	--	--
19	4	4	4	75	75	1	1	4	1	001000000	(1)	--	--	5000.0	--	--	--	--
19	4	4	4	75	75	1	1	4	1	001000000	(2)	--	--	3000.0	--	--	--	--
19	4	4	4	75	75	1	1	8	1	000100000	(1)	--	--	--	-3000.0	--	--	--
19	4	4	4	75	75	1	1	8	1	000100000	(2)	--	--	--	-5000.0	--	--	--
19	4	4	4	75	75	1	1	16	1	000010000	(1)	--	--	--	--	-0.15	--	--
19	4	4	4	75	75	1	1	16	1	000010000	(2)	--	--	--	--	-0.05	--	--
19	4	4	4	75	75	1	1	32	1	000001000	(1)	--	--	--	--	0.05	--	--
19	4	4	4	75	75	1	1	32	1	000001000	(2)	--	--	--	--	0.25	--	--
19	4	4	4	75	75	1	1	128	1	000000010	(3)	--	--	--	--	--	-20.0	--
19	4	4	4	75	75	1	1	256	1	000000001	(1)	--	--	--	--	--	--	3700.0
19	4	4	4	75	75	1	1	256	1	000000001	(2)	--	--	--	--	--	--	7500.0

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CLS	REIT Modes					CPA Alt	AC#1	AC#2	AC#1	AC#2	AC #1	Cell 2 2					Cell 3 3											
	TBL	#1	#2	R,C	R,C							Separat	Rate	Rate	Acc.	Acc.	Time	Time	CPAAlt	Data File	Achieved	C I	RAS	Own	Alt	Data File	Achieved	C I
6 3	-----					3 3	Subtotal =					4 NMACs																
6 4	145	5	10	2	2	-250.00	-5000.0	-5000.0	0.00	0.25	0.0	-20.0	3680.0	CL6B1_E	67.7	0	0	5	4	3824.8								
6 4	1657	5	10	2	2	-250.00	-5000.0	-5000.0	0.00	0.25	0.0	-20.0	3720.0	CL6B1_E	67.7	0	0	5	4	3864.8								
6 4	3169	5	10	2	2	-250.00	-5000.0	-5000.0	0.00	0.25	0.0	-20.0	7480.0	CL6B1_E	67.7	0	0	5	5	7624.8								
6 4	4681	5	10	2	2	-250.00	-5000.0	-5000.0	0.00	0.25	0.0	-20.0	7520.0	CL6B1_E	82.2	0	0	5	5	7679.3								
6 4	1720	5	10	2	2	-250.00	-5000.0	-5000.0	0.00	0.35	0.0	-20.0	3720.0	CL6B1_E	67.7	0	0	5	4	3864.8								
6 4	4744	5	10	2	2	-250.00	-5000.0	-5000.0	0.00	0.35	0.0	-20.0	7520.0	CL6B1_E	82.2	0	0	5	5	7679.3								
6 4	1588	5	10	2	2	-500.00	-5000.0	-5000.0	0.00	0.15	0.0	-25.0	3720.0	CL6B1_E	18.2	0	0	5	4	3977.4								
6 4	4612	5	10	2	2	-500.00	-5000.0	-5000.0	0.00	0.15	0.0	-25.0	7520.0	CL6B1_E	18.2	0	0	5	5	7777.4								
6 4	-----					2 2	Subtotal =					8 NMACs																
6 4	146	10	5	2	2	3 3	-500.00	-5000.0	-5000.0	0.00	0.25	0.0	-20.0	3680.0	CL6B1_F	54.1	0	0	5	4	3937.4	CL6B1_N	-54.1	0	0	5	4	3883.2
6 4	3170	10	5	2	2	3 3	-500.00	-5000.0	-5000.0	0.00	0.25	0.0	-20.0	7480.0	CL6B1_F	54.1	0	0	5	5	7737.4	CL6B1_N	-54.1	0	0	5	5	7683.3
6 4	1721	10	5	2	2	3 3	-500.00	-5000.0	-5000.0	0.00	0.35	0.0	-20.0	3720.0	CL6B1_F	81.0	0	0	5	4	4003.1	CL6B1_N	-95.5	0	0	5	4	3922.1
6 4	4745	10	5	2	2	3 3	-500.00	-5000.0	-5000.0	0.00	0.35	0.0	-20.0	7520.0	CL6B1_F	81.0	0	0	5	5	7803.1	CL6B1_N	-95.5	0	0	5	5	7722.1
6 4	-----					2 2	3 3	Subtotal =					4 NMACs															
6 4	146	5	10			3 3	-500.00	-5000.0	-5000.0	0.00	0.25	0.0	-20.0	3680.0							CL6B1_M	54.1	0	0	5	4	3937.4	
6 4	1658	5	10			3 3	-500.00	-5000.0	-5000.0	0.00	0.25	0.0	-20.0	3720.0							CL6B1_M	54.1	0	0	5	4	3977.4	
6 4	1658	10	5			3 3	-500.00	-5000.0	-5000.0	0.00	0.25	0.0	-20.0	3720.0							CL6B1_N	-54.1	0	0	5	4	3923.2	
6 4	3170	5	10			3 3	-500.00	-5000.0	-5000.0	0.00	0.25	0.0	-20.0	7480.0							CL6B1_M	54.1	0	0	5	5	7737.4	
6 4	4682	5	10			3 3	-500.00	-5000.0	-5000.0	0.00	0.25	0.0	-20.0	7520.0							CL6B1_M	54.1	0	0	5	5	7777.4	
6 4	4682	10	5			3 3	-500.00	-5000.0	-5000.0	0.00	0.25	0.0	-20.0	7520.0							CL6B1_N	-54.1	0	0	5	5	7723.3	
6 4	1721	5	10			3 3	-500.00	-5000.0	-5000.0	0.00	0.35	0.0	-20.0	3720.0							CL6B1_M	95.5	0	0	5	4	4017.6	
6 4	4745	5	10			3 3	-500.00	-5000.0	-5000.0	0.00	0.35	0.0	-20.0	7520.0							CL6B1_M	95.5	0	0	5	5	7817.6	
6 4	-----					3 3	Subtotal =					8 NMACs																
7 3	2559	5	10	2	2		0.00	5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	3700.0	CL7B1_E	-35.4	1	0	4	4	3683.9							
7 3	2559	10	5	2	2		0.00	5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	3700.0	CL7B1_F	-93.3	1	0	4	4	3683.9							
7 3	2538	5	10	2	2		0.00	5000.0	-5000.0	0.15	-0.05	-25.0	-20.0	3700.0	CL7B1_E	-35.4	1	0	4	4	3683.9							
7 3	2538	10	5	2	2		0.00	5000.0	-5000.0	0.15	-0.05	-25.0	-20.0	3700.0	CL7B1_F	-93.3	1	0	4	4	3683.9							
7 3	-----					2 2	Subtotal =					4 NMACs																
7 4	164	10	5	2	2		250.00	1000.0	-3000.0	0.05	-0.15	-25.0	-20.0	3700.0	CL7B1_F	-61.3	0	0	4	4	3559.2							
7 4	4700	10	5	2	2		250.00	1000.0	-3000.0	0.05	-0.15	-25.0	-20.0	7500.0	CL7B1_F	-61.3	0	0	5	5	7359.2							
7 4	143	10	5	2	2		250.00	1000.0	-5000.0	0.05	-0.15	-25.0	-20.0	3700.0	CL7B1_F	-89.9	0	0	4	4	3573.7							
7 4	668	10	5	2	2		250.00	3000.0	-3000.0	0.05	-0.15	-25.0	-20.0	3700.0	CL7B1_F	-41.2	0	0	4	4	3553.6							
7 4	647	10	5	2	2		250.00	3000.0	-5000.0	0.05	-0.15	-25.0	-20.0	3700.0	CL7B1_F	-98.8	0	0	4	4	3564.9							
7 4	5183	10	5	2	2		250.00	3000.0	-5000.0	0.05	-0.15	-25.0	-20.0	7500.0	CL7B1_F	-98.8	0	0	5	5	7364.9							
7 4	773	10	5	2	2		250.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_F	-55.6	0	0	4	4	3539.1							
7 4	2712	10	5	2	2		250.00	5000.0	1000.0	0.15	0.15	-25.0	-30.0	3700.0	CL7B1_F	-42.0	0	0	4	4	3555.2							
7 4	2838	10	5	2	2		250.00	5000.0	1000.0	0.15	0.25	-25.0	-30.0	3700.0	CL7B1_F	-42.0	0	0	4	4	3555.2							
7 4	2964	10	5	2	2		250.00	5000.0	1000.0	0.15	0.35	-25.0	-30.0	3700.0	CL7B1_F	-42.0	0	0	4	4	3555.2							
7 4	7115	10	5	2	2		250.00	5000.0	-1000.0	0.15	-0.05	-25.0	-20.0	7500.0	CL7B1_F	-93.7	0	0	5	5	7355.2							
7 4	1172	10	5	2	2		250.00	5000.0	-3000.0	0.05	-0.15	-25.0	-20.0	3700.0	CL7B1_F	-41.2	0	0	4	4	3553.6							
7 4	2558	5	10	2	2		250.00	5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	3700.0	CL7B1_E	82.7	1	0	4	4	3635.7							
7 4	2558	10	5	2	2		250.00	5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	3700.0	CL7B1_F	-45.5	1	0	4	4	3635.7							
7 4	7094	5	10	2	2		250.00	5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	7500.0	CL7B1_E	82.7	1	0	5	5	7435.7							
7 4	7094	10	5	2	2		250.00	5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	7500.0	CL7B1_F	-45.5	1	0	5	5	7435.7							
7 4	2551	10	5	2	2		250.00	5000.0	-3000.0	0.15	-0.05	-25.0	-25.0	3700.0	CL7B1_F	-50.0	1	0	4	4	3599.5							
7 4	2684	10	5	2	2		250.00	5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	3700.0	CL7B1_F	-9.8	1	0	4	4	3599.5							
7 4	7220	10	5	2	2		250.00	5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	7500.0	CL7B1_F	-9.8	1	0	5	5	7399.5							
7 4	1151	10	5	2	2		250.00	5000.0	-5000.0	0.05	-0.15	-25.0	-20.0	3700.0	CL7B1_F	-98.8	0	0	4	4	3564.9							
7 4	5687	10	5	2	2		250.00	5000.0	-5000.0	0.05	-0.15	-25.0	-20.0	7500.0	CL7B1_F	-98.8	0	0	5	5	7364.9							
7 4	1277	10	5	2	2		250.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_F	-55.6	0	0	4	4	3539.1							
7 4	2537	5	10	2	2		250.00	5000.0	-5000.0	0.15	-0.05	-25.0	-20.0	3700.0	CL7B1_E	82.7	1	0	4	4	3635.7							
7 4	2537	10	5	2	2		250.00	5000.0	-5000.0	0.15	-0.05	-25.0	-20.0	3700.0	CL7B1_F	-45.5	1	0	4	4	3635.7							
7 4	7073	5	10	2	2		250.00	5000.0	-5000.0	0.15	-0.05	-25.0	-20.0	7500.0	CL7B1_E	82.7	1	0</										

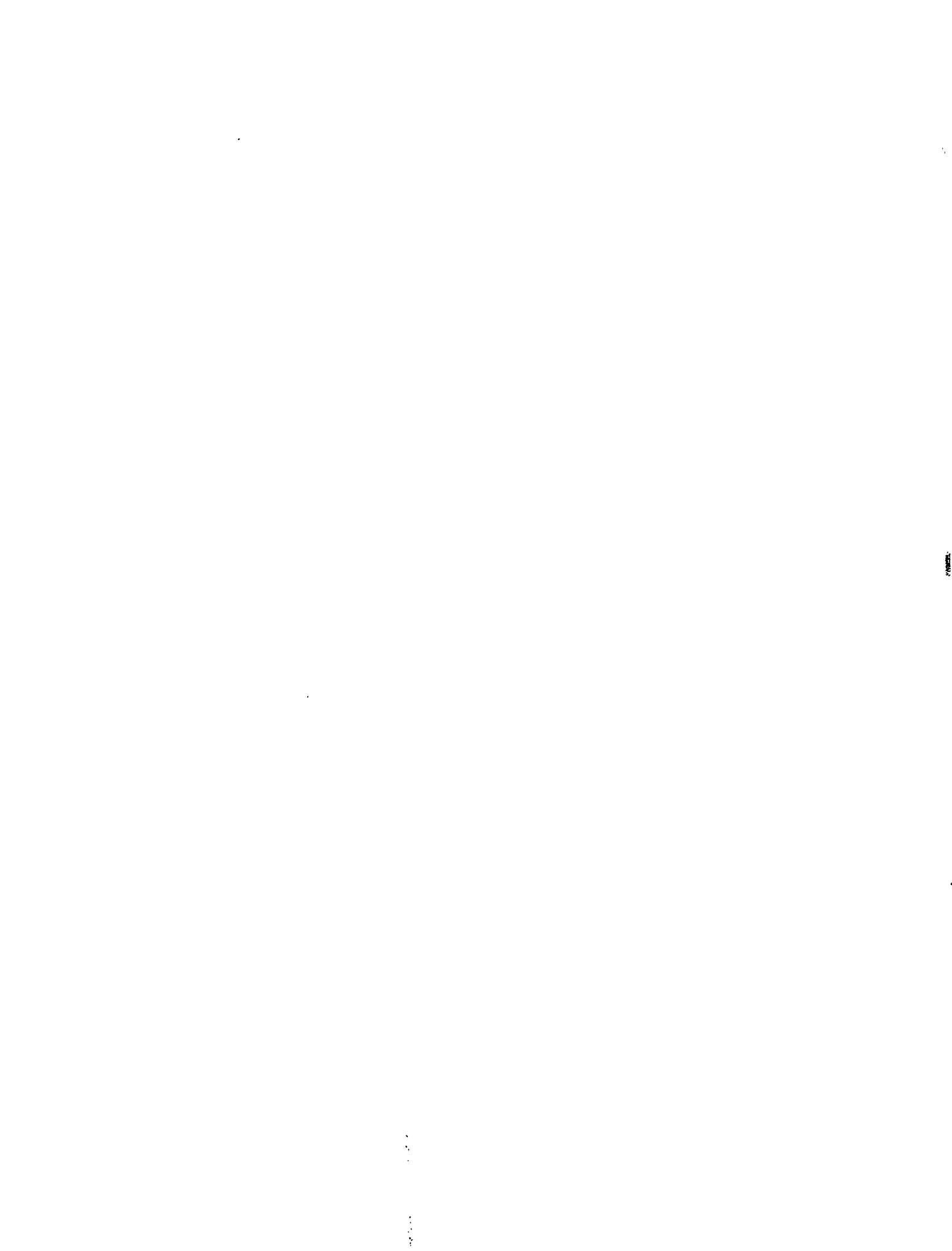
CLS	REIT	ModeS	#1	#2	R,C	R,C	CPA	Alt	AC#1	AC#2	AC#1	AC#2	AC#1	AC#2	AC #1	Cell 2 2					Cell 3 3									
																Data	Achieved	C	I	RAS	Own	Alt	Data	Achieved	C	I	RAS	Own	Alt	
TBL						Separat	Rate	Rate	Acc.	Acc.	Time	Time	CPAAlt	File	Separatn	N	C	1	2	CPA	Ach	File	Separatn	N	C	1	2	CPA	Ach	
7 4	2663	10	5	2	2	3 3	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	3700.0	CL7B1_F	42.8	1	0	4	4	3635.7	CL7B1_N	89.9	0	0	4	4	3592.9		
7 4	7199	5	10	2	2	3 3	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7500.0	CL7B1_E	-89.9	0	0	5	5	7302.9	CL7B1_M	-89.9	0	0	5	5	7302.9		
7 4	7199	10	5	2	2	3 3	250.00	5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7500.0	CL7B1_F	42.8	1	0	5	5	7435.7	CL7B1_N	89.9	0	0	5	5	7392.9		
7 4	4804	5	10	2	2	3 3	500.00	1000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL7B1_E	-38.4	0	0	5	5	7184.4	CL7B1_M	98.4	1	0	5	5	7301.1		
7 4	4804	10	5	2	2	3 3	500.00	1000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL7B1_F	78.3	1	0	5	5	7301.1	CL7B1_N	-98.4	1	0	5	5	7202.7		
7 4	5329	5	10	2	2	3 3	500.00	3000.0	-3000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL7B1_E	2.7	1	0	5	5	7187.7	CL7B1_M	-88.2	0	0	5	5	7187.7		
7 4	5182	10	5	2	2	3 3	500.00	3000.0	-5000.0	0.05	-0.15	-25.0	-20.0	7500.0	CL7B1_F	53.1	1	0	5	5	7364.9	CL7B1_N	-41.9	1	0	5	5	7297.3		
7 4	772	5	10	2	2	3 3	500.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_E	-54.8	0	0	4	4	3356.7	CL7B1_M	48.8	1	0	4	4	3486.1		
7 4	772	10	5	2	2	3 3	500.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_F	74.5	1	0	4	4	3486.1	CL7B1_N	-48.8	1	0	4	4	3437.3		
7 4	5308	10	5	2	2	3 3	500.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL7B1_F	-48.4	0	0	5	5	7223.5	CL7B1_N	69.7	0	0	5	5	7257.4		
7 4	5833	5	10	2	2	3 3	500.00	5000.0	-3000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL7B1_E	2.7	1	0	5	5	7187.7	CL7B1_M	-88.2	0	0	5	5	7187.7		
7 4	5686	10	5	2	2	3 3	500.00	5000.0	-5000.0	0.05	-0.15	-25.0	-20.0	7500.0	CL7B1_F	53.1	1	0	5	5	7364.9	CL7B1_N	-41.9	1	0	5	5	7297.3		
7 4	1276	5	10	2	2	3 3	500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_E	-54.8	0	0	4	4	3356.7	CL7B1_M	48.8	1	0	4	4	3486.1		
7 4	1276	10	5	2	2	3 3	500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_F	74.5	1	0	4	4	3486.1	CL7B1_N	-48.8	1	0	4	4	3437.3		
7 4	5812	10	5	2	2	3 3	500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL7B1_F	-48.4	0	0	5	5	7223.5	CL7B1_N	69.7	0	0	5	5	7257.4		
7 4	7324	5	10	2	2	3 3	500.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7500.0	CL7B1_E	6.4	1	0	5	5	7218.0	CL7B1_M	94.6	1	0	5	5	7297.3		
7 4	4300	5	10	2	2	3 3	500.00	5000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL7B1_E	-43.7	0	0	4	4	3428.1	CL7B1_M	-73.5	0	0	4	4	3424.1		
7 4	267	5	10	2	2	3 3	750.00	1000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_E	76.3	1	0	4	4	3341.6	CL7B1_M	10.1	1	0	4	4	3326.1		
7 4	4803	5	10	2	2	3 3	750.00	1000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL7B1_E	76.3	1	0	5	5	7141.6	CL7B1_M	-7.6	1	0	5	5	7126.1		
7 4	1779	5	10	2	2	3 3	750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL7B1_E	8.0	1	0	4	4	3341.6	CL7B1_M	-94.8	0	0	4	4	3326.1		
7 4	1779	10	5	2	2	3 3	750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL7B1_F	-97.0	0	0	4	4	3341.6	CL7B1_N	94.8	0	0	4	4	3420.9		
7 4	3291	5	10	2	2	3 3	750.00	1000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL7B1_E	8.0	1	0	4	4	3341.6	CL7B1_M	-94.8	0	0	4	4	3326.1		
7 4	3291	10	5	2	2	3 3	750.00	1000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL7B1_F	-97.0	0	0	4	4	3341.6	CL7B1_N	94.8	0	0	4	4	3420.9		
7 4	771	5	10	2	2	3 3	750.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_E	29.8	1	0	4	4	3277.4	CL7B1_M	-8.8	0	0	4	4	3277.4		
7 4	5307	5	10	2	2	3 3	750.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL7B1_E	29.8	1	0	5	5	7077.4	CL7B1_M	-77.2	0	0	5	5	7077.4		
7 4	7239	10	5	2	2	3 3	750.00	5000.0	-1000.0	0.15	-0.15	-25.0	-20.0	7500.0	CL7B1_F	32.0	1	0	5	5	7174.5	CL7B1_N	98.3	0	0	5	5	7142.6		
7 4	7218	10	5	2	2	3 3	750.00	5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	7500.0	CL7B1_F	-48.3	0	0	5	5	7192.2	CL7B1_N	0.5	1	0	5	5	7154.1		
7 4	2808	10	5	2	2	3 3	750.00	5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL7B1_F	90.9	1	0	4	4	3445.0	CL7B1_N	24.6	0	0	4	4	3354.1		
7 4	1275	5	10	2	2	3 3	750.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_E	29.8	1	0	4	4	3277.4	CL7B1_M	-8.8	0	0	4	4	3277.4		
7 4	5811	5	10	2	2	3 3	750.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL7B1_E	29.8	1	0	5	5	7077.4	CL7B1_M	-77.2	0	0	5	5	7077.4		
7 4	2654	10	5	2	2	3 3	750.00	5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	3700.0	CL7B1_F	-13.5	1	0	4	4	3392.2	CL7B1_N	84.3	0	0	4	4	3367.2		
7 4	2787	5	10	2	2	3 3	750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL7B1_E	17.6	1	0	4	4	3282.8	CL7B1_M	35.2	1	0	4	4	3282.8		
7 4	7323	5	10	2	2	3 3	750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7500.0	CL7B1_E	-50.8	1	0	5	5	7082.8	CL7B1_M	-21.1	1	0	5	5	7065.1		
7 4	7323	10	5	2	2	3 3	750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7500.0	CL7B1_F	58.6	1	0	5	5	7192.2	CL7B1_N	21.1	1	0	5	5	7086.2		
7 4	2913	5	10	2	2	3 3	750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3700.0	CL7B1_E	-21.1	1	0	4	4	3265.1	CL7B1_M	81.9	1	0	4	4	3329.5		
7 4	7449	5	10	2	2	3 3	750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7500.0	CL7B1_E	-89.4	0	0	5	5	7065.1	CL7B1_M	-0.9	1	0	5	5	7153.6		
7 4	7449	10	5	2	2	3 3	750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7500.0	CL7B1_F	20.0	1	0	5	5	7174.5	CL7B1_N	0.9	1	0	5	5	7154.6		
7 4	4173	5	10	2	2	3 3	750.00	5000.0	-5000.0	0.25	-0.15	-25.0	-20.0	3700.0	CL7B1_E	20.0	1	0	4	4	3442.6	CL7B1_M	1.5	1	0	4	4	3424.1		
7 4	4299	5	10	2	2	3 3	750.00	5000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL7B1_E	18.1	1	0	3	4	3334.0	CL7B1_M	-83.3	0	0	3	4	3271.3		
7 4	4299	10	5	2	2	3 3	750.00	5000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL7B1_F	-86.8	0	0	3	4	3334.0	CL7B1_N	83.3	0	0	3	4	3354.6		
7 4	-----	2	2	2	3 3	Subtotal	=	51	NMACs																					
7 4	7346	5	10			3 3	250.00	5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	7500.0								CL7B1_M	-97.5	1	0	5	5	7355.2		
7 4	7346	10	5			3 3	250.00	5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	7500.0								CL7B1_N	97.5	0	0	5	5	7452.7		
7 4	5329	10	5			3 3	500.00	3000.0	-3000.0																					

CLS	REIT TBL	Modes		CPA Alt	AC#1 Rate	AC#2 Rate	AC#1 Acc.	AC#2 Acc.	AC#1 Time	AC#2 Time	AC #1 CPAAlt	Cell 2 2					Cell 3 3				
		#1	#2									R	C	R	C	Data File	Achieved	C	I	RAS	Own	Alt	Data File	Achieved	C	I	RAS	Own	Alt
8 4	2285	5	10	2	2	250.00	-3000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL8B1_E	-67.7	0	0	4	4	3527.1	
8 4	2411	5	10	2	2	250.00	-3000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3700.0	CL8B1_E	-67.7	0	0	4	4	3527.1	
8 4	3923	5	10	2	2	250.00	-3000.0	-5000.0	0.25	-0.35	-25.0	-20.0	3700.0	CL8B1_E	-67.7	0	0	4	4	3527.1	
8 4	1676	10	5	2	2	250.00	-5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	3700.0	CL8B1_F	-40.5	0	0	4	4	3568.7	
8 4	6212	10	5	2	2	250.00	-5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	7500.0	CL8B1_F	-40.5	0	0	5	5	7368.8	
8 4	1655	10	5	2	2	250.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	3700.0	CL8B1_F	-84.1	0	0	4	4	3579.5	
8 4	6191	10	5	2	2	250.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7500.0	CL8B1_F	-98.6	0	0	5	5	7379.5	
8 4	1641	10	5	2	2	250.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-30.0	3700.0	CL8B1_F	-26.0	0	0	4	4	3568.7	
8 4	6177	10	5	2	2	250.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-30.0	7500.0	CL8B1_F	-40.5	0	0	5	5	7368.8	
8 4	1774	10	5	2	2	250.00	-5000.0	-5000.0	0.15	-0.25	-25.0	-25.0	3700.0	CL8B1_F	-26.0	0	0	4	4	3568.7	
8 4	3293	5	10	2	2	250.00	-5000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL8B1_E	-67.7	0	0	4	4	3527.1	
8 4	1143	5	10	2	2	500.00	-1000.0	-5000.0	0.05	-0.15	-25.0	-25.0	3700.0	CL8B1_E	62.6	1	0	4	4	3485.4	
8 4	5679	5	10	2	2	500.00	-1000.0	-5000.0	0.05	-0.15	-25.0	-25.0	7500.0	CL8B1_E	-53.3	0	0	5	5	7254.5	
8 4	1136	5	10	2	2	500.00	-1000.0	-5000.0	0.05	-0.15	-25.0	-30.0	3700.0	CL8B1_E	-39.4	0	0	4	4	3443.8	
8 4	1269	5	10	2	2	500.00	-1000.0	-5000.0	0.05	-0.25	-25.0	-25.0	3700.0	CL8B1_E	-39.4	0	0	4	4	3443.8	
8 4	1402	5	10	2	2	500.00	-1000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3700.0	CL8B1_E	-39.4	0	0	4	4	3443.8	
8 4	5938	5	10	2	2	500.00	-1000.0	-5000.0	0.05	-0.35	-25.0	-20.0	7500.0	CL8B1_E	-53.8	0	0	5	5	7243.8	
8 4	2655	5	10	2	2	500.00	-1000.0	-5000.0	0.15	-0.15	-25.0	-25.0	3700.0	CL8B1_E	-38.8	0	0	4	4	3454.5	
8 4	7191	5	10	2	2	500.00	-1000.0	-5000.0	0.15	-0.15	-25.0	-25.0	7500.0	CL8B1_E	-53.3	0	0	5	5	7254.5	
8 4	2914	5	10	2	2	500.00	-1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3700.0	CL8B1_E	-39.4	0	0	4	4	3443.8	
8 4	7450	5	10	2	2	500.00	-1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7500.0	CL8B1_E	-53.8	0	0	5	5	7243.8	
8 4	4167	5	10	2	2	500.00	-1000.0	-5000.0	0.25	-0.15	-25.0	-25.0	3700.0	CL8B1_E	-38.8	0	0	4	4	3454.5	
8 4	8703	5	10	2	2	500.00	-1000.0	-5000.0	0.25	-0.15	-25.0	-25.0	7500.0	CL8B1_E	-53.3	0	0	5	5	7254.5	
8 4	4426	5	10	2	2	500.00	-1000.0	-5000.0	0.25	-0.35	-25.0	-20.0	3700.0	CL8B1_E	-39.4	0	0	4	4	3443.8	
8 4	8962	5	10	2	2	500.00	-1000.0	-5000.0	0.25	-0.35	-25.0	-20.0	7500.0	CL8B1_E	-53.8	0	0	5	5	7243.8	
8 4	5308	5	10	2	2	500.00	-3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL8B1_E	40.6	1	0	5	5	7312.5	
8 4	5308	10	5	2	2	500.00	-3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL8B1_F	-27.8	1	0	5	5	7312.5	
8 4	2151	5	10	2	2	500.00	-3000.0	-5000.0	0.15	-0.15	-25.0	-25.0	3700.0	CL8B1_E	62.6	1	0	4	4	3485.4	
8 4	6687	5	10	2	2	500.00	-3000.0	-5000.0	0.15	-0.15	-25.0	-25.0	7500.0	CL8B1_E	-53.3	0	0	5	5	7254.5	
8 4	2144	5	10	2	2	500.00	-3000.0	-5000.0	0.15	-0.15	-25.0	-30.0	3700.0	CL8B1_E	-39.4	0	0	4	4	3443.8	
8 4	2277	5	10	2	2	500.00	-3000.0	-5000.0	0.15	-0.25	-25.0	-25.0	3700.0	CL8B1_E	-39.4	0	0	4	4	3443.8	
8 4	2410	5	10	2	2	500.00	-3000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3700.0	CL8B1_E	-39.4	0	0	4	4	3443.8	
8 4	6946	5	10	2	2	500.00	-3000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7500.0	CL8B1_E	-53.8	0	0	5	5	7243.8	
8 4	3663	5	10	2	2	500.00	-3000.0	-5000.0	0.25	-0.15	-25.0	-25.0	3700.0	CL8B1_E	-38.8	0	0	4	4	3454.5	
8 4	8199	5	10	2	2	500.00	-3000.0	-5000.0	0.25	-0.15	-25.0	-25.0	7500.0	CL8B1_E	-53.3	0	0	5	5	7254.5	
8 4	3922	5	10	2	2	500.00	-3000.0	-5000.0	0.25	-0.35	-25.0	-20.0	3700.0	CL8B1_E	-39.4	0	0	4	4	3443.8	
8 4	8458	5	10	2	2	500.00	-3000.0	-5000.0	0.25	-0.35	-25.0	-20.0	7500.0	CL8B1_E	-53.8	0	0	5	5	7243.8	
8 4	6211	10	5	2	2	500.00	-5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	7500.0	CL8B1_F	-86.5	0	0	5	5	7239.2	
8 4	1801	5	10	2	2	500.00	-5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL8B1_E	-18.2	0	0	4	4	3439.2	
8 4	1801	10	5	2	2	500.00	-5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL8B1_F	-86.5	0	0	4	4	3439.2	
8 4	6337	5	10	2	2	500.00	-5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	7500.0	CL8B1_E	-18.2	0	0	5	5	7239.2	
8 4	3313	5	10	2	2	500.00	-5000.0	-3000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL8B1_E	-92.4	0	0	4	4	3443.7	
8 4	6435	5	10	2	2	500.00	-5000.0	-5000.0	0.15	-0.35	-25.0	-25.0	7500.0	CL8B1_E	-18.2	0	0	5	5	7239.2	
8 4	6435	10	5	2	2	500.00	-5000.0	-5000.0	0.15	-0.35	-25.0	-25.0	7500.0	CL8B1_F	-86.5	0	0	5	5	7239.2	
8 4	3159	5	10	2	2	500.00	-5000.0	-5000.0	0.25	-0.15	-25.0	-25.0	3700.0	CL8B1_E	62.6	1	0	4	4	3485.4	
8 4	7695	5	10	2	2	500.00	-5000.0	-5000.0	0.25	-0.15	-25.0	-25.0	7500.0	CL8B1_E	48.2	1	0	5	5	7285.4	
8 4	3152	5	10	2	2	500.00	-5000.0	-5000.0	0.25	-0.15	-25.0	-30.0	3700.0	CL8B1_E	-39.4	0	0	4	4	3443.7	
8 4	3285	5	10	2	2	500.00	-5000.0	-5000.0	0.25	-0.25	-25.0	-25.0	3700.0	CL8B1_E	-39.4	0	0	4	4	3443.7	
8 4	7821	5	10	2	2	500.00	-5000.0	-5000.0	0.25	-0.25	-25.0	-25.0	7500.0	CL8B1_E	-53.8	0	0	5	5	7243.8	
8 4	3418	5	10	2	2	500.00	-5000.0	-5000.0	0.25	-0.35	-25.0	-20.0	3700.0	CL8B1_E	-39.4	0	0	4	4	3443.7	
8 4	7954	5	10	2	2	500.00	-5000.0	-5000.0	0.25	-0.35	-25.0	-20.0	7500.0	CL8B1_E	-53.8	0	0	5	5	7243.8	
8 4	1135	5	10	2	2	750.00	-1000.0	-5000.0	0.05	-0.15	-25.0	-30.0	3700.0	CL8B1_E	-70.6	0	0	4	4	3360.4	
8 4	1275	5	10	2	2	750.00	-1000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL8B1_E	68.4	1	0	4	4	3402.1	
8 4	5811	5	10	2	2	750.00	-1000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL8B1_E	47.5	0	0	5	5	7202.1	
8 4	1268	5	10	2	2	750.00	-1000.0	-5000.0	0.05	-0.25	-25.0	-25.0	3700.0	CL8B1_E	47.5	0	0	4	4	3402.1	
8 4	1268	10	5	2	2	750.00	-1000.0	-5000.0	0.05	-0.25	-25.0	-25.0	3700.0	CL8B1_F	-92.4	0	0	4	4	3402.1	
8 4	5804	5	10	2	2	750.00	-1000.0	-5000.0	0.05	-0.25	-25.0	-25.0	7500.0	CL8B1_E	-70.6	0	0	5	5	7160.4	
8 4	1401	5	10	2	2	750.00	-1000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3700.0	CL8B1_E	47.5	0	0	4	4	3402.1	
8 4	1401	10	5	2	2	750.00	-1000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3700.0	CL8B1_F	-92.4	0	0	4	4	3402.1	
8 4	5937	5	10	2	2	750.00	-1000.0	-5000.0	0.05	-0.35	-25.0	-20.0	7500.0	CL8B1_E	47.5	0	0	5	5	7202.1	
8 4	2780	5	10	2	2	750.00	-1000.0	-5000.0	0.15	-0.25	-25.0	-25.0	3700.0	CL8B1_E	-70.6	0	0	4	4	3360.4	
8 4	2913	5	10	2	2	750.00	-1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3700.0	CL8B1_E	47.5	0	0	4	4	3402.1	
8 4	2913	10	5	2	2	750.00	-1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3700.0	CL8B1_F	-92.4	0	0	4	4	3402.1	
8 4	7449	5	10	2	2	750.00	-1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7500.0	CL8B1_E	47.5	0	0	5	5	7202.1	

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CLS	REIT TBL	ModeS			CPA Alt Separat	AC#1 Rate	AC#2 Rate	AC#1 Acc.	AC#2 Acc.	AC#1 Time	AC#2 Time	AC #1 CPAAlt	Cell 2 2					Cell 3 3								
		#1	#2	R,C R,C									Data File	Achieved Separatn	C N	I C	RAS 1 2	Own CPA	Alt Ach	Data File	Achieved Separatn	C N	I C	RAS 1 2	Own CPA	Alt Ach
8 4	8836	10	5	2 2 3 3	500.00	-1000.0	-5000.0	0.25	-0.25	-25.0	-20.0	7500.0	CL8B1_F	-80.5	0	0	5	5	7285.4	CL8B1_N	82.0	0	0	5	5	7325.8
8 4	772	5	10	2 2 3 3	500.00	-3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL8B1_E	40.6	1	0	4	4	3512.5	CL8B1_M	-53.5	0	0	4	4	3512.5
8 4	772	10	5	2 2 3 3	500.00	-3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL8B1_F	-27.8	1	0	4	4	3512.5	CL8B1_N	53.5	0	0	4	4	3566.0
8 4	2284	10	5	2 2 3 3	500.00	-3000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL8B1_F	44.0	1	0	4	4	3527.1	CL8B1_N	12.2	0	0	4	4	3497.6
8 4	6820	5	10	2 2 3 3	500.00	-3000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7500.0	CL8B1_E	48.2	1	0	5	5	7285.4	CL8B1_M	28.0	0	0	5	5	7285.4
8 4	6820	10	5	2 2 3 3	500.00	-3000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7500.0	CL8B1_F	-80.5	0	0	5	5	7285.4	CL8B1_N	-28.0	1	0	5	5	7257.4
8 4	3796	5	10	2 2 3 3	500.00	-3000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL8B1_E	62.6	1	0	4	4	3485.4	CL8B1_M	-82.0	0	0	4	4	3443.8
8 4	3796	10	5	2 2 3 3	500.00	-3000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL8B1_F	-66.1	0	0	4	4	3485.4	CL8B1_N	82.0	0	0	4	4	3525.7
8 4	8332	5	10	2 2 3 3	500.00	-3000.0	-5000.0	0.25	-0.25	-25.0	-20.0	7500.0	CL8B1_E	48.1	1	0	5	5	7285.4	CL8B1_M	-82.0	0	0	5	5	7243.8
8 4	8332	10	5	2 2 3 3	500.00	-3000.0	-5000.0	0.25	-0.25	-25.0	-20.0	7500.0	CL8B1_F	-80.5	0	0	5	5	7285.4	CL8B1_N	82.0	0	0	5	5	7325.7
8 4	1675	10	5	2 2 3 3	500.00	-5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	3700.0	CL8B1_F	55.2	1	0	4	4	3527.1	CL8B1_N	68.1	0	0	4	4	3525.7
8 4	1647	10	5	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	3700.0	CL8B1_F	45.1	1	0	4	4	3527.1	CL8B1_N	-28.6	1	0	4	4	3467.5
8 4	6183	10	5	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	7500.0	CL8B1_F	45.1	1	0	5	5	7327.1	CL8B1_N	-17.9	1	0	5	5	7267.6
8 4	1640	5	10	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-30.0	3700.0	CL8B1_E	-72.4	0	0	4	4	3385.0	CL8B1_M	-18.2	0	0	4	4	3439.2
8 4	1640	10	5	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-30.0	3700.0	CL8B1_F	13.6	0	0	4	4	3485.4	CL8B1_N	18.2	0	0	4	4	3457.4
8 4	6176	5	10	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-30.0	7500.0	CL8B1_E	-72.4	0	0	5	5	7185.0	CL8B1_M	-18.2	0	0	5	5	7239.2
8 4	6176	10	5	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-30.0	7500.0	CL8B1_F	13.6	0	0	5	5	7285.4	CL8B1_N	18.2	0	0	5	5	7257.4
8 4	1780	5	10	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL8B1_E	42.2	1	0	4	4	3439.2	CL8B1_M	28.0	1	0	4	4	3485.4
8 4	6316	5	10	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7500.0	CL8B1_E	42.2	1	0	5	5	7239.2	CL8B1_M	28.0	1	0	5	5	7285.4
8 4	6309	10	5	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.25	-25.0	-25.0	7500.0	CL8B1_F	13.6	0	0	5	5	7285.4	CL8B1_N	18.2	0	0	5	5	7257.4
8 4	1906	5	10	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3700.0	CL8B1_E	-18.2	0	0	4	4	3439.2	CL8B1_M	-18.2	0	0	4	4	3439.2
8 4	1906	10	5	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3700.0	CL8B1_F	13.6	0	0	4	4	3485.4	CL8B1_N	18.2	0	0	4	4	3457.4
8 4	6442	5	10	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7500.0	CL8B1_E	-18.2	0	0	5	5	7239.2	CL8B1_M	-18.2	0	0	5	5	7239.2
8 4	6442	10	5	2 2 3 3	500.00	-5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7500.0	CL8B1_F	13.6	0	0	5	5	7285.4	CL8B1_N	18.2	0	0	5	5	7257.4
8 4	3292	10	5	2 2 3 3	500.00	-5000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL8B1_F	44.0	1	0	4	4	3527.1	CL8B1_N	-28.0	1	0	4	4	3457.4
8 4	7828	10	5	2 2 3 3	500.00	-5000.0	-5000.0	0.25	-0.25	-25.0	-20.0	7500.0	CL8B1_F	29.5	1	0	5	5	7327.1	CL8B1_N	-28.0	1	0	5	5	7257.4
8 4	5433	10	5	2 2 3 3	750.00	-3000.0	-5000.0	0.05	-0.35	-25.0	-20.0	7500.0	CL8B1_F	55.1	1	0	5	5	7291.7	CL8B1_N	42.7	0	0	5	5	7315.4
8 4	1653	10	5	2 2 3 3	750.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	3700.0	CL8B1_F	17.8	0	0	4	4	3485.4	CL8B1_N	14.0	0	0	4	4	3453.2
8 4	1772	5	10	2 2 3 3	750.00	-5000.0	-5000.0	0.15	-0.25	-25.0	-25.0	3700.0	CL8B1_E	-11.0	0	0	4	4	3341.1	CL8B1_M	-95.5	0	0	4	4	3341.1
8 4	1772	10	5	2 2 3 3	750.00	-5000.0	-5000.0	0.15	-0.25	-25.0	-25.0	3700.0	CL8B1_F	-95.5	0	0	4	4	3341.1	CL8B1_N	95.5	0	0	4	4	3436.6
8 4	6308	5	10	2 2 3 3	750.00	-5000.0	-5000.0	0.15	-0.25	-25.0	-25.0	7500.0	CL8B1_E	-11.0	0	0	5	5	7141.2	CL8B1_M	-95.5	0	0	5	5	7141.2
8 4	6308	10	5	2 2 3 3	750.00	-5000.0	-5000.0	0.15	-0.25	-25.0	-25.0	7500.0	CL8B1_F	-95.5	0	0	5	5	7141.2	CL8B1_N	95.5	0	0	5	5	7236.6
8 4	3291	5	10	2 2 3 3	750.00	-5000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL8B1_E	68.4	1	0	4	4	3402.1	CL8B1_M	-18.8	1	0	4	4	3402.1
8 4	3291	10	5	2 2 3 3	750.00	-5000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL8B1_F	-36.5	1	0	4	4	3402.1	CL8B1_N	18.8	0	0	4	4	3420.9
8 4	7827	5	10	2 2 3 3	750.00	-5000.0	-5000.0	0.25	-0.25	-25.0	-20.0	7500.0	CL8B1_E	-99.1	0	0	5	5	7160.4	CL8B1_M	-57.4	0	0	5	5	7202.1
8 4	7827	10	5	2 2 3 3	750.00	-5000.0	-5000.0	0.25	-0.25	-25.0	-20.0	7500.0	CL8B1_F	-57.4	0	0	5	5	7202.1	CL8B1_N	57.4	0	0	5	5	7259.5
8 4	3417	10	5	2 2 3 3	750.00	-5000.0	-5000.0	0.25	-0.35	-25.0	-20.0	3700.0	CL8B1_F	12.8	1	0	4	4	3443.7	CL8B1_N	53.0	0	0	4	4	3455.1
8 4	7953	10	5	2 2 3 3	750.00	-5000.0	-5000.0	0.25	-0.35	-25.0	-20.0	7500.0	CL8B1_F	12.8	1	0	5	5	7243.8	CL8B1_N	53.0	0	0	5	5	7255.1
8 4	2897	5	10	2 2 3 3	-500.00	-1000.0	5000.0	0.15	0.25	-25.0	-20.0	3700.0	CL8B1_E	-62.6	1	0	4	4	3914.6	CL8B1_M	82.0	0	0	4	4	3956.2
8 4	2897	10	5	2 2 3 3	-500.00	-1000.0	5000.0	0.15	0.25	-25.0	-20.0	3700.0	CL8B1_F	66.1	0	0	4	4	3914.6	CL8B1_N	-82.0	0	0	4	4	3874.3
8 4	7433	5	10	2 2 3 3	-500.00	-1000.0	5000.0	0.15	0.25	-25.0	-20.0	7500.0	CL8B1_E	-48.2	1	0	5	5	7714.6	CL8B1_M	82.0	0	0	5	5	7756.2
8 4	7433	10	5	2 2 3 3	-500.00	-1000.0	5000.0	0.15	0.25	-25.0	-20.0	7500.0	CL8B1_F	80.5	0	0	5	5	7714.6	CL8B1_N	-82.0	0	0	5	5	7674.3
8 4	4409	5	10	2 2 3 3	-500.00	-1000.0	5000.0	0.25	0.25	-25.0	-20.0	3700.0	CL8B1_E	-62.6	1	0	4	4	3914.6	CL8B1_M	82.0	0	0	4	4	3956.2
8 4	4409	10	5	2 2 3 3	-500.00	-1000.0	5000.0	0.25	0.25	-25.0	-20.0	3700.0	CL8B1_F	66.1	0	0	4	4	3914.6	CL8B1_N	-82.0	0	0	4	4	3874.3
8 4	8945	5	10	2 2 3 3	-500.00	-1000.0	5000.0	0.25	0.25	-25.0	-20.0	7500.0	CL8B1_E	-48.2	1	0	5	5	7714.6	CL8B1_M	82.0	0	0	5	5	7756.2
8 4	8945	10	5	2 2 3 3	-500.00	-1000.0	5000.0	0.25	0.25	-25.0	-20.0	7500.0	CL8B1_F	80.5	0	0	5	5	7714.6	CL8B1_N	-82.0	0	0	5	5	7674.3
8 4	3905	5	10	2 2 3 3	-500.00	-3000.0	5000.0	0.25	0.25	-25.0	-20.0	3700.0	CL8B1_E	-62.6	1	0	4	4	3914.6	CL8B1_M	82.0	0	0	4	4	3956.2
8 4	3905	10	5	2 2 3 3	-500.00	-3000.0	5000.0	0.25	0.25	-25.0	-20.0	3700.0	CL8B1_F	66.1	0	0	4	4	3914.6	CL8B1_N	-82.0	0	0	4	4	3874.3
8 4	-----	-----	-----	2 2 3 3	Subtotal =	61	NMACs																			
8 4	1151	5	10		3 3	250.00	-1000.0	-5000.0	0.05	-0.15	-25.0	-20.0	3700.0							CL8B1_M	-99.8	0	0	4	4	3563.9
8 4	1648	5	10		3 3	250.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	3700.0							CL8B1_M	96.1	1	0	4	4	3610.4
8 4	1648	10	5		3 3	250.00	-5000.0	-5000.0	0.15																	

CLS	REIT TBL	Modes		CPA Alt Separat	AC#1 Rate	AC#2 Rate	AC#1 Acc.	AC#2 Acc.	AC#1 Time	AC#2 Time	AC #1 CPAAlt	Cell 2 2					Cell 3 3												
		#1	#2									R,C	R,C	Data File	Achieved Separatn	C I N C	RAS 1 2	Own Alt CPA Ach	Data File	Achieved Separatn	C I N C	RAS 1 2	Own Alt CPA Ach						
15 4	2765	5	10	2	2	-750.00	3000.0	5000.0	0.00	0.35	0.0	-25.0	3720.0	CL5B1_E	94.0	0	1	4	4	3720.0									
15 4	-----					Subtotal =		16 NMAs																					
15 4	2960	10	5	2	2	3	3	-500.00	5000.0	5000.0	0.00	0.25	0.0	-20.0	3720.0	CL5B1_F	-29.1	0	1	4	4	3720.0	CL5B1_N	-33.6	0	1	3	4	3686.4
15 4	1511	10	5	2	2	3	3	-500.00	5000.0	5000.0	0.00	0.35	0.0	-20.0	3680.0	CL5B1_F	26.8	1	1	3	4	3680.0	CL5B1_N	-26.8	0	1	3	4	3653.2
15 4	-----					Subtotal =		2 NMAs																					
16 4	2491	5	10	2	2	-500.00	1000.0	-3000.0	0.00	0.35	0.0	-25.0	3720.0	CL6B1_E	-85.4	1	1	4	4	4045.0									
16 4	-----					Subtotal =		1 NMAs																					
17 4	4518	10	5	2	2	250.00	5000.0	5000.0	0.25	0.35	-25.0	-30.0	3700.0	CL7B1_F	-97.4	0	1	3	3	3359.8									
17 4	2739	5	10	2	2	500.00	5000.0	3000.0	0.15	0.15	-25.0	-25.0	3700.0	CL7B1_E	-57.1	0	0	4	3	3142.9									
17 4	2739	10	5	2	2	500.00	5000.0	3000.0	0.15	0.15	-25.0	-25.0	3700.0	CL7B1_F	65.1	1	1	4	3	3265.1									
17 4	2858	10	5	2	2	500.00	5000.0	3000.0	0.15	0.25	-25.0	-30.0	3700.0	CL7B1_F	95.3	1	1	4	3	3297.3									
17 4	2991	5	10	2	2	500.00	5000.0	3000.0	0.15	0.35	-25.0	-25.0	3700.0	CL7B1_E	-41.8	0	1	4	3	3175.1									
17 4	2991	10	5	2	2	500.00	5000.0	3000.0	0.15	0.35	-25.0	-25.0	3700.0	CL7B1_F	80.5	1	1	4	3	3297.3									
17 4	2984	10	5	2	2	500.00	5000.0	3000.0	0.15	0.35	-25.0	-30.0	3700.0	CL7B1_F	82.8	1	1	4	3	3282.8									
17 4	2886	5	10	2	2	500.00	5000.0	5000.0	0.15	0.25	-25.0	-25.0	3700.0	CL7B1_E	-57.1	0	1	4	3	3142.9									
17 4	-----					Subtotal =		8 NMAs																					
17 4	2732	5	10	2	2	3	3	500.00	5000.0	3000.0	0.15	0.15	-25.0	-30.0	3700.0	CL7B1_E	-33.0	0	1	4	3	3175.1	CL7B1_M	-33.0	0	1	4	3	3175.1
17 4	2732	10	5	2	2	3	3	500.00	5000.0	3000.0	0.15	0.15	-25.0	-30.0	3700.0	CL7B1_F	89.3	1	1	4	3	3297.3	CL7B1_N	33.0	0	1	3	3	3208.1
17 4	2865	5	10	2	2	3	3	500.00	5000.0	3000.0	0.15	0.25	-25.0	-25.0	3700.0	CL7B1_E	-34.7	0	1	4	3	3175.1	CL7B1_M	-34.7	0	1	4	3	3175.1
17 4	2865	10	5	2	2	3	3	500.00	5000.0	3000.0	0.15	0.25	-25.0	-25.0	3700.0	CL7B1_F	87.6	1	1	4	3	3297.3	CL7B1_N	34.7	0	1	3	3	3209.7
17 4	2858	5	10	2	2	3	3	500.00	5000.0	3000.0	0.15	0.25	-25.0	-30.0	3700.0	CL7B1_E	-26.9	0	1	4	3	3175.1	CL7B1_M	-26.9	0	1	4	3	3175.1
17 4	2984	5	10	2	2	3	3	500.00	5000.0	3000.0	0.15	0.35	-25.0	-30.0	3700.0	CL7B1_E	-39.4	0	1	4	3	3160.6	CL7B1_M	42.6	0	1	4	3	3220.1
17 4	-----					Subtotal =		6 NMAs																					
I-12	17 4	4517	5	10		3	3	500.00	5000.0	5000.0	0.25	0.35	-25.0	-30.0	3700.0								CL7B1_M	-63.0	0	1	3	3	3137.0
	17 4	-----				3	3	Subtotal =																					
	18 4	1550	5	10	2	2	250.00	-5000.0	-3000.0	0.15	-0.05	-25.0	-20.0	3700.0	CL8B1_E	-100.4	0	0	4	4	3537.8								
	18 4	1529	5	10	2	2	250.00	-5000.0	-5000.0	0.15	-0.05	-25.0	-20.0	3700.0	CL8B1_E	-100.4	0	0	4	4	3537.8								
	18 4	3593	10	5	2	2	500.00	-3000.0	1000.0	0.25	0.05	-25.0	-30.0	3700.0	CL8B1_F	85.4	1	1	4	4	3610.4								
	18 4	3726	10	5	2	2	500.00	-3000.0	1000.0	0.25	0.15	-25.0	-25.0	3700.0	CL8B1_F	85.4	1	1	4	4	3610.4								
	18 4	3852	10	5	2	2	500.00	-3000.0	1000.0	0.25	0.25	-25.0	-25.0	3700.0	CL8B1_F	85.4	1	1	4	4	3610.4								
	18 4	3978	10	5	2	2	500.00	-3000.0	1000.0	0.25	0.35	-25.0	-25.0	3700.0	CL8B1_F	85.4	1	1	4	4	3610.4								
	18 4	268	5	10	2	2	500.00	-5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL8B1_E	85.2	1	1	4	4	3568.3								
	18 4	268	10	5	2	2	500.00	-5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL8B1_F	-88.1	0	1	4	4	3568.3								
	18 4	394	5	10	2	2	500.00	-5000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3700.0	CL8B1_E	-99.3	0	0	5	4	3517.3								
	18 4	394	10	5	2	2	500.00	-5000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3700.0	CL8B1_F	-84.2	0	0	4	4	3543.7								
	18 4	1849	5	10	2	2	750.00	-5000.0	3000.0	0.15	0.25	-25.0	-30.0	3700.0	CL8B1_E	-98.3	0	1	4	3	2866.3								
	18 4	1541	5	10	2	2	750.00	-5000.0	-3000.0	0.15	-0.05	-25.0	-25.0	3700.0	CL8B1_E	-30.5	0	1	4	4	3341.1								
	18 4	1800	10	5	2	2	750.00	-5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL8B1_F	-40.3	0	1	4	4	3385.0								
	18 4	6336	10	5	2	2	750.00	-5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	7500.0	CL8B1_F	-40.3	0	1	5	5	7185.0								
	18 4	1926	10	5	2	2	750.00	-5000.0	-3000.0	0.15	-0.35	-25.0	-20.0	3700.0	CL8B1_F	-40.3	0	1	4	4	3385.0								
	18 4	6462	10	5	2	2	750.00	-5000.0	-3000.0	0.15	-0.35	-25.0	-20.0	7500.0	CL8B1_F	-40.3	0	0	5	5	7185.0								
	18 4	1520	5	10	2	2	750.00	-5000.0	-5000.0	0.15	-0.05	-25.0	-25.0	3700.0	CL8B1_E	-30.5	0	1	4	4	3341.1								
	18 4	-----				Subtotal =		17 NMAs																					
	18 4	7744	5	10		3	3	500.00	-5000.0	-1000.0	0.25	-0.15	-25.0	-20.0	7500.0							CL8B1_M	-92.8	1	1	5	5	7263.4	
	18 4	7870	5	10		3	3	500.00	-5000.0	-1000.0	0.25	-0.25	-25.0	-20.0	7500.0							CL8B1_M	-92.8	1	1	5	5	7263.4	
	18 4	7996	5	10		3	3	500.00	-5000.0	-1000.0	0.25	-0.35	-25.0	-20.0	7500.0							CL8B1_M	-92.8	1	1	5	5	7263.4	
	18 4	1541	10	5		3	3	750.00	-5000.0	-3000.0	0.15	-0.05	-25.0	-25.0	3700.0							CL8B1_N	-2.1	1	1	4	4	3345.0	
	18 4	6077	10	5		3	3	750.00	-5000.0	-3000.0	0.15	-0.05	-25.0	-25.0	7500.0							CL8B1_N	59.8	1	1	5	5	7206.9	
	18 4	1674	10	5		3	3	750.00	-5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	3700.0							CL8B1_N	-83.9	0	1	4	4	3263.2	
	18 4	6210	10	5		3	3	750.00	-5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	7500.0							CL8B1_N	-66.3	0	1	5	5	7080.8	
	18 4	1520	10	5		3	3	750.00	-5000.0	-5000.0	0.15	-0.05	-25.0	-25.0	3700.0							CL8B1_N	-2.1	1	1	4			



CLS	REIT	ModeS	#1	#2	R,C	R,C	CPA Alt	AC#1	AC#2	AC#1	AC#2	AC#1	AC#2	AC#1	AC#2	AC #1	CPAAlt	Cell 2 2					Cell 4 4												
																		Data	Achieved	C	I	RAS	Own	Alt	Data	Achieved	C	I	RAS	Own	Alt				
TBL							Separat	Rate	Rate	Acc.	Acc.	Time	Time					File	Separatn	N	C	1	2	CPA	Ach	File	Separatn	N	C	1	2	CPA	Ach		
7 4	2654	10	5	2	2		750.00	5000.0	-5000.0	0.15	-0.15	-25.0	-25.0			3700.0		CL7B1_F	-13.5	1	0	4	4	3392.2											
7 4	7323	5	10	2	2		750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0			7500.0		CL7B1_E	-50.8	1	0	5	5	7082.8											
7 4	7323	10	5	2	2		750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0			7500.0		CL7B1_F	58.6	1	0	5	5	7192.2											
7 4	7449	5	10	2	2		750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0			7500.0		CL7B1_E	-89.4	0	0	5	5	7065.1											
7 4	7449	10	5	2	2		750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0			7500.0		CL7B1_F	20.0	1	0	5	5	7174.5											
7 4	4047	10	5	2	2		750.00	5000.0	-5000.0	0.25	-0.05	-25.0	-20.0			3700.0		CL7B1_F	-100.1	0	0	3	4	3359.8											
7 4	4173	5	10	2	2		750.00	5000.0	-5000.0	0.25	-0.15	-25.0	-20.0			3700.0		CL7B1_E	20.0	1	0	4	4	3442.6											
7 4	8835	5	10	2	2		750.00	5000.0	-5000.0	0.25	-0.25	-25.0	-20.0			7500.0		CL7B1_E	0.4	1	0	5	5	7134.0											
7 4	4425	5	10	2	2		750.00	5000.0	-5000.0	0.25	-0.35	-25.0	-20.0			3700.0		CL7B1_E	0.4	1	0	3	4	3316.3											
7 4	4425	10	5	2	2		750.00	5000.0	-5000.0	0.25	-0.35	-25.0	-20.0			3700.0		CL7B1_F	-76.0	0	0	3	4	3316.3											
7 4	8961	5	10	2	2		750.00	5000.0	-5000.0	0.25	-0.35	-25.0	-20.0			7500.0		CL7B1_E	-17.3	1	0	5	5	7116.3											
7 4	2014	5	10	2	2		-250.00	1000.0	5000.0	0.15	0.35	-25.0	-20.0			3700.0		CL7B1_E	94.3	0	0	4	4	3847.2											
7 4	3526	5	10	2	2		-250.00	1000.0	5000.0	0.25	0.35	-25.0	-20.0			3700.0		CL7B1_E	94.3	0	0	4	4	3847.2											
7 4	-----	-----	-----	-----	-----	-----	Subtotal	=	175	NMACs																									
7 4	772	5	10	2	2	4 4	500.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0			3700.0		CL7B1_E	-54.8	0	0	4	4	3356.7	CL7B1_T	-74.1	0	0	4	4	3423.5				
7 4	772	10	5	2	2	4 4	500.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0			3700.0		CL7B1_F	74.5	1	0	4	4	3486.1	CL7B1_U	74.1	0	0	4	4	3497.6				
7 4	1276	5	10	2	2	4 4	500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0			3700.0		CL7B1_E	-54.8	0	0	4	4	3356.7	CL7B1_T	-74.1	0	0	4	4	3423.5				
7 4	1276	10	5	2	2	4 4	500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0			3700.0		CL7B1_F	74.5	1	0	4	4	3486.1	CL7B1_U	74.1	0	0	4	4	3497.6				
7 4	1779	5	10	2	2	4 4	750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0			3700.0		CL7B1_E	8.0	1	0	4	4	3341.6	CL7B1_T	-55.1	0	0	4	4	3365.8				
7 4	1779	10	5	2	2	4 4	750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0			3700.0		CL7B1_F	-97.0	0	0	4	4	3341.6	CL7B1_U	55.1	0	0	4	4	3420.9				
7 4	1905	5	10	2	2	4 4	750.00	1000.0	-5000.0	0.15	-0.35	-25.0	-20.0			3700.0		CL7B1_E	-7.6	1	0	4	4	3326.1	CL7B1_T	-22.2	0	0	4	4	3432.9				
7 4	1905	10	5	2	2	4 4	750.00	1000.0	-5000.0	0.15	-0.35	-25.0	-20.0			3700.0		CL7B1_F	-84.0	0	0	4	4	3326.1	CL7B1_U	22.2	0	0	4	4	3455.1				
7 4	3291	5	10	2	2	4 4	750.00	1000.0	-5000.0	0.25	-0.25	-25.0	-20.0			3700.0		CL7B1_E	8.0	1	0	4	4	3341.6	CL7B1_T	-55.1	0	0	4	4	3365.8				
7 4	3291	10	5	2	2	4 4	750.00	1000.0	-5000.0	0.25	-0.25	-25.0	-20.0			3700.0		CL7B1_F	-97.0	0	0	4	4	3341.6	CL7B1_U	55.1	0	0	4	4	3420.9				
7 4	3417	5	10	2	2	4 4	750.00	1000.0	-5000.0	0.25	-0.35	-25.0	-20.0			3700.0		CL7B1_E	-7.6	1	0	4	4	3326.1	CL7B1_T	-22.2	0	0	4	4	3432.9				
7 4	3417	10	5	2	2	4 4	750.00	1000.0	-5000.0	0.25	-0.35	-25.0	-20.0			3700.0		CL7B1_F	-84.0	0	0	4	4	3326.1	CL7B1_U	22.2	0	0	4	4	3455.1				
7 4	771	5	10	2	2	4 4	750.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0			3700.0		CL7B1_E	29.8	1	0	4	4	3277.4	CL7B1_T	26.8	0	0	4	4	3342.7				
7 4	897	5	10	2	2	4 4	750.00	3000.0	-5000.0	0.05	-0.35	-25.0	-20.0			3700.0		CL7B1_E	-17.6	0	0	4	4	3230.0	CL7B1_T	40.8	1	0	4	4	3356.7				
7 4	2283	5	10	2	2	4 4	750.00	3000.0	-5000.0	0.15	-0.25	-25.0	-20.0			3700.0		CL7B1_E	-17.3	1	0	4	4	3316.3	CL7B1_T	-46.6	0	0	4	4	3334.0				
7 4	1275	5	10	2	2	4 4	750.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0			3700.0		CL7B1_E	29.8	1	0	4	4	3277.4	CL7B1_T	26.8	0	0	4	4	3342.7				
7 4	1401	5	10	2	2	4 4	750.00	5000.0	-5000.0	0.05	-0.35	-25.0	-20.0			3700.0		CL7B1_E	-17.6	0	0	4	4	3230.0	CL7B1_T	40.8	1	0	4	4	3356.7				
7 4	2787	5	10	2	2	4 4	750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0			3700.0		CL7B1_E	17.6	1	0	4	4	3282.8	CL7B1_T	37.7	1	0	4	4	3392.2				
7 4	2913	5	10	2	2	4 4	750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0			3700.0		CL7B1_E	-21.1	1	0	4	4	3265.1	CL7B1_T	37.7	1	0	4	4	3392.2				
7 4	4299	5	10	2	2	4 4	750.00	5000.0	-5000.0	0.25	-0.25	-25.0	-20.0			3700.0		CL7B1_E	18.1	1	0	3	4	3334.0	CL7B1_T	-86.8	0	0	3	4	3334.0				
7 4	4299	10	5	2	2	4 4	750.00	5000.0	-5000.0	0.25	-0.25	-25.0	-20.0			3700.0		CL7B1_F	-86.8	0	0	3	4	3334.0	CL7B1_U	86.8	0	0	3	4	3420.9				
7 4	-----	-----	-----	-----	-----	-----	Subtotal	=	21	NMACs																									
7 4	4503	5	10			4 4	500.00	5000.0	3000.0	0.25	0.35	-25.0	-25.0			3700.0									CL7B1_T	-79.8	0	0	3	3	3137.0				
7 4	393	5	10			4 4	750.00	1000.0	-5000.0	0.05	-0.35	-25.0	-20.0			3700.0									CL7B1_T	-49.5	0	0	4	4	3432.9				
7 4	393	10	5			4 4	750.00	1000.0	-5000.0	0.05	-0.35	-25.0	-20.0			3700.0									CL7B1_U	49.5	0	0	4	4	3482.5				
7 4	4929	5	10			4 4	750.00	1000.0	-5000.0	0.05	-0.35	-25.0	-20.0			7500.0									CL7B1_T	-89.4	0	0	5	5	7165.8				
7 4	4929	10	5			4 4</																													

CLS	REIT	ModeS	CPA Alt				AC#1				AC#2				Cell 2 2				Cell 4 4										
			TBL	#1	#2	R,C	R,C	Separat	Rate	Rate	Acc.	Acc.	Time	Time	AC #1	AC#2	CPAAlt	Data File	Achieved	C I	RAS	Own	Alt	Data File	Achieved	C I	RAS	Own	Alt
8 4	2143	10 5 2 2						750.00	-3000.0	-5000.0	0.15	-0.15	-25.0	-30.0	3700.0	CL8B1_F	-28.9	1	0	4	4	3402.1							
8 4	6679	10 5 2 2						750.00	-3000.0	-5000.0	0.15	-0.15	-25.0	-30.0	7500.0	CL8B1_F	-28.9	1	0	5	5	7202.1							
8 4	2283	5 10 2 2						750.00	-3000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL8B1_E	-78.1	0	0	4	4	3360.4							
8 4	6819	5 10 2 2						750.00	-3000.0	-5000.0	0.15	-0.25	-25.0	-20.0	7500.0	CL8B1_E	-99.1	0	0	5	5	7160.4							
8 4	6945	5 10 2 2						750.00	-3000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7500.0	CL8B1_E	47.5	0	0	5	5	7202.1							
8 4	2395	5 10 2 2						750.00	-3000.0	-5000.0	0.15	-0.35	-25.0	-30.0	3700.0	CL8B1_E	-70.6	0	0	4	4	3360.4							
8 4	3795	5 10 2 2						750.00	-3000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL8B1_E	-78.1	0	0	4	4	3360.4							
8 4	8331	5 10 2 2						750.00	-3000.0	-5000.0	0.25	-0.25	-25.0	-20.0	7500.0	CL8B1_E	-99.1	0	0	5	5	7160.4							
8 4	3788	5 10 2 2						750.00	-3000.0	-5000.0	0.25	-0.25	-25.0	-25.0	3700.0	CL8B1_E	-70.6	0	0	4	4	3360.4							
8 4	3921	5 10 2 2						750.00	-3000.0	-5000.0	0.25	-0.35	-25.0	-20.0	3700.0	CL8B1_E	47.5	0	0	4	4	3402.1							
8 4	3921	10 5 2 2						750.00	-3000.0	-5000.0	0.25	-0.35	-25.0	-20.0	3700.0	CL8B1_F	-92.4	0	0	4	4	3402.1							
8 4	8457	5 10 2 2						750.00	-3000.0	-5000.0	0.25	-0.35	-25.0	-20.0	7500.0	CL8B1_E	47.5	0	0	5	5	7202.1							
8 4	1653	10 5 2 2						750.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	3700.0	CL8B1_F	17.8	0	0	4	4	3485.4							
8 4	6189	5 10 2 2						750.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-20.0	7500.0	CL8B1_E	95.4	1	0	5	5	7239.2							
8 4	1646	10 5 2 2						750.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	3700.0	CL8B1_F	-64.2	0	0	4	4	3385.0							
8 4	6182	10 5 2 2						750.00	-5000.0	-5000.0	0.15	-0.15	-25.0	-25.0	7500.0	CL8B1_F	-64.2	0	0	5	5	7185.0							
8 4	1772	5 10 2 2						750.00	-5000.0	-5000.0	0.15	-0.25	-25.0	-25.0	3700.0	CL8B1_E	-11.0	0	0	4	4	3341.1							
8 4	1772	10 5 2 2						750.00	-5000.0	-5000.0	0.15	-0.25	-25.0	-25.0	3700.0	CL8B1_F	-95.5	0	0	4	4	3341.1							
8 4	6308	5 10 2 2						750.00	-5000.0	-5000.0	0.15	-0.25	-25.0	-25.0	7500.0	CL8B1_E	-11.0	0	0	5	5	7141.2							
8 4	6308	10 5 2 2						750.00	-5000.0	-5000.0	0.15	-0.25	-25.0	-25.0	7500.0	CL8B1_F	-95.5	0	0	5	5	7141.2							
8 4	3151	10 5 2 2						750.00	-5000.0	-5000.0	0.25	-0.15	-25.0	-30.0	3700.0	CL8B1_F	-28.9	1	0	4	4	3402.1							
8 4	7687	10 5 2 2						750.00	-5000.0	-5000.0	0.25	-0.15	-25.0	-30.0	7500.0	CL8B1_F	-28.9	1	0	5	5	7202.1							
8 4	1384	5 10 2 2						-250.00	-1000.0	5000.0	0.05	0.25	-25.0	-20.0	3700.0	CL8B1_E	67.7	0	0	4	4	3872.9							
8 4	2896	5 10 2 2						-250.00	-1000.0	5000.0	0.15	0.25	-25.0	-20.0	3700.0	CL8B1_E	67.7	0	0	4	4	3872.9							
8 4	3022	5 10 2 2						-250.00	-1000.0	5000.0	0.15	0.35	-25.0	-20.0	3700.0	CL8B1_E	67.7	0	0	4	4	3872.9							
8 4	4408	5 10 2 2						-250.00	-1000.0	5000.0	0.25	0.25	-25.0	-20.0	3700.0	CL8B1_E	67.7	0	0	4	4	3872.9							
8 4	4534	5 10 2 2						-250.00	-1000.0	5000.0	0.25	0.35	-25.0	-20.0	3700.0	CL8B1_E	67.7	0	0	4	4	3872.9							
8 4	3904	5 10 2 2						-250.00	-3000.0	5000.0	0.25	0.25	-25.0	-20.0	3700.0	CL8B1_E	67.7	0	0	4	4	3872.9							
8 4	4030	5 10 2 2						-250.00	-3000.0	5000.0	0.25	0.35	-25.0	-20.0	3700.0	CL8B1_E	67.7	0	0	4	4	3872.9							
8 4	5921	5 10 2 2						-500.00	-1000.0	5000.0	0.05	0.25	-25.0	-20.0	7500.0	CL8B1_E	53.8	0	0	5	5	7756.2							
8 4	1511	5 10 2 2						-500.00	-1000.0	5000.0	0.05	0.35	-25.0	-20.0	3700.0	CL8B1_E	39.4	0	0	4	4	3956.2							
8 4	2764	5 10 2 2						-500.00	-1000.0	5000.0	0.15	0.15	-25.0	-25.0	3700.0	CL8B1_E	38.8	0	0	4	4	3945.5							
8 4	3023	5 10 2 2						-500.00	-1000.0	5000.0	0.15	0.35	-25.0	-20.0	3700.0	CL8B1_E	39.4	0	0	4	4	3956.2							
8 4	7559	5 10 2 2						-500.00	-1000.0	5000.0	0.15	0.35	-25.0	-20.0	7500.0	CL8B1_E	53.8	0	0	5	5	7756.2							
8 4	4276	5 10 2 2						-500.00	-1000.0	5000.0	0.25	0.15	-25.0	-25.0	3700.0	CL8B1_E	38.8	0	0	4	4	3945.5							
8 4	4535	5 10 2 2						-500.00	-1000.0	5000.0	0.25	0.35	-25.0	-20.0	3700.0	CL8B1_E	39.4	0	0	4	4	3956.2							
8 4	9071	5 10 2 2						-500.00	-1000.0	5000.0	0.25	0.35	-25.0	-20.0	7500.0	CL8B1_E	53.8	0	0	5	5	7756.2							
8 4	881	5 10 2 2						-500.00	-3000.0	5000.0	0.05	0.25	-25.0	-20.0	3700.0	CL8B1_E	36.8	0	0	4	4	3979.4							
8 4	4031	5 10 2 2						-500.00	-3000.0	5000.0	0.25	0.35	-25.0	-20.0	3700.0	CL8B1_E	39.4	0	0	4	4	3956.2							
8 4	4711	10 5 2 2						-750.00	-5000.0	-1000.0	0.05	-0.15	-25.0	-30.0	7500.0	CL8B1_F	68.5	0	0	5	5	7818.5							
8 4	4844	10 5 2 2						-750.00	-5000.0	-1000.0	0.05	-0.25	-25.0	-25.0	7500.0	CL8B1_F	67.9	0	0	5	5	7818.5							
8 4	4837	10 5 2 2						-750.00	-5000.0	-1000.0	0.05	-0.25	-25.0	-30.0	7500.0	CL8B1_F	68.5	0	0	5	5	7818.5							
8 4	4970	10 5 2 2						-750.00	-5000.0	-1000.0	0.05	-0.35	-25.0	-25.0	7500.0	CL8B1_F	63.0	0	0	5	5	7818.5							
8 4	4963	10 5 2 2						-750.00	-5000.0	-1000.0	0.05	-0.35	-25.0	-30.0	7500.0	CL8B1_F	68.5	0	0	5	5	7818.5							
8 4	-----	2 2						Subtotal	=	148	NMAs																		
8 4	1276	10 5 2 2 4 4						500.00	-1000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL8B1_F	44.0	1	0	4	4	3527.1	CL8B1_U	-38.8	1	0	4	4	3457.4
8 4	5812	5 10 2 2 4 4						500.00	-1000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL8B1_E	48.1	1	0	5	5	7285.4	CL8B1_T	-71.2	0	0	5	5	7254.5
8 4	5812	10 5 2 2 4 4						500.00	-1000.0	-5000.0	0.05	-0.25	-25.0	-20.0	7500.0	CL8B1_F	-80.5	0	0	5	5	7285.4	CL8B1_U	71.2	0	0	5		

CLS	REIT	Modes	#1	#2	R,C	R,C	CPA Alt	AC#1	AC#2	AC#1	AC#2	AC#1	AC#2	AC #1	Cell 3 3					Cell 4 4												
															Data File	Achieved	C	I	RAS	Own	Alt	Data File	Achieved	C	I	RAS	Own	Alt				
TBL							Separat	Rate	Rate	Acc.	Acc.	Time	Time	CPAAlt	File	Separatn	N	C	1	2	CPA	Ach	File	Separatn	N	C	1	2	CPA	Ach		
7 4	7449	5 10 3 3					750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7500.0	CL7B1_M	-0.9	1	0	5	5		7153.6										
7 4	7449	10 5 3 3					750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	7500.0	CL7B1_N	0.9	1	0	5	5		7154.6										
7 4	4173	5 10 3 3					750.00	5000.0	-5000.0	0.25	-0.15	-25.0	-20.0	3700.0	CL7B1_M	1.5	1	0	4	4		3424.1										
7 4	4173	10 5 3 3					750.00	5000.0	-5000.0	0.25	-0.15	-25.0	-20.0	3700.0	CL7B1_N	-1.5	1	0	3	4		3422.6										
7 4	8709	5 10 3 3					750.00	5000.0	-5000.0	0.25	-0.15	-25.0	-20.0	7500.0	CL7B1_M	1.5	1	0	5	5		7224.1										
7 4	8709	10 5 3 3					750.00	5000.0	-5000.0	0.25	-0.15	-25.0	-20.0	7500.0	CL7B1_N	-1.5	1	0	5	5		7222.6										
7 4	-----	-----	3 3				Subtotal	=	64 NMAs																							
7 4	772	5 10 3 3	4 4				500.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_M	48.8	1	0	4	4		3486.1	CL7B1_T	-74.1	0	0	4	4		3423.5		
7 4	772	10 5 3 3	4 4				500.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_N	-48.8	1	0	4	4		3437.3	CL7B1_U	74.1	0	0	4	4		3497.6		
7 4	1276	5 10 3 3	4 4				500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_M	48.8	1	0	4	4		3486.1	CL7B1_T	-74.1	0	0	4	4		3423.5		
7 4	1276	10 5 3 3	4 4				500.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_N	-48.8	1	0	4	4		3437.3	CL7B1_U	74.1	0	0	4	4		3497.6		
7 4	1779	5 10 3 3	4 4				750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL7B1_M	-94.8	0	0	4	4		3326.1	CL7B1_T	-55.1	0	0	4	4		3365.8		
7 4	1779	10 5 3 3	4 4				750.00	1000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL7B1_N	94.8	0	0	4	4		3420.9	CL7B1_U	55.1	0	0	4	4		3420.9		
7 4	3291	5 10 3 3	4 4				750.00	1000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL7B1_M	-94.8	0	0	4	4		3326.1	CL7B1_T	-55.1	0	0	4	4		3365.8		
7 4	3291	10 5 3 3	4 4				750.00	1000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL7B1_N	94.8	0	0	4	4		3420.9	CL7B1_U	55.1	0	0	4	4		3420.9		
7 4	771	5 10 3 3	4 4				750.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_M	-8.8	0	0	4	4		3277.4	CL7B1_T	26.8	0	0	4	4		3342.7		
7 4	771	10 5 3 3	4 4				750.00	3000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_N	8.8	0	0	4	4		3286.2	CL7B1_U	-26.8	1	0	4	4		3316.0		
7 4	897	5 10 3 3	4 4				750.00	3000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3700.0	CL7B1_M	-16.1	0	0	4	4		3310.3	CL7B1_T	-40.8	1	0	4	4		3316.0		
7 4	1275	5 10 3 3	4 4				750.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_M	-8.8	0	0	4	4		3277.4	CL7B1_T	26.8	0	0	4	4		3342.7		
7 4	1275	10 5 3 3	4 4				750.00	5000.0	-5000.0	0.05	-0.25	-25.0	-20.0	3700.0	CL7B1_N	8.8	0	0	4	4		3286.2	CL7B1_U	-26.8	1	0	4	4		3316.0		
7 4	1401	5 10 3 3	4 4				750.00	5000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3700.0	CL7B1_M	-16.1	0	0	4	4		3310.3	CL7B1_T	-40.8	1	0	4	4		3316.0		
7 4	2787	5 10 3 3	4 4				750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL7B1_M	35.2	1	0	4	4		3282.8	CL7B1_T	37.7	1	0	4	4		3392.2		
7 4	2787	10 5 3 3	4 4				750.00	5000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0	CL7B1_N	-35.2	1	0	4	4		3247.6	CL7B1_U	-37.7	1	0	4	4		3354.6		
7 4	2913	5 10 3 3	4 4				750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3700.0	CL7B1_M	81.9	1	0	4	4		3329.5	CL7B1_T	37.7	1	0	4	4		3392.2		
7 4	2913	10 5 3 3	4 4				750.00	5000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3700.0	CL7B1_N	-81.9	1	0	4	4		3247.6	CL7B1_U	-37.7	1	0	4	4		3354.6		
7 4	4299	5 10 3 3	4 4				750.00	5000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL7B1_M	-83.3	0	0	3	4		3271.3	CL7B1_T	-86.8	0	0	3	4		3334.0		
7 4	4299	10 5 3 3	4 4				750.00	5000.0	-5000.0	0.25	-0.25	-25.0	-20.0	3700.0	CL7B1_N	83.3	0	0	3	4		3354.6	CL7B1_U	86.8	0	0	3	4		3420.9		
7 4	-----	-----	3 3	4 4			Subtotal	=	20 NMAs																							
7 4	4503	5 10			4 4		500.00	5000.0	3000.0	0.25	0.35	-25.0	-25.0	3700.0									CL7B1_T	-79.8	0	0	3	3		3137.0		
7 4	393	5 10			4 4		750.00	1000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3700.0									CL7B1_T	-49.5	0	0	4	4		3432.9		
7 4	393	10 5			4 4		750.00	1000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3700.0									CL7B1_U	49.5	0	0	4	4		3482.5		
7 4	4929	5 10			4 4		750.00	1000.0	-5000.0	0.05	-0.35	-25.0	-20.0	7500.0									CL7B1_T	-89.4	0	0	5	5		7165.8		
7 4	4929	10 5			4 4		750.00	1000.0	-5000.0	0.05	-0.35	-25.0	-20.0	7500.0									CL7B1_U	89.4	0	0	5	5		7255.1		
7 4	1905	5 10			4 4		750.00	1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3700.0									CL7B1_T	-22.2	0	0	4	4		3432.9		
7 4	1905	10 5			4 4		750.00	1000.0	-5000.0	0.15	-0.35	-25.0	-20.0	3700.0									CL7B1_U	22.2	0	0	4	4		3455.1		
7 4	3417	5 10			4 4		750.00	1000.0	-5000.0	0.25	-0.35	-25.0	-20.0	3700.0									CL7B1_T	-22.2	0	0	4	4		3432.9		
7 4	3417	10 5			4 4		750.00	1000.0	-5000.0	0.25	-0.35	-25.0	-20.0	3700.0									CL7B1_U	22.2	0	0	4	4		3455.1		
7 4	897	5 10			4 4		750.00	3000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3700.0									CL7B1_T	40.8	1	0	4	4		3356.7		
7 4	2283	5 10			4 4		750.00	3000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0									CL7B1_T	-46.6	0	0	4	4		3334.0		
7 4	2283	10 5			4 4		750.00	3000.0	-5000.0	0.15	-0.25	-25.0	-20.0	3700.0									CL7B1_U	46.6	0	0	4	4		3380.7		
7 4	2682	5 10			4 4		750.00	5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	3700.0									CL7B1_T	-23.2	0	0	4	4		3353.6		
7 4	2682	10 5			4 4		750.00	5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	3700.0									CL7B1_U	23.2	0	0	4	4		3376.8		
7 4	1401	5 10			4 4		750.00	5000.0	-5000.0	0.05	-0.35	-25.0	-20.0	3700.0									CL7B1_T	40.8	1	0	4	4		3356.7		
7 4	-----	-----	4 4				Subtotal	=	15 NMAs																							
8 3	774	5 10 3 3					0.00	-3000.0	-5000.0																							

CLS	REIT	Modes			CPA Alt		AC#1	AC#2	AC#1	AC#2	AC#1	AC#2	AC #1	Cell 3 3					Cell 4 4												
		TBL	#1	#2	R,C	R,C	Separat	Rate	Rate	Acc.	Acc.	Time	Time	CPAAAlt	Data File	Achieved Separatn	C N	I C	RAS 1 2	Own CPA	Alt Ach	Data File	Achieved Separatn	C N	I C	RAS 1 2	Own CPA	Alt Ach			
17 4	2732	10	5	3	3		500.00	5000.0	3000.0	0.15	0.15	-25.0	-30.0	3700.0	CL7B1_N	33.0	0	1	3	3	3208.1										
17 4	2865	10	5	3	3		500.00	5000.0	3000.0	0.15	0.25	-25.0	-25.0	3700.0	CL7B1_N	34.7	0	1	3	3	3209.7										
17 4	4517	5	10	3	3		500.00	5000.0	5000.0	0.25	0.35	-25.0	-30.0	3700.0	CL7B1_M	-63.0	0	1	3	3	3137.0										
17 4	-----						Subtotal	=	3 NMACs																						
17 4	2732	5	10	3	3	4 4	500.00	5000.0	3000.0	0.15	0.15	-25.0	-30.0	3700.0	CL7B1_M	-33.0	0	1	4	3	3175.1	CL7B1_T	-33.0	0	1	4	3	3175.1			
17 4	2865	5	10	3	3	4 4	500.00	5000.0	3000.0	0.15	0.25	-25.0	-25.0	3700.0	CL7B1_M	-34.7	0	1	4	3	3175.1	CL7B1_T	-34.7	0	1	4	3	3175.1			
17 4	2858	5	10	3	3	4 4	500.00	5000.0	3000.0	0.15	0.25	-25.0	-30.0	3700.0	CL7B1_M	-26.9	0	1	4	3	3175.1	CL7B1_T	-41.4	0	1	4	3	3160.6			
17 4	2984	5	10	3	3	4 4	500.00	5000.0	3000.0	0.15	0.35	-25.0	-30.0	3700.0	CL7B1_M	42.6	0	1	4	3	3220.1	CL7B1_T	-24.9	0	1	4	3	3175.1			
17 4	-----						Subtotal	=	4 NMACs																						
17 4	2739	5	10			4 4	500.00	5000.0	3000.0	0.15	0.15	-25.0	-25.0	3700.0								CL7B1_T	-24.9	0	1	4	3	3175.1			
17 4	2991	5	10			4 4	500.00	5000.0	3000.0	0.15	0.35	-25.0	-25.0	3700.0								CL7B1_T	-56.2	0	1	4	3	3160.6			
17 4	-----						Subtotal	=	2 NMACs																						
18 4	7744	5	10	3	3		500.00	-5000.0	-1000.0	0.25	-0.15	-25.0	-20.0	7500.0	CL8B1_M	-92.8	1	1	5	5	7263.4										
18 4	7870	5	10	3	3		500.00	-5000.0	-1000.0	0.25	-0.25	-25.0	-20.0	7500.0	CL8B1_M	-92.8	1	1	5	5	7263.4										
18 4	7996	5	10	3	3		500.00	-5000.0	-1000.0	0.25	-0.35	-25.0	-20.0	7500.0	CL8B1_M	-92.8	1	1	5	5	7263.4										
18 4	1541	10	5	3	3		750.00	-5000.0	-3000.0	0.15	-0.05	-25.0	-25.0	3700.0	CL8B1_N	-2.1	1	1	4	4	3345.0										
18 4	6077	10	5	3	3		750.00	-5000.0	-3000.0	0.15	-0.05	-25.0	-25.0	7500.0	CL8B1_N	59.8	1	1	5	5	7206.9										
18 4	1674	10	5	3	3		750.00	-5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	3700.0	CL8B1_N	-83.9	0	1	4	4	3263.2										
18 4	6210	10	5	3	3		750.00	-5000.0	-3000.0	0.15	-0.15	-25.0	-20.0	7500.0	CL8B1_N	-66.3	0	1	5	5	7080.8										
18 4	1520	10	5	3	3		750.00	-5000.0	-5000.0	0.15	-0.05	-25.0	-25.0	3700.0	CL8B1_N	-2.1	1	1	4	4	3345.0										
18 4	6056	10	5	3	3		750.00	-5000.0	-5000.0	0.15	-0.05	-25.0	-25.0	7500.0	CL8B1_N	59.8	1	1	5	5	7206.9										
18 4	-----						Subtotal	=	9 NMACs																						
18 4	6336	10	5			4 4	750.00	-5000.0	-3000.0	0.15	-0.25	-25.0	-20.0	7500.0								CL8B1_U	-56.6	0	1	5	5	7135.3			
18 4	-----						Subtotal	=	1 NMACs																						
19 4	366	10	5	3	3		-250.00	1000.0	-3000.0	-0.05	0.25	-25.0	-25.0	3700.0	CL9B1_N	12.1	0	1	4	4	3942.5										
19 4	528	10	5	3	3		-250.00	1000.0	-3000.0	-0.05	0.35	-25.0	-25.0	3700.0	CL9B1_N	19.5	0	1	4	4	3949.8										
19 4	3427	10	5	3	3		-500.00	5000.0	-5000.0	-0.15	0.15	-25.0	-20.0	3700.0	CL9B1_N	-86.7	1	1	4	4	3841.2										
19 4	7315	10	5	3	3		-500.00	5000.0	-5000.0	-0.15	0.15	-25.0	-20.0	7500.0	CL9B1_N	-86.7	1	1	5	5	7641.2										
19 4	3418	5	10	3	3		-500.00	5000.0	-5000.0	-0.15	0.15	-25.0	-25.0	3700.0	CL9B1_M	37.5	1	1	4	4	3968.8										
19 4	3418	10	5	3	3		-500.00	5000.0	-5000.0	-0.15	0.15	-25.0	-25.0	3700.0	CL9B1_N	-76.9	1	1	4	4	3931.2										
19 4	7306	5	10	3	3		-500.00	5000.0	-5000.0	-0.15	0.15	-25.0	-25.0	7500.0	CL9B1_M	37.5	1	1	5	5	7768.8										
19 4	7306	10	5	3	3		-500.00	5000.0	-5000.0	-0.15	0.15	-25.0	-25.0	7500.0	CL9B1_N	-76.9	1	1	5	5	7731.3										
19 4	3589	10	5	3	3		-500.00	5000.0	-5000.0	-0.15	0.25	-25.0	-20.0	3700.0	CL9B1_N	59.0	0	1	4	4	4010.6										
19 4	7477	5	10	3	3		-500.00	5000.0	-5000.0	-0.15	0.25	-25.0	-20.0	7500.0	CL9B1_M	-92.6	0	1	5	5	7718.1										
19 4	7477	10	5	3	3		-500.00	5000.0	-5000.0	-0.15	0.25	-25.0	-20.0	7500.0	CL9B1_N	41.9	1	1	5	5	7810.7										
19 4	3751	10	5	3	3		-500.00	5000.0	-5000.0	-0.15	0.35	-25.0	-20.0	3700.0	CL9B1_N	-82.8	1	1	4	4	3968.4										
19 4	7639	10	5	3	3		-500.00	5000.0	-5000.0	-0.15	0.35	-25.0	-20.0	7500.0	CL9B1_N	-82.8	1	1	5	5	7768.4										
19 4	-----						Subtotal	=	13 NMACs																						
19 4	996	5	10			4 4	-250.00	3000.0	-5000.0	-0.05	0.25	-25.0	-20.0	3700.0								CL9B1_T	-16.5	0	1	4	4	3681.4			
19 4	4884	5	10			4 4	-250.00	3000.0	-5000.0	-0.05	0.25	-25.0	-20.0	7500.0								CL9B1_T	-16.5	0	1	5	5	7481.4			
19 4	7179	10	5			4 4	-250.00	5000.0	-3000.0	-0.15	0.05	-25.0	-20.0	7500.0								CL9B1_U	49.6	0	1	5	5	7767.7			
19 4	-----						Subtotal	=	3 NMACs																						

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APPENDIX J

CAS LOGIC PARAMETER VALUES

Thresholds for Logic Versions 6.04a and 7¹

Own Altitude (ft) (Note 1)	Radio Altitude or Pressure Altitude						
	Up to 1,000	1,000 – 2,350	2,350 – 5,000	5,000 – 10,000	10,000 – 20,000	20,000 – 42,000	Above 42,000
Sensitivity Level	2	3	4	5	6	7	7
Alarm Time [TAU] (sec)		15	20	25	30	35	35
Incremental Protected Volume [DMOD] (nmi) (Note 2)		0.20	0.35	0.55	0.80	1.10	1.10
Alarm Time for TA [TAUTA] (sec)	20	25	30	40	45	48	48
Vertical Threshold for TA [ZTHR _{TA}] (ft)	850	850	850	850	850	850	1200
Vertical Threshold for RA [ZTHR] (ft.)		600	600	600	600	700	800
Vertical Threshold for Positive RA [ALIM] (ft)		300	300	350	400	600	700

Note 1: Pressure altitude is referenced to 1013.25 millibars (29.92 inches of mercury). When radio altitude and pressure altitude imply different SLs, TCAS selects the lower SL.

Note 2: Alarm times (TAU and TAUTA) and Incremental Protection Volume (DMOD) are selected according to the higher of own and threat SL, unless own SL is ≤ 2 .

¹ DO-185A, Table 2-13.

APPENDIX K
PERFORMANCE STATISTICS OUTPUTS

MITRE encounter classes: 0,10 Date processed: 8/25/97
 Based on FAA Technical Center data of: AUGUST 1997
 Total TCAS-TCAS runs for single point of view : 1512
 Total incorrectly labelled RAs : 0

	Class	0		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAS/ runs (%)		90.00	90.00	90.00	90.00	90.00	90.00
Crossing RAs/ RAs (%)		0.00	0.00	0.00	0.00	0.00	0.00
Crossing RAs/ runs (%)		0.00	0.00	0.00	0.00	0.00	0.00
Cr. RA NMACs/ cross RAs (%)		0.00	0.00	0.00	0.00	0.00	0.00
Cr. RA NMACs/ NMACs* (%)		0.00	0.00	0.00	0.00	0.00	0.00
NMACs*/ runs (%)		0.00	0.00	0.00	0.00	0.00	0.00
Avg warning time** (sec)		22.50	23.00	23.00	23.00	23.00	23.00
Avg alt sep at CPA* (ft)		671.03	688.55	614.90	674.63	648.67	657.05

	Class	10		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAS/ runs (%)		65.63	65.63	65.63	65.63	65.63	65.63
Crossing RAs/ RAs (%)		0.00	0.00	0.00	0.00	0.00	0.00
Crossing RAs/ runs (%)		0.00	0.00	0.00	0.00	0.00	0.00
Cr. RA NMACs/ cross RAs (%)		0.00	0.00	0.00	0.00	0.00	0.00
Cr. RA NMACs/ NMACs* (%)		0.00	0.00	0.00	0.00	0.00	0.00
NMACs*/ runs (%)		0.00	0.00	0.00	0.00	0.00	0.00
Avg warning time** (sec)		20.52	21.02	20.99	21.02	20.99	21.01
Avg alt sep at CPA* (ft)		669.68	640.41	627.69	654.05	656.62	637.56

* NMACs and average alt. sep. at CPA are based on simulation truth
 ** Average warning time includes negative times (ie, RA occurs after CPA)

MITRE encounter classes: 1,11 Date processed: 8/27/97

Based on FAA Technical Center data of: AUGUST 1997

Total TCAS-TCAS runs for single point of view : 4536

Total incorrectly labelled RAs : 0

	Class		1		TCAS - TCAS		Both Responding	
	6.04A only	Ch7-100 ft only	Ch7-25 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100	
RAs/ runs (%)	94.39	94.39	94.39	94.39	94.39	94.39	94.39	
Crossing RAs/ RAs (%)	8.92	5.14	4.86	4.86	6.76	6.49	5.00	
Crossing RAs/ runs (%)	8.42	4.85	4.59	4.59	6.38	6.12	4.72	
Cr. RA NMACs/ cross RAs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Cr. RA NMACs/ NMACs* (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NMACs*/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Avg warning time** (sec)	16.64	17.82	17.85	17.85	17.86	17.89	17.83	
Avg alt sep at CPA* (ft)	761.42	815.30	786.48	786.48	789.16	781.41	801.08	

	Class		11		TCAS - TCAS		Both Responding	
	6.04A only	Ch7-100 ft only	Ch7-25 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100	
RAs/ runs (%)	60.71	71.43	71.43	71.43	71.43	71.43	71.43	
Crossing RAs/ RAs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Crossing RAs/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Cr. RA NMACs/ cross RAs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Cr. RA NMACs/ NMACs* (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NMACs*/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Avg warning time** (sec)	9.04	7.76	7.75	7.75	7.76	7.75	7.76	
Avg alt sep at CPA* (ft)	658.56	667.32	656.32	656.32	663.72	658.04	662.28	

* NMACs and average alt. sep. at CPA are based on simulation truth

** Average warning time includes negative times (ie, RA occurs after CPA)

MITRE encounter classes: 2,12 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total TCAS-TCAS runs for single point of view : 54424

Total incorrectly labelled RAS : 8

	Class	2		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAS/ runs (%)	99.60	99.14	98.94	99.32	99.07	99.05	
Crossing RAS/ RAS (%)	2.45	2.39	1.94	2.52	2.15	2.20	
Crossing RAS/ runs (%)	2.44	2.37	1.92	2.51	2.13	2.18	
Cr. RA NMACs/ cross RAS (%)	3.09	0.00	0.00	0.00	0.00	0.00	
Cr. RA NMACs/ NMACs* (%)	5.17	0.00	0.00	0.00	0.00	0.00	
NMACs*/ runs (%)	1.46	0.35	0.45	0.73	0.59	0.40	
Avg warning time** (sec)	15.52	16.43	16.71	16.43	16.73	16.57	
Avg alt sep at CPA* (ft)	610.62	660.75	667.94	636.84	644.73	665.06	

	Class	12		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAS/ runs (%)	75.10	79.57	80.82	79.62	80.87	80.19	
Crossing RAS/ RAS (%)	0.00	0.00	0.00	0.09	0.00	0.00	
Crossing RAS/ runs (%)	0.00	0.00	0.00	0.07	0.00	0.00	
Cr. RA NMACs/ cross RAS (%)	0.00	0.00	0.00	0.00	0.00	0.00	
Cr. RA NMACs/ NMACs* (%)	0.00	0.00	0.00	0.00	0.00	0.00	
NMACs*/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	
Avg warning time** (sec)	14.53	13.59	13.27	13.60	13.26	13.43	
Avg alt sep at CPA* (ft)	729.76	720.77	725.86	725.12	724.87	722.73	

* NMACs and average alt. sep. at CPA are based on simulation truth

** Average warning time includes negative times (ie, RA occurs after CPA)

MITRE encounter classes: 3,13 Date processed: 8/21/97

Based on FAA Technical Center data of: AUGUST 1997

Total TCAS-TCAS runs for single point of view : 69984

Total incorrectly labelled RAs : 0

	Class	3		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAs/ runs (%)	65.69	65.58	65.77	65.58	65.77	65.68	
Crossing RAs/ RAs (%)	7.50	10.60	11.56	11.18	12.11	11.00	
Crossing RAs/ runs (%)	4.92	6.95	7.60	7.33	7.97	7.22	
Cr. RA NMACs/ cross RAs (%)	0.00	0.00	0.00	0.00	0.00	0.00	
Cr. RA NMACs/ NMACs* (%)	0.00	0.00	0.00	0.00	0.00	0.00	
NMACs*/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	
Avg warning time** (sec)	16.75	17.85	18.16	17.86	18.17	18.01	
Avg alt sep at CPA* (ft)	737.01	733.86	724.11	737.38	732.48	729.88	

	Class	13		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAs/ runs (%)	62.06	62.50	60.15	62.52	60.01	61.29	
Crossing RAs/ RAs (%)	14.97	10.39	11.33	11.84	12.78	10.96	
Crossing RAs/ runs (%)	9.29	6.50	6.81	7.40	7.67	6.72	
Cr. RA NMACs/ cross RAs (%)	1.06	0.38	0.00	0.33	0.32	0.18	
Cr. RA NMACs/ NMACs* (%)	100.00	33.33	0.00	50.00	100.00	33.33	
NMACs*/ runs (%)	0.10	0.07	0.00	0.05	0.02	0.04	
Avg warning time** (sec)	19.85	21.08	21.03	21.10	21.10	21.07	
Avg alt sep at CPA* (ft)	878.79	872.12	838.68	879.77	864.98	855.93	

* NMACs and average alt. sep. at CPA are based on simulation truth

** Average warning time includes negative times (ie, RA occurs after CPA)

MITRE encounter classes: 4,14 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total TCAS-TCAS runs for single point of view : 9072

Total incorrectly labelled RAS : 0

	Class	4		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAS/ runs (%)	96.70	96.98	97.25	96.84	96.84	97.12	
Crossing RAS/ RAS (%)	7.67	5.81	5.79	6.67	6.67	5.80	
Crossing RAS/ runs (%)	7.42	5.63	5.63	6.46	6.46	5.63	
Cr. RA NMACs/ cross RAS (%)	0.00	0.00	0.00	0.00	0.00	0.00	
Cr. RA NMACs/ NMACs* (%)	0.00	0.00	0.00	0.00	0.00	0.00	
NMACs*/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	
Avg warning time** (sec)	19.67	20.28	20.13	20.30	20.20	20.21	
Avg alt sep at CPA* (ft)	948.61	1023.15	997.16	986.34	973.43	1009.11	

	Class	14		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAS/ runs (%)	68.57	68.57	68.57	68.57	68.57	68.57	
Crossing RAS/ RAS (%)	10.42	6.25	5.73	8.85	8.33	5.99	
Crossing RAS/ runs (%)	7.14	4.29	3.93	6.07	5.71	4.11	
Cr. RA NMACs/ cross RAS (%)	0.00	0.00	0.00	0.00	0.00	0.00	
Cr. RA NMACs/ NMACs* (%)	0.00	0.00	0.00	0.00	0.00	0.00	
NMACs*/ runs (%)	0.00	0.00	0.00	0.00	0.00	0.00	
Avg warning time** (sec)	14.14	14.68	14.63	14.68	14.63	14.66	
Avg alt sep at CPA* (ft)	709.93	698.79	696.34	699.73	699.61	697.47	

* NMACs and average alt. sep. at CPA are based on simulation truth

** Average warning time includes negative times (ie, RA occurs after CPA)

MITRE encounter classes: 5,15 Date processed: 8/25/97

Based on FAA Technical Center data of: AUGUST 1997

Total TCAS-TCAS runs for single point of view : 108864

Total incorrectly labelled RAs : 0

	Class	5		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAs/ runs (%)	95.77	94.85	94.65	95.15	95.01	94.75	
Crossing RAs/ RAs (%)	4.97	4.86	4.72	5.31	5.23	4.82	
Crossing RAs/ runs (%)	4.76	4.61	4.47	5.05	4.97	4.56	
Cr. RA NMACs/ cross RAs (%)	0.22	0.00	0.00	0.00	0.00	0.00	
Cr. RA NMACs/ NMACs* (%)	3.45	0.00	0.00	0.00	0.00	0.00	
NMACs*/ runs (%)	0.31	0.04	0.07	0.17	0.12	0.06	
Avg warning time** (sec)	16.28	16.85	17.28	16.87	17.25	17.06	
Avg alt sep at CPA* (ft)	752.78	801.04	815.62	777.75	784.05	806.93	

	Class	15		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAs/ runs (%)	78.07	72.05	72.24	72.64	70.99	72.28	
Crossing RAs/ RAs (%)	8.84	8.94	7.32	9.71	9.02	8.09	
Crossing RAs/ runs (%)	6.90	6.44	5.29	7.06	6.40	5.85	
Cr. RA NMACs/ cross RAs (%)	6.67	1.19	1.45	1.90	2.10	1.31	
Cr. RA NMACs/ NMACs* (%)	66.67	100.00	100.00	100.00	100.00	100.00	
NMACs*/ runs (%)	0.69	0.08	0.08	0.13	0.13	0.08	
Avg warning time** (sec)	14.89	15.15	14.67	15.11	14.95	14.90	
Avg alt sep at CPA* (ft)	839.91	918.93	902.17	882.49	875.21	910.71	

* NMACs and average alt. sep. at CPA are based on simulation truth

** Average warning time includes negative times (ie, RA occurs after CPA)

MITRE encounter classes: 6,16 Date processed: 8/25/97
 Based on FAA Technical Center data of: AUGUST 1997
 Total TCAS-TCAS runs for single point of view : 108756
 Total incorrectly labelled RAs : 108

	Class	6		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAs/ runs (%)		94.53	94.09	94.37	94.27	94.22	94.18
Crossing RAs/ RAs (%)		16.41	16.01	14.67	16.78	16.08	15.36
Crossing RAs/ runs (%)		15.51	15.06	13.84	15.82	15.15	14.46
Cr. RA NMACs/ cross RAs (%)		0.61	0.14	0.15	0.30	0.14	0.14
Cr. RA NMACs/ NMACs* (%)		34.62	11.11	20.00	24.32	14.29	15.38
NMACs*/ runs (%)		0.27	0.19	0.10	0.19	0.15	0.14
Avg warning time** (sec)		18.07	18.62	18.73	18.65	18.75	18.68
Avg alt sep at CPA* (ft)		838.85	892.48	887.67	868.59	867.88	890.16

	Class	16		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAs/ runs (%)		78.57	84.75	84.87	85.14	84.65	84.85
Crossing RAs/ RAs (%)		15.44	8.35	8.99	10.69	11.33	8.69
Crossing RAs/ runs (%)		12.13	7.08	7.63	9.10	9.59	7.37
Cr. RA NMACs/ cross RAs (%)		0.33	0.00	0.00	0.00	0.00	0.00
Cr. RA NMACs/ NMACs* (%)		100.00	0.00	0.00	0.00	0.00	0.00
NMACs*/ runs (%)		0.04	0.00	0.00	0.00	0.00	0.00
Avg warning time** (sec)		20.01	18.28	17.83	18.27	17.97	18.06
Avg alt sep at CPA* (ft)		905.29	932.58	908.05	919.24	908.52	921.74

* NMACs and average alt. sep. at CPA are based on simulation truth
 ** Average warning time includes negative times (ie, RA occurs after CPA)

MITRE encounter classes: 7,17 Date processed: 8/27/97

Based on FAA Technical Center data of: AUGUST 1997

Total TCAS-TCAS runs for single point of view : 163240

Total incorrectly labelled RAs : 56

	Class		7		TCAS - TCAS		Both Responding	
	6.04A only	Ch7-100 ft only	Ch7-25 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100	
RAs/runs (%)	99.36	99.06	99.15	99.30	99.18	99.08		
Crossing RAs/RAs (%)	3.32	3.29	2.29	3.35	2.81	2.70		
Crossing RAs/runs (%)	3.30	3.26	2.27	3.32	2.78	2.68		
Cr. RA NMACs/cross RAs (%)	0.00	0.00	0.00	0.00	0.00	0.00		
Cr. RA NMACs/NMACs* (%)	0.00	0.00	0.00	0.00	0.00	0.00		
NMACs*/runs (%)	1.60	0.67	0.28	1.06	0.51	0.30		
Avg warning time** (sec)	14.60	15.10	15.67	15.13	15.65	15.40		
Avg alt sep at CPA* (ft)	618.23	676.79	716.67	648.39	671.04	697.50		

	Class		17		TCAS - TCAS		Both Responding	
	6.04A only	Ch7-100 ft only	Ch7-25 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100	
RAs/runs (%)	71.63	72.29	73.51	73.09	71.62	72.96		
Crossing RAs/RAs (%)	1.89	1.02	1.39	1.41	1.91	1.23		
Crossing RAs/runs (%)	1.35	0.74	1.02	1.03	1.37	0.90		
Cr. RA NMACs/cross RAs (%)	17.11	14.29	10.34	11.97	16.77	11.76		
Cr. RA NMACs/NMACs* (%)	92.86	85.71	100.00	77.78	100.00	80.00		
NMACs*/runs (%)	0.25	0.12	0.11	0.16	0.23	0.13		
Avg warning time** (sec)	15.76	15.96	15.32	15.87	15.67	15.64		
Avg alt sep at CPA* (ft)	855.58	926.38	894.14	891.52	874.31	909.56		

* NMACs and average alt. sep. at CPA are based on simulation truth

** Average warning time includes negative times (ie, RA occurs after CPA)

MITRE encounter classes: 8,18 Date processed: 8/23/97
 Based on FAA Technical Center data of: AUGUST 1997
 Total TCAS-TCAS runs for single point of view : 162900
 Total incorrectly labelled RAs : 396

	Class	8		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAs/ runs (%)		93.02	93.41	94.41	93.56	94.11	93.93
Crossing RAs/ RAs (%)		8.89	7.21	6.73	7.93	7.73	7.05
Crossing RAs/ runs (%)		8.27	6.73	6.35	7.42	7.28	6.62
Cr. RA NMACs/ cross RAs (%)		0.70	0.00	0.00	0.10	0.05	0.11
Cr. RA NMACs/ NMACs* (%)		3.76	0.00	0.00	0.73	0.49	1.15
NMACs*/ runs (%)		1.55	0.68	0.49	0.98	0.74	0.62
Avg warning time** (sec)		15.34	16.14	16.18	16.15	16.24	16.17
Avg alt sep at CPA* (ft)		719.05	761.47	759.49	746.32	748.94	761.42

	Class	18		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAs/ runs (%)		77.24	82.71	86.16	82.81	85.33	84.20
Crossing RAs/ RAs (%)		14.66	13.03	12.90	13.62	13.41	13.07
Crossing RAs/ runs (%)		11.33	10.78	11.11	11.28	11.44	11.01
Cr. RA NMACs/ cross RAs (%)		2.65	2.01	0.22	1.92	0.95	0.44
Cr. RA NMACs/ NMACs* (%)		70.59	100.00	100.00	72.00	81.82	100.00
NMACs*/ runs (%)		0.43	0.22	0.02	0.30	0.13	0.05
Avg warning time** (sec)		18.10	18.03	16.94	18.11	17.21	17.53
Avg alt sep at CPA* (ft)		893.43	936.84	920.85	931.64	929.45	928.74

* NMACs and average alt. sep. at CPA are based on simulation truth
 ** Average warning time includes negative times (ie, RA occurs after CPA)

MITRE encounter classes: 9,19 Date processed: 8/25/97
 Based on FAA Technical Center data of: AUGUST 1997
 Total TCAS-TCAS runs for single point of view : 139927
 Total incorrectly labelled RAs : 41

	Class	9		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAs/ runs (%)	69.32	68.76	68.32	68.87	68.30	68.48	
Crossing RAs/ RAs (%)	28.98	27.88	28.26	29.34	29.25	27.99	
Crossing RAs/ runs (%)	20.09	19.17	19.31	20.20	19.98	19.17	
Cr. RA NMACs/ cross RAs (%)	0.86	0.34	0.14	0.69	0.50	0.21	
Cr. RA NMACs/ NMACs* (%)	76.47	100.00	100.00	100.00	100.00	100.00	
NMACs*/ runs (%)	0.22	0.07	0.03	0.14	0.10	0.04	
Avg warning time** (sec)	17.65	18.51	18.70	18.52	18.74	18.60	
Avg alt sep at CPA* (ft)	813.67	814.85	805.78	817.80	814.80	808.97	

	Class	19		TCAS - TCAS		Both Responding	
		6.04A only	Ch7-100 ft only	Ch7-25 ft only	6.04A/Ch7-100	6.04A/Ch7-25	Ch7-25/Ch7-100
RAs/ runs (%)	74.29	74.15	73.00	74.08	72.13	73.31	
Crossing RAs/ RAs (%)	23.59	18.82	18.71	21.12	20.62	18.78	
Crossing RAs/ runs (%)	17.52	13.96	13.66	15.64	14.87	13.77	
Cr. RA NMACs/ cross RAs (%)	2.51	1.17	0.28	1.68	1.10	0.87	
Cr. RA NMACs/ NMACs* (%)	100.00	100.00	100.00	100.00	100.00	100.00	
NMACs*/ runs (%)	0.44	0.16	0.04	0.26	0.16	0.12	
Avg warning time** (sec)	20.71	21.36	21.23	21.43	21.43	21.39	
Avg alt sep at CPA* (ft)	979.75	981.31	969.19	986.51	985.32	975.20	

* NMACs and average alt. sep. at CPA are based on simulation truth
 ** Average warning time includes negative times (ie, RA occurs after CPA)

APPENDIX L
SUMMARY NMAC TABLES ONE PILOT NON RESPONDING

MITRE encounter classes: 0,10 Date processed: 9/ 4/97
 Based on FAA Technical Center data of : AUGUST 1997 Some TCAS Non-Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**)= 1.00 Significance threshold (>)= 1.0 %

Table 0.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	-----	-----	-----	-----	-----

Table 0.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	-----	-----	-----	-----	-----

Table 10.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	-----	-----	-----	-----	-----

Table 10.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	-----	-----	-----	-----	-----

MITRE encounter classes: 1,11 Date processed: 9/ 4/97
 Based on FAA Technical Center data of : AUGUST 1997 Some TCAS Non-Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>) = 1.0 %

Table 1.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	-----	-----	-----	-----	-----

Table 1.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	3.750	3.750	3.750	3.750
One Mode C	0.000	0.000	-----	-----	-----	-----	-----

Table 11.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	-----	-----	-----	-----	-----

Table 11.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	-----	-----	-----	-----	-----

MITRE encounter classes: 2,12 Date processed: 9/ 4/97
 Based on FAA Technical Center data of : AUGUST 1997 Some TCAS Non-Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>) = 1.0 %

Table 2.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.579	0.000	0.000	2.315	1.157	1.678	1.157
One Mode C	1.620	1.852	-----	-----	-----	-----	-----

Table 2.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	1.707	0.580	0.757	11.662	9.021	11.082	8.988
One Mode C	7.796	3.157	-----	-----	-----	-----	-----

Table 12.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	-----	-----	-----	-----	-----

Table 12.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.192	0.000	0.192	0.000
One Mode C	0.192	0.000	-----	-----	-----	-----	-----

MITRE encounter classes: 3,13 Date processed: 9/ 4/97
 Based on FAA Technical Center data of : AUGUST 1997 Some TCAS Non-Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>) = 1.0 %

Table 3.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.543	0.000	0.543	0.000
One Mode C	4.484	0.951	-----	-----	-----	-----	-----

Table 3.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.135	0.135	0.135	** 0.152
One Mode C	0.000	0.000	-----	-----	-----	-----	-----

Table 13.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.781	0.000	-----	-----	-----	-----	-----

Table 13.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.101	0.000	0.025	2.024	0.215	1.088	0.797
One Mode C	0.759	0.228	-----	-----	-----	-----	-----

MITRE encounter classes: 4,14 Date processed: 9/ 4/97
 Based on FAA Technical Center data of : AUGUST 1997 Some TCAS Non-Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>>) = 1.0 %

Table 4.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	6.667	6.667	6.667	6.667
One Mode C	0.000	0.000	----	----	----	----	----

Table 4.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	1.974	**	**	1.974
One Mode C	0.000	0.000	----	----	----	----	----

Table 14.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	33.333	33.333	33.333	33.333
One Mode C	0.000	0.000	----	----	----	----	----

Table 14.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	----	----	----	----	----

MITRE encounter classes: 5,15 Date processed: 9/ 4/97
 Based on FAA Technical Center data of : AUGUST 1997 Some TCAS Non-Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>>) = 1.0 %

Table 5.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	7.946	7.381	** 8.354	6.815
One Mode C	6.281	3.832	-----	-----	-----	-----	-----

Table 5.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.367	0.089	0.146	5.351	3.685	5.275	3.489
One Mode C	3.457	1.317	-----	-----	-----	-----	-----

Table 15.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	30.882	30.882	** 31.618	30.147
One Mode C	16.176	14.706	-----	-----	-----	-----	-----

Table 15.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.728	0.081	0.142	0.546	0.303	0.243	0.243
One Mode C	0.364	0.162	-----	-----	-----	-----	-----

MITRE encounter classes: 6,16 Date processed: 9/ 4/97
 Based on FAA Technical Center data of : AUGUST 1997 Some TCAS Non-Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>) = 1.0 %

Table 6.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.810	0.347	0.174	3.877	2.344	3.819	1.997
One Mode C	5.498	2.025	-----	-----	-----	-----	-----

Table 6.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.153	0.051	0.141	4.141	**	**	3.898
One Mode C	0.946	0.486	-----	-----	-----	-----	-----

Table 16.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	-----	-----	-----	-----	-----

Table 16.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.039	0.000	0.000	2.909	0.236	1.631	1.336
One Mode C	0.786	0.157	-----	-----	-----	-----	-----

MITRE encounter classes: 7,17 Date processed: 8/29/97
 Based on FAA Technical Center data of : AUGUST 1997 Some TCAS Non-Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>) = 1.0 %

Table 7.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.165	0.000	0.000	8.416	5.569	7.013	5.693
One Mode C	8.952	4.208	-----	-----	-----	-----	-----

Table 7.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	1.951	0.348	0.627	14.399	10.546	13.926	10.507
One Mode C	9.795	5.246	-----	-----	-----	-----	-----

Table 17.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	22.619	** 23.214	** 23.214	22.619
One Mode C	13.690	13.095	-----	-----	-----	-----	-----

Table 17.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.254	0.109	0.236	0.318	** 0.436	** 0.418	** 0.381
One Mode C	0.563	0.563	-----	-----	-----	-----	-----

MITRE encounter classes: 8,18 Date processed: 8/29/97
 Based on FAA Technical Center data of : AUGUST 1997 Some TCAS Non-Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>>) = 1.0 %

Table 8.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	1.157	0.154	0.212	4.090	1.910	2.894	2.160
One Mode C	6.250	3.279	-----	-----	-----	-----	-----

Table 8.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	1.649	0.570	0.855	7.655	6.121	** 7.800	5.779
One Mode C	5.884	2.745	-----	-----	-----	-----	-----

Table 18.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	0.000	0.000	-----	-----	-----	-----	-----

Table 18.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.410	0.024	0.133	6.304	0.784	4.243	2.278
One Mode C	1.977	0.627	-----	-----	-----	-----	-----

MITRE encounter classes: 9,19 Date processed: 8/29/97
 Based on FAA Technical Center data of : AUGUST 1997 Some TCAS Non-Responding
 Failure : separation at CPA <= 100 ft based on simulation truth
 Ratio threshold (**) = 1.00 Significance threshold (>>) = 1.0 %

Table 9.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	1.986	0.950	1.641	0.864
One Mode C	6.822	3.109	-----	-----	-----	-----	-----

Table 9.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.280	0.031	0.117	1.379	0.802	1.059	0.896
One Mode C	0.109	0.062	-----	-----	-----	-----	-----

Table 19.3 - Percent of unresolved failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
One Mode C	6.491	0.000	-----	-----	-----	-----	-----

Table 19.4 - Percent of induced failures

	BOTH TCAS RESPONDING			ONE TCAS NON-RESPONDING			
	6.04A only	CH7-25 only	CH7-25/6.04A	6.04A only	CH7-25 only	6.04A/CH7-25NR	CH7-25/6.04A NR
TCAS-TCAS	0.486	0.041	0.176	5.126	0.351	2.424	1.553
One Mode C	2.026	0.513	-----	-----	-----	-----	-----

APPENDIX M
CLASS WEIGHTS²

Class	Weight
1	0.0197
2	0.0004
3	0.0033
4	0.0145
5	0.0025
6	0.0029
7	0.0002
8	0.0005
9	0.0001
10 + 0	0.3973
11	0.1929
12	0.0759
13	0.1081
14	0.1167
15	0.0205
16	0.0256
17	0.0019
18	0.0094
19	0.0074
Total:	1.0000

²McLaughlin, M.P., and Zeitlin, A.D., "Safety Study of TCAS II for Logic Version 6.04a.", The MITRE Corporation, McLean Va, MTR 93W0000234, November 1993.

APPENDIX N
CHANGE 7 REPRESENTATIVE NMACS

Change 7 Representative NMAC U1

Mitre Encounter Class : 6 Reit Number : 4358

NMAC Characterization

50% had 100 ft tracker
50% had 25 ft tracker
100% had planned separation 0 ft
AC1 rates : 5000 fpm
AC2 rates : -5000 fpm
AC1 acceleration : 0 g
AC2 acceleration : 0.15 g
AC2 accel time : CPA - 25 sec
0% of encounters had reversed RAs

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
84	85	% of RAs were non-crossing
89	80	% of NMACs were non-crossing
99	99	% of RAs were not reversed
97	97	% of NMACs were not reversed

Comments

8 members in group.
Change 7 commands came too late to be effective.

T-N

DATA FOR C7UNR01

4358 6.04A RL VS 6.04A RH 6 -1738.71 NON_CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUV = 25.0 ALIM = 300.0
 0.0 (5000.0,5000.0) (-5000.0,0.0) 0.00 0.15 0.0 -25.0 7480.0
 A/C1: 1165022 TA TIME :13 |TAUR | DES @34 [NXRA] | LC2 @51
 A/C2: 1265122 TA TIME :13 |TAUR | POTRA @34 (6FT) | CL @35 [NXRA] | DDES @45
 | CL @46 | LD2 @56

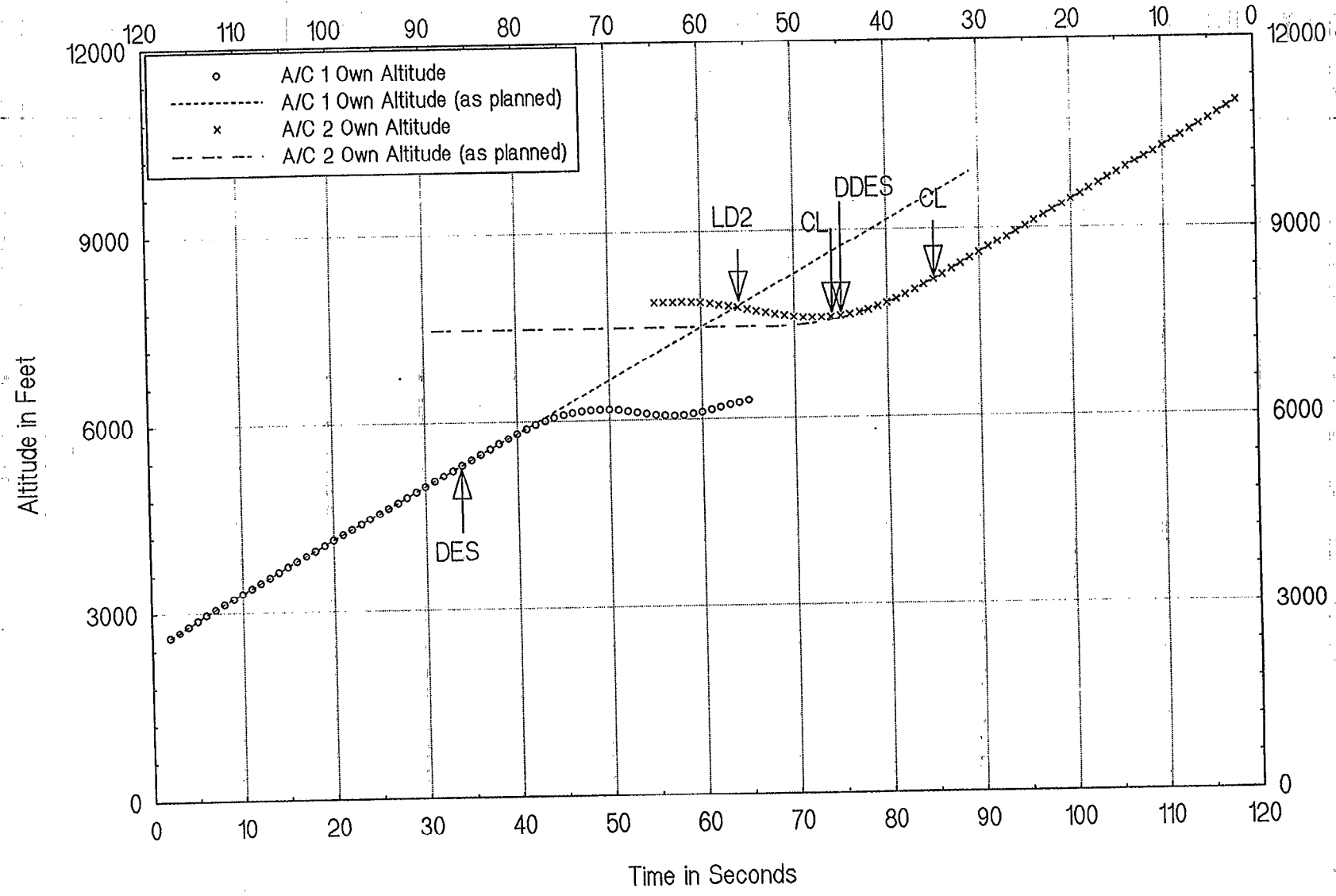
4358 C7 100 FT RL VS C7 100 FT RH 6 -0.01 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUV = 25.0 ALIM = 300.0
 0.0 (5000.0,5000.0) (-5000.0,0.0) 0.00 0.15 0.0 -25.0 7480.0
 A/C1: 1171033 TA TIME :13 |TAUR | POTRA @34 | DES @55 [NXRA]
 A/C2: 1271133 TA TIME :13 |TAUR | POTRA @34 | CL @55 [NXRA]

4358 C7 25 FT RL VS C7 25 FT RH 6 -0.01 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUV = 25.0 ALIM = 300.0
 0.0 (5000.0,5000.0) (-5000.0,0.0) 0.00 0.15 0.0 -25.0 7480.0
 A/C1: 1175044 TA TIME :13 |TAUR | POTRA @34 | DES @58 [NXRA]
 A/C2: 1275144 TA TIME :13 |TAUR | POTRA @34 | CL @57 [NXRA]

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7UNR01A.EPC)

6.04a vs 6.04a Data File Name=CL6B1E.DAT; REIT Number=4358

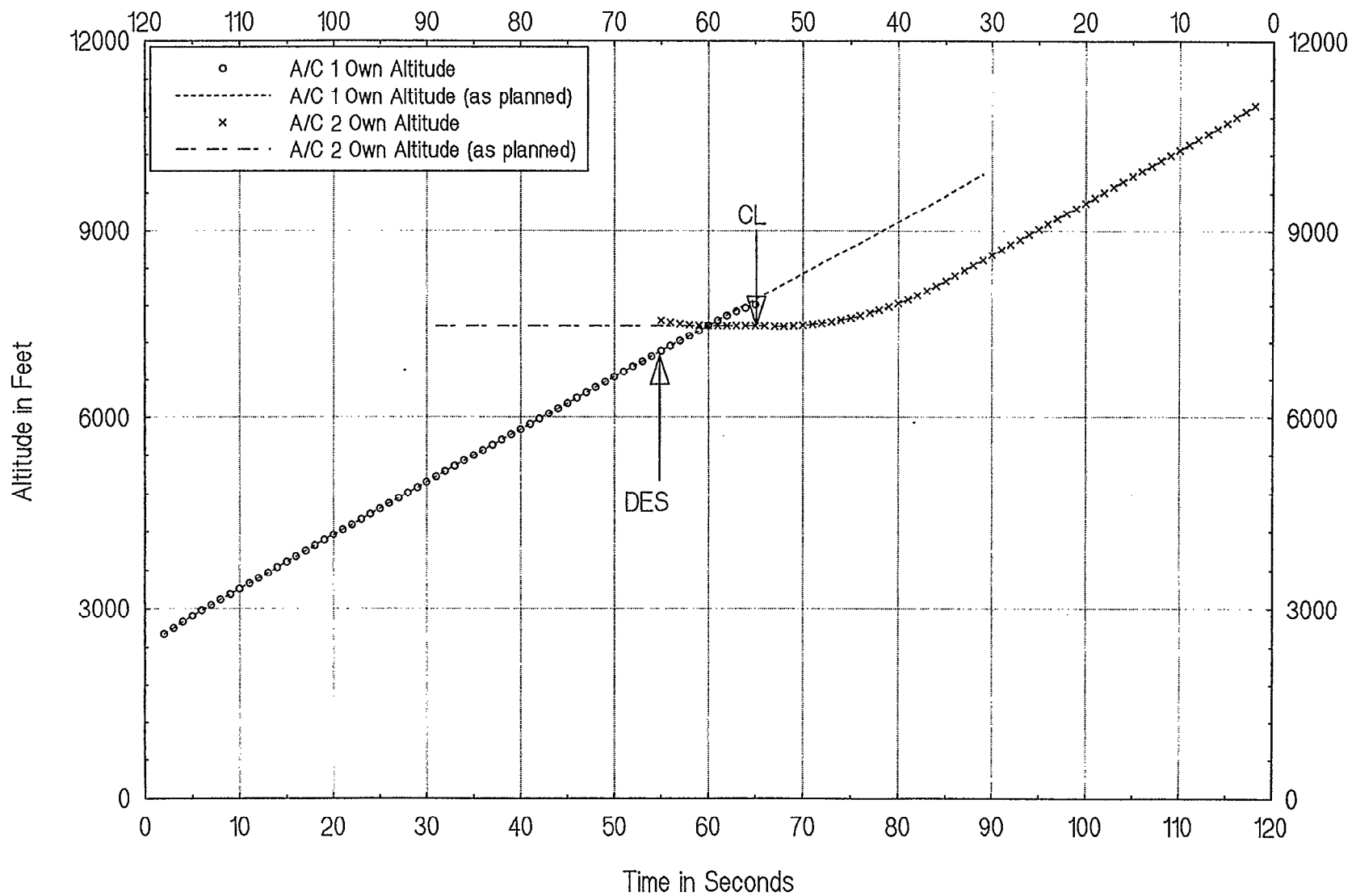
SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7UNR01B.EPC)

C7-100 vs C7-100 Data File Name=CL6B1M.DAT; REIT Number=4358

SIM MODE = 1171033 (Source: LL FTEG Run, October 1997)

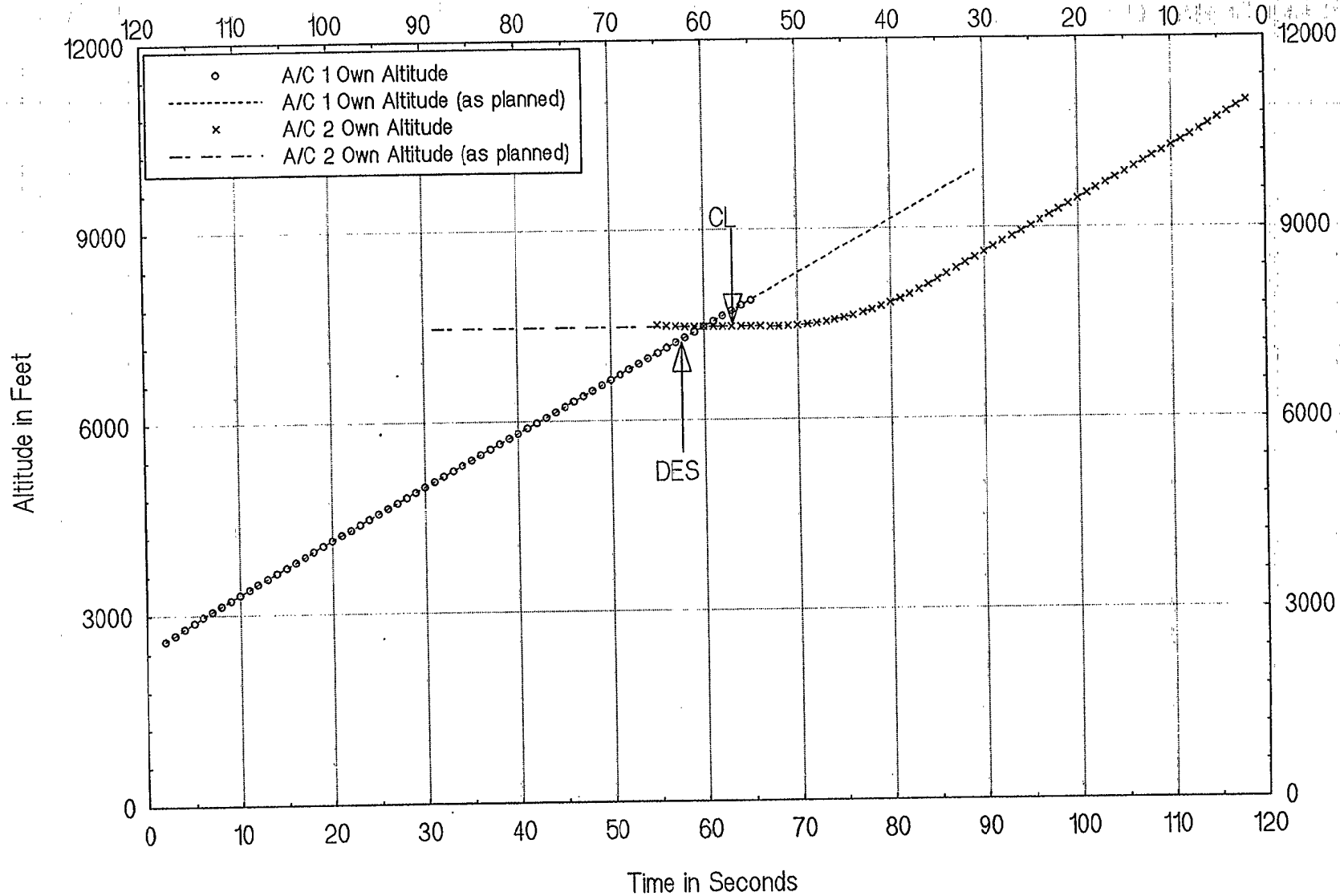


7-11

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7UNR01C.EPC)

C7-25 vs C7-25 Data File Name=CL6B1T.DAT; REIT Number=4358

SIM MODE = 1175044 (Source: LL FTEG Run, October 1997)



5-N

Change 7 Representative NMAC U2

Mitre Encounter Class : 6 Reit Number : 1334

NMAC Characterization

50% had 100 ft tracker
 50% had 25 ft tracker
 100% had planned separation 0 ft
 AC1 rates : 3000, 5000 fpm
 AC2 rates : -3000, -5000 fpm
 AC1 acceleration : 0 g
 AC2 acceleration : 0.15, 0.25 g
 AC2 accel time : CPA - 20, 25 sec
 100% of encounters had reversed RAs

9-N

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
84	85	% of RAs were non-crossing
89	80	% of NMACs were non-crossing
99	99	% of RAs were not reversed
97	97	% of NMACs were not reversed

Comments

4 members in group.
 Change 7-100 reversed and had an NMAC, Change 7-25 did not reverse - no NMAC.

DATA FOR C7UNR02

1334 6.04A RL VS 6.04A RH 6 -9.45 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUV = 25.0 ALIM = 300.0
 0.0 (5000.0,5000.0) (-5000.0,0.0) 0.00 0.15 0.0 -25.0 3680.0
 A/C1: 1165022 TA TIME :19 | TAUR | DES @34 [NXRA] | POTRA @40 (6FT) | CL @53
 | ICL @55
 A/C2: 1265122 TA TIME :19 | TAUR | POTRA @40 (6FT) | DES @53 [XRA] | IDES @55

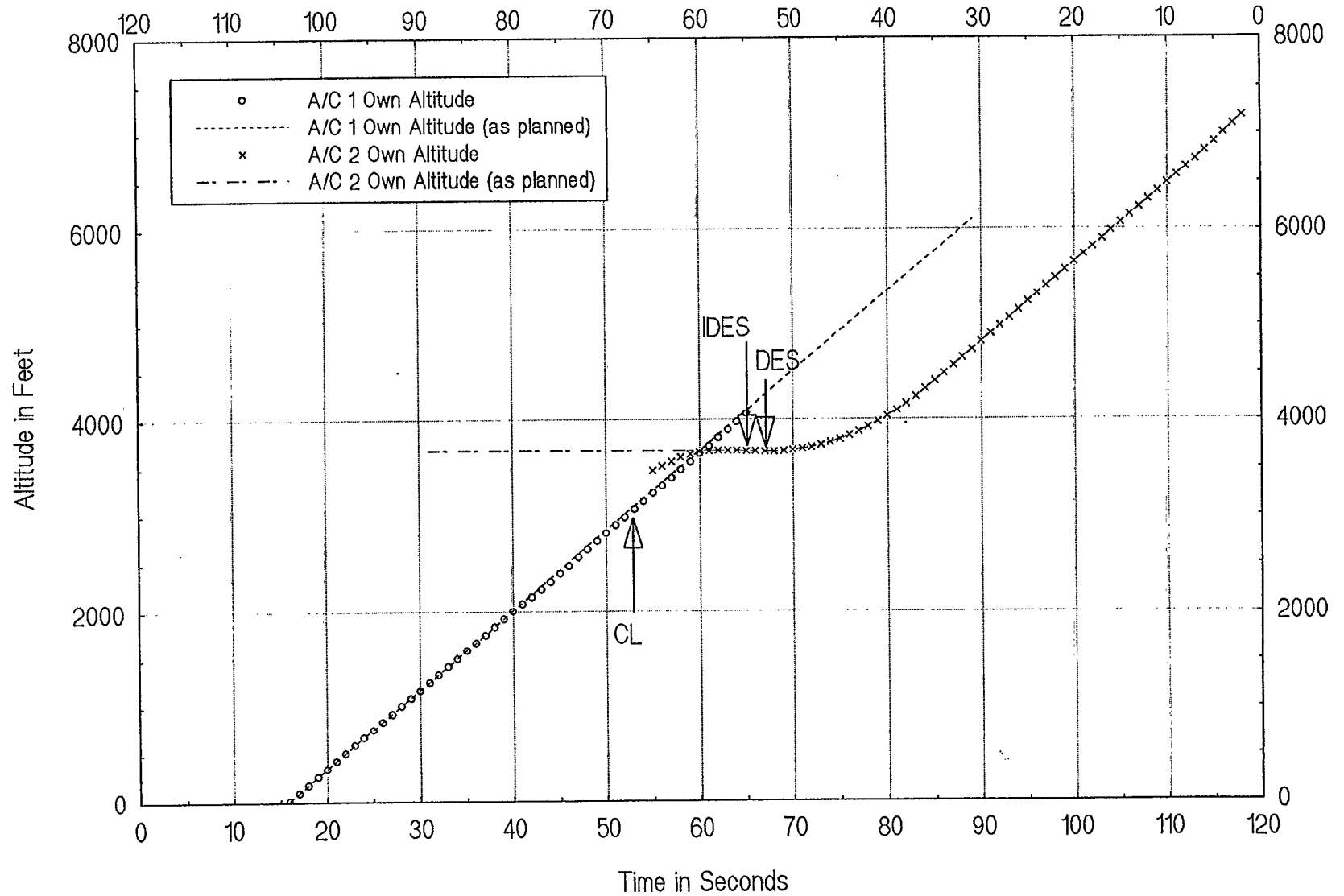
1334 C7 100 FT RL VS C7 100 FT RH 6 73.20 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUV = 25.0 ALIM = 300.0
 0.0 (5000.0,5000.0) (-5000.0,0.0) 0.00 0.15 0.0 -25.0 3680.0
 A/C1:** REV **1171033 TA TIME :19 | TAUR | POTRA @34 | POTRA @40 | CL @51 [XRA]
 | DES @56
 A/C2:** REV **1271133 TA TIME :19 | TAUR | POTRA @40 | DES @50 [XRA] | IDES @53
 | CL @56

1334 C7 25 FT RL VS C7 25 FT RH 6 131.25 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUV = 25.0 ALIM = 300.0
 0.0 (5000.0,5000.0) (-5000.0,0.0) 0.00 0.15 0.0 -25.0 3680.0
 A/C1: 1175044 TA TIME :19 | TAUR | POTRA @34 | POTRA @40 | CL @51 [XRA]
 A/C2: 1275144 TA TIME :19 | TAUR | POTRA @40 | DES @50 [XRA] | IDES @53

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7UNR02A.EPC)

6.04a vs 6.04a Data File Name=CL6B1E.DAT; REIT Number=1334

SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)

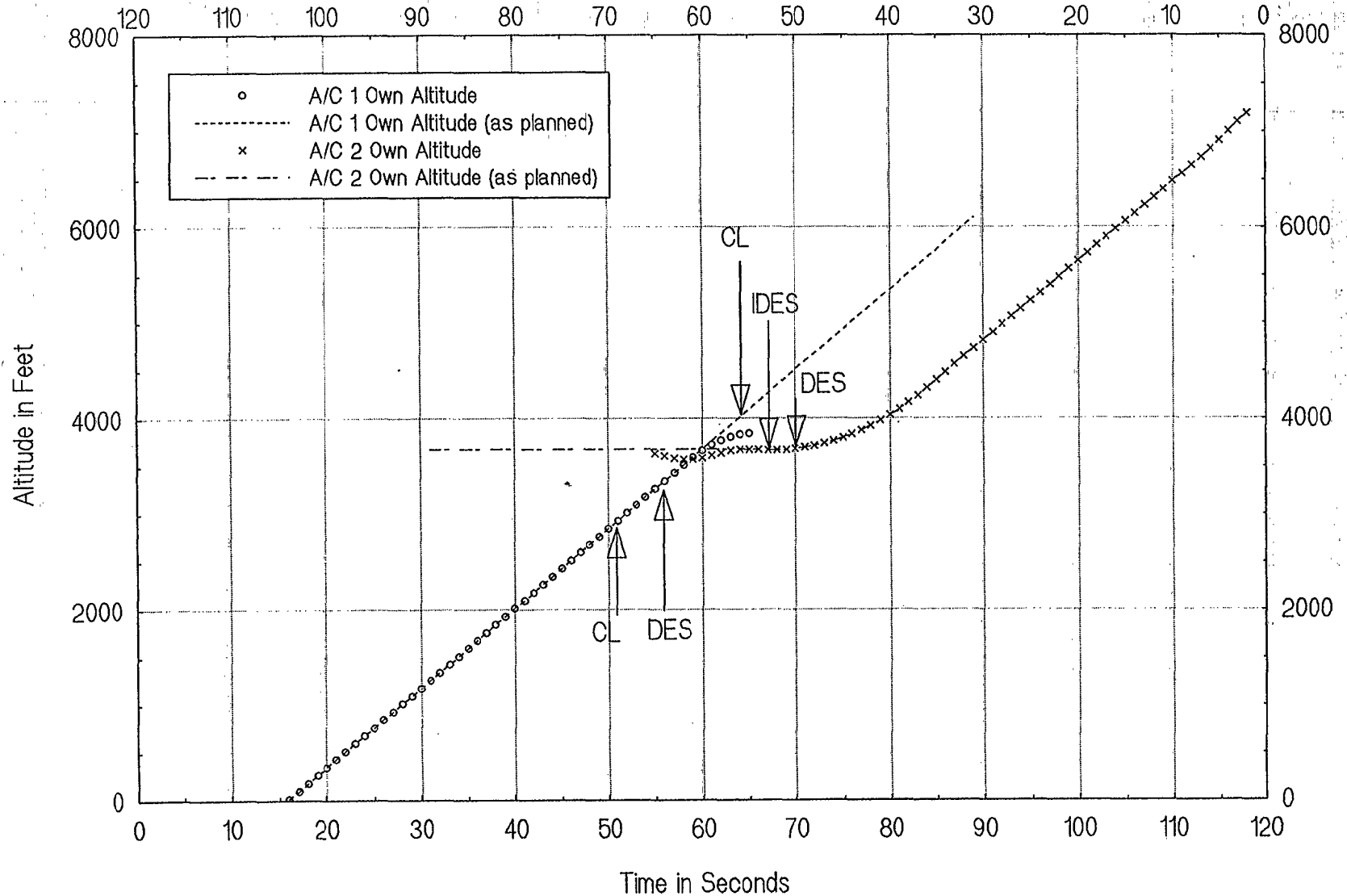


8-N

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7UNR02B.EPC)

C7-100 vs C7-100 Data File Name=CL6B1MDAT; REIT Number=1334

SIM MODE = 1171033 (Source: LL FTEG Run, October 1997)

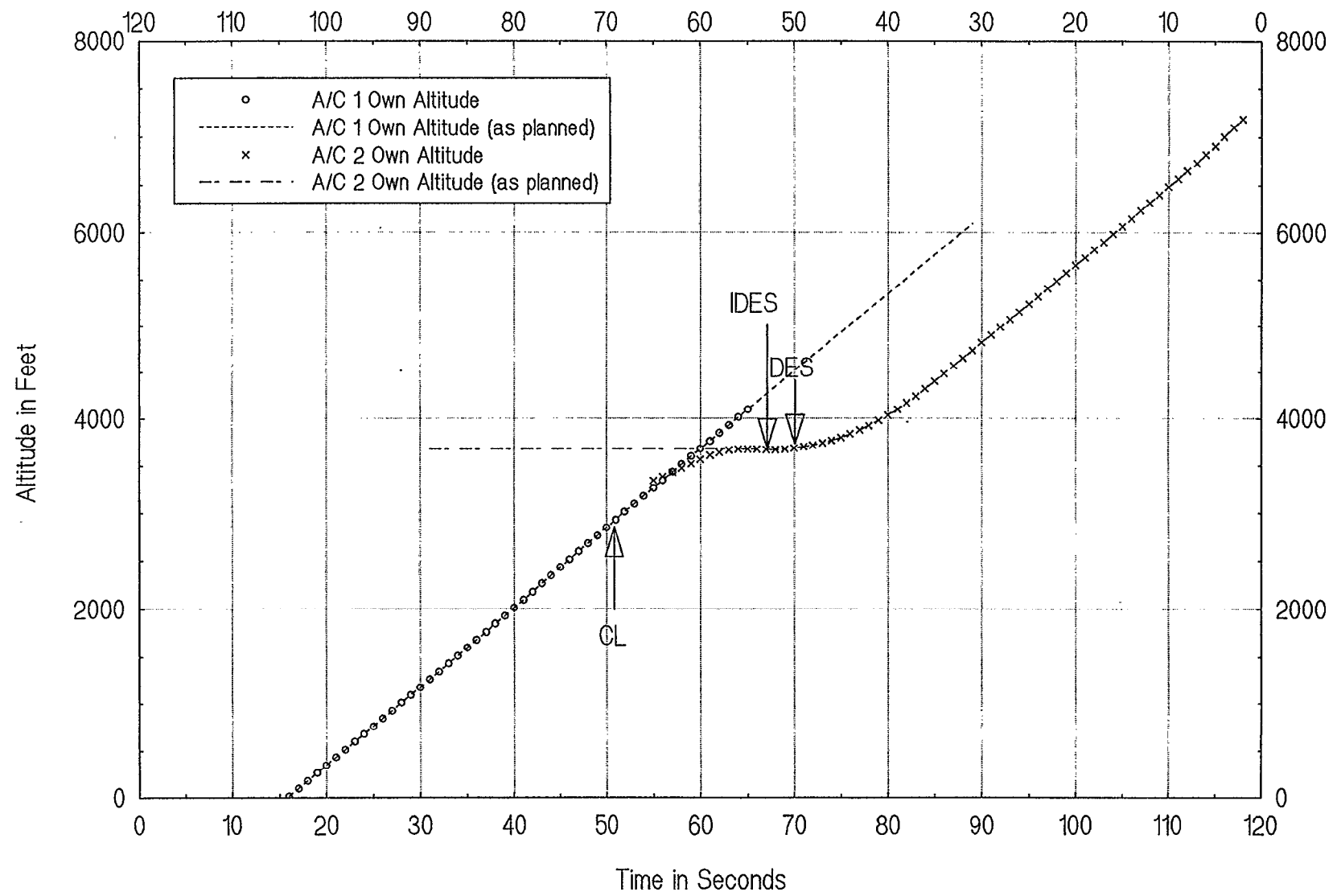


ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7UNR02C.EPC)

C7-25 vs C7-25 Data File Name=CL6B1T.DAT; REIT Number=1334

SIM MODE = 1175044 (Source: LL FTEG Run, October 1997)

N-10



Change 7 Representative NMAC U3

Mitre Encounter Class : 8 Reit Number : 1656

NMAC Characterization

60% had 100 ft tracker
40% had 25 ft tracker
100% had planned separation 0 ft
AC1 rates : -3000(20%), -5000(80%) fpm
AC2 rates : -5000 fpm
AC1 acceleration : 0.05(20%), 0.15(80%) g
AC2 acceleration : -0.25(20%), -0.15(80%) g
AC2 accel time : CPA - 20 sec
0% of encounters had reversed RAs

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
93	94	% of RAs were non-crossing
100	100	% of NMACs were non-crossing
99	99.5	% of RAs were not reversed
98	100	% of NMACs were not reversed

Comments

10 members in group.
Late maneuver with high rates, not alarming.

DATA FOR C7UNR03

1656 6.04A RL VS 6.04A RH 8 -9.65 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUV = 20.0 ALIM = 300.0
 0.0 (-5000.0,0.0) (0.0,-5000.0) 0.15 -0.15 -25.0 -20.0 3700.0
 A/C1: 1165022 TA TIME :19 |RELZ | DES @54 [NXRA] | IDES @56
 A/C2: 1265122 TA TIME :19 |TAUV | POTRA @52 (DFD) | CL @54 [NXRA]

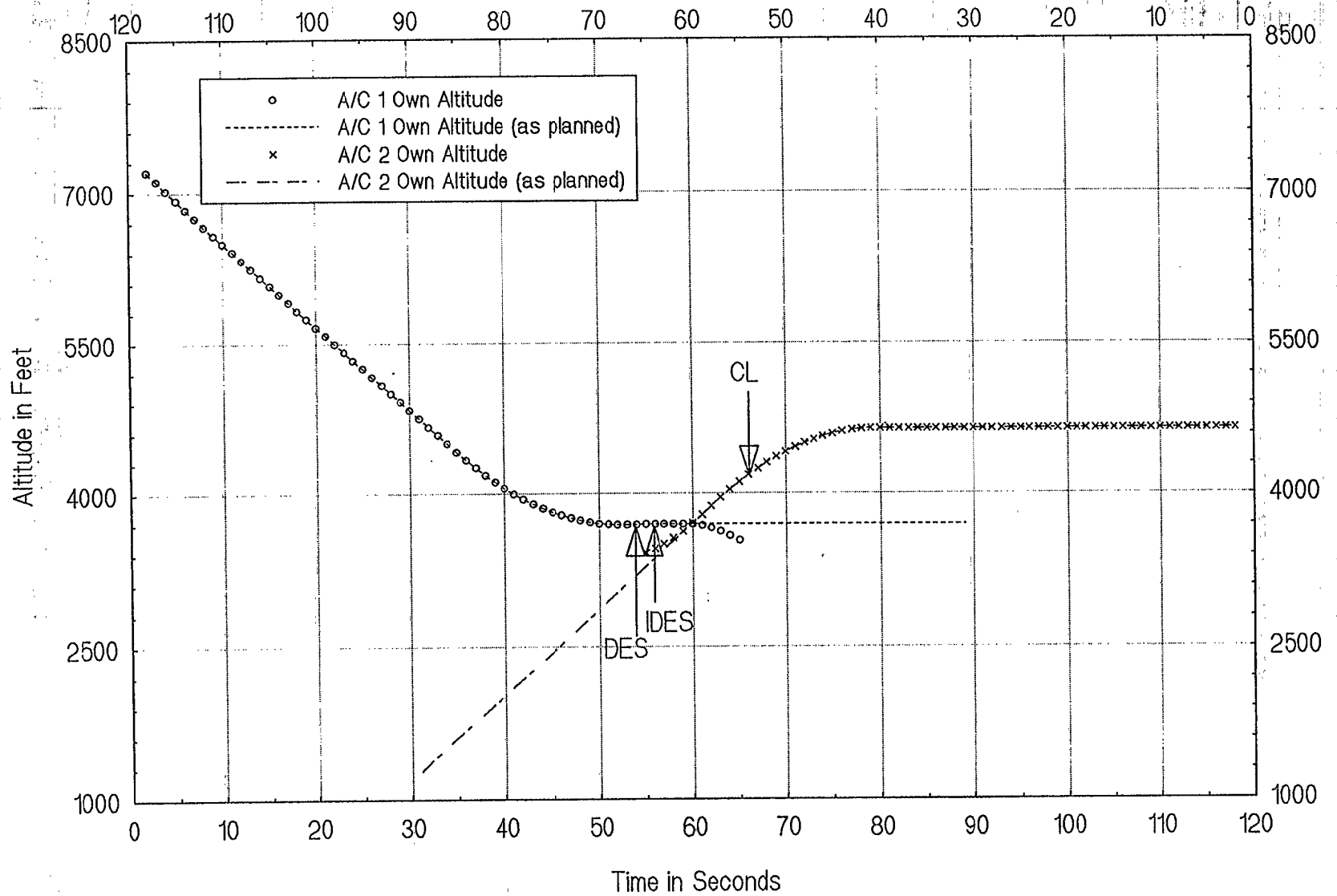
1656 C7 100 FT RL VS C7 100 FT RH 8 -55.99 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUV = 20.0 ALIM = 300.0
 0.0 (-5000.0,0.0) (0.0,-5000.0) 0.15 -0.15 -25.0 -20.0 3700.0
 A/C1: 1171033 TA TIME :19 |RELZ | DES @53 [NXRA]
 A/C2: 1271133 TA TIME :19 |TAUV | CL @52 [NXRA]

1656 C7 25 FT RL VS C7 25 FT RH 8 -76.10 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUV = 20.0 ALIM = 300.0
 0.0 (-5000.0,0.0) (0.0,-5000.0) 0.15 -0.15 -25.0 -20.0 3700.0
 A/C1: 1175044 TA TIME :19 |TAUV | DES @52 [NXRA]
 A/C2: 1275144 TA TIME :19 |TAUV | DDES @52 [NXRA] | CL @53

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7UNR03A.EPC)

6.04a vs 6.04a Data File Name=CL8B1E.DAT; REIT Number=1656

SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)

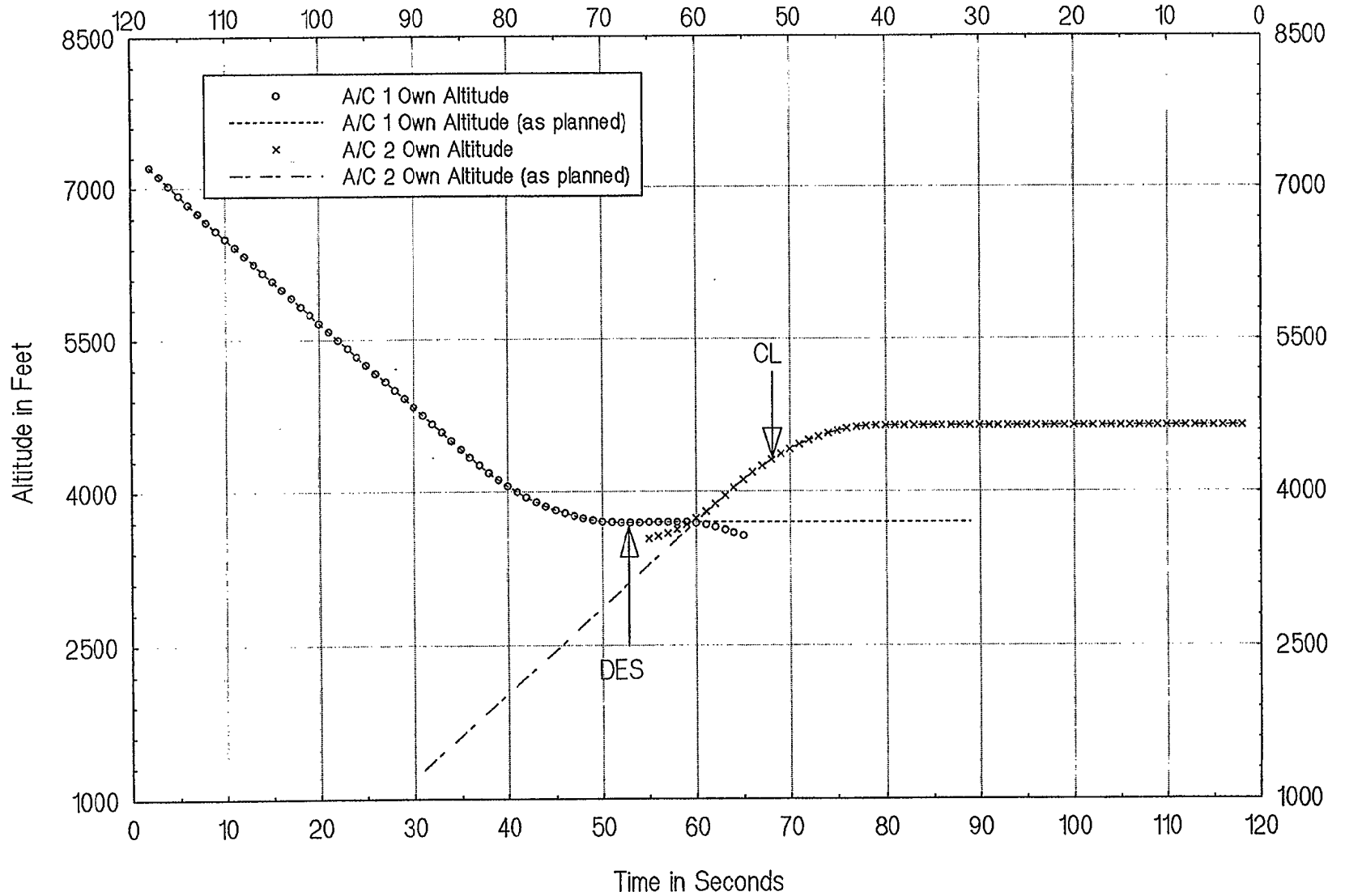


ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7UNR03B.EPC)

C7-100 vs C7-100 Data File Name=CL8B1M.DAT; REIT Number=1656

SIM MODE = 1171033 (Source: LL FTEG Run, October 1997)

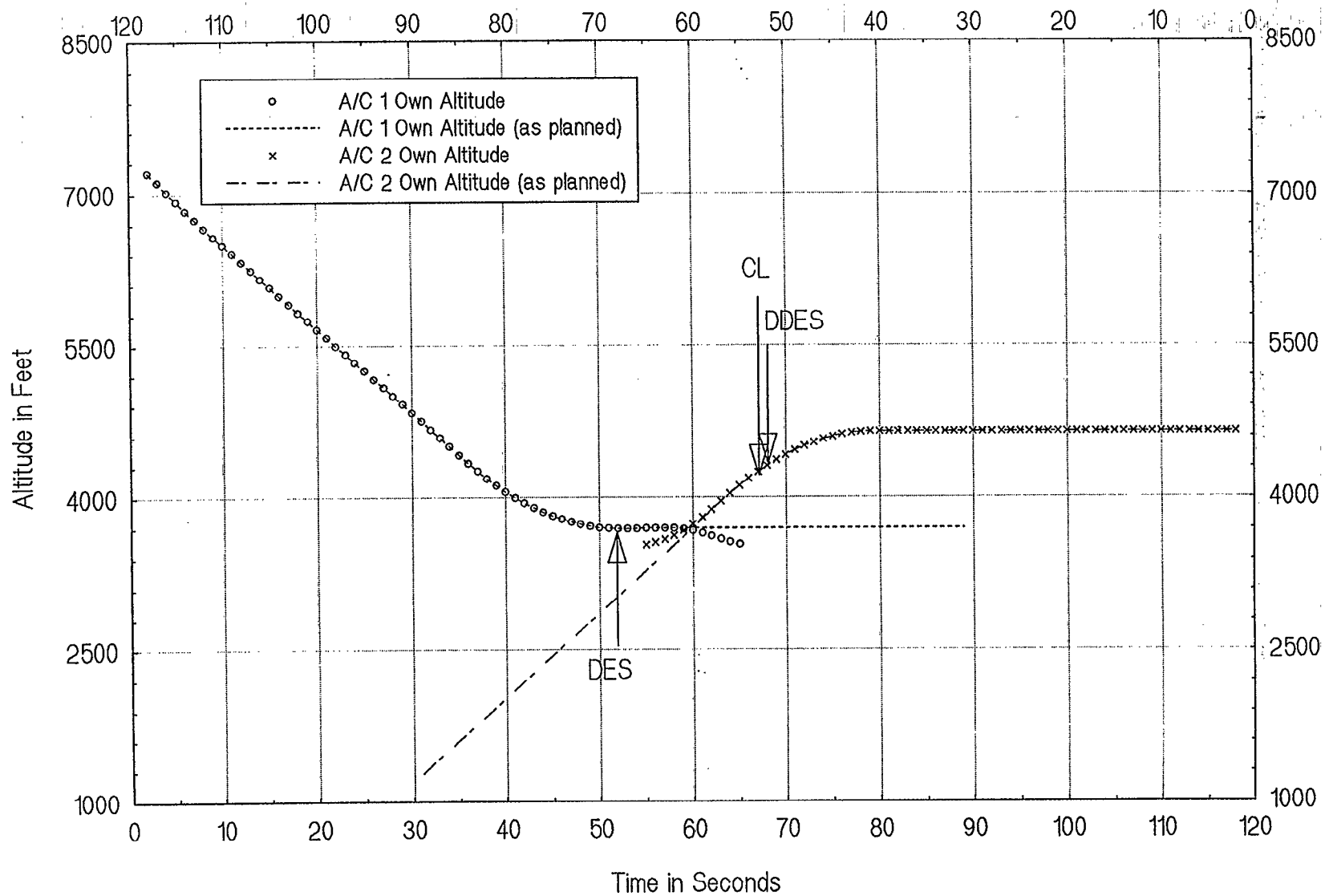
41-14



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7UNR03C.EPC)

C7-25 vs C7-25 Data File Name=CL8B1T.DAT; REIT Number=1656

SIM MODE = 1175044 (Source: LL FTEG Run, October, 1997)



SI-N

Change 7 Representative NMAC I1

Mitre Encounter Class : 2

Reit Number : 1196

NMAC Characterization

44% had 100 ft tracker
56% had 25 ft tracker
75% had planned separation -500 ft
25% had planned separation -750 ft
AC1 rates : 0,400 fpm
AC2 rates : 5000 fpm
AC2 acceleration : 0.25, 0.35 g
AC2 accel time : CPA - 20 sec
3% of encounters had reversed RAs

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
97.5	98	% of RAs were non-crossing
100	100	% of NMACs were non-crossing
99.5	99.7	% of RAs were not reversed
94.5	100	% of NMACs were not reversed

Comments

32 members in group.
Also a problem for 6.04a, not alarming.

DATA FOR C7IND01

1196 6.04A RL VS 6.04A RH 2 -48.15 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUV = 20.0 ALIM = 300.0
 -500.0 (0.0,0.0) (0.0,5000.0) 0.00 0.25 0.0 -20.0 3720.0
 A/C1: 1165022 TA TIME :30 |RELZ | CL @48 [NXRA] | ICL @50
 A/C2: 1265122 TA TIME :30 |RELZ | POTRA @46 (DFD) | DES @48 [NXRA] | IDES @53

1196 C7 100 FT RL VS C7 100 FT RH 2 81.99 NON_CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUV = 20.0 ALIM = 300.0
 -500.0 (0.0,0.0) (0.0,5000.0) 0.00 0.25 0.0 -20.0 3720.0
 A/C1: 1171033 TA TIME :30 |RELZ | CL @47 [NXRA] | ICL @50
 A/C2: 1271133 TA TIME :30 |RELZ | DCL @46 [NXRA] | DES @47

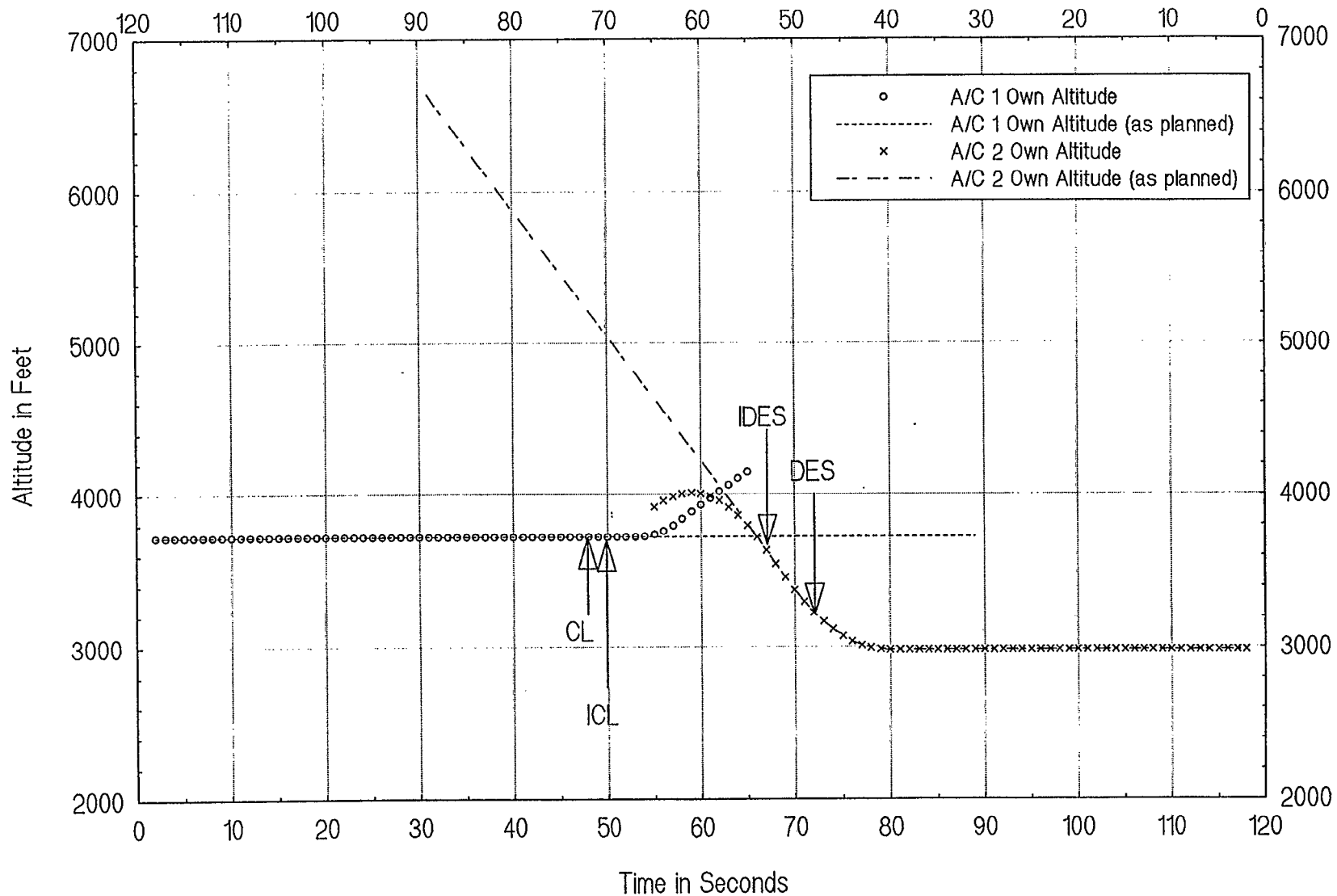
1196 C7 25 FT RL VS C7 25 FT RH 2 56.62 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUV = 20.0 ALIM = 300.0
 -500.0 (0.0,0.0) (0.0,5000.0) 0.00 0.25 0.0 -20.0 3720.0
 A/C1: 1175044 TA TIME :30 |TAUV | POTRA @46 (VTT) | CL @47 [NXRA] | ICL @53
 A/C2: 1275144 TA TIME :30 |TAUV | DCL @46 [NXRA] | DES @47

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND01A.EPC)

6.04a vs 6.04a Data File Name=CL2B1E.DAT; REIT Number=1196

SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)

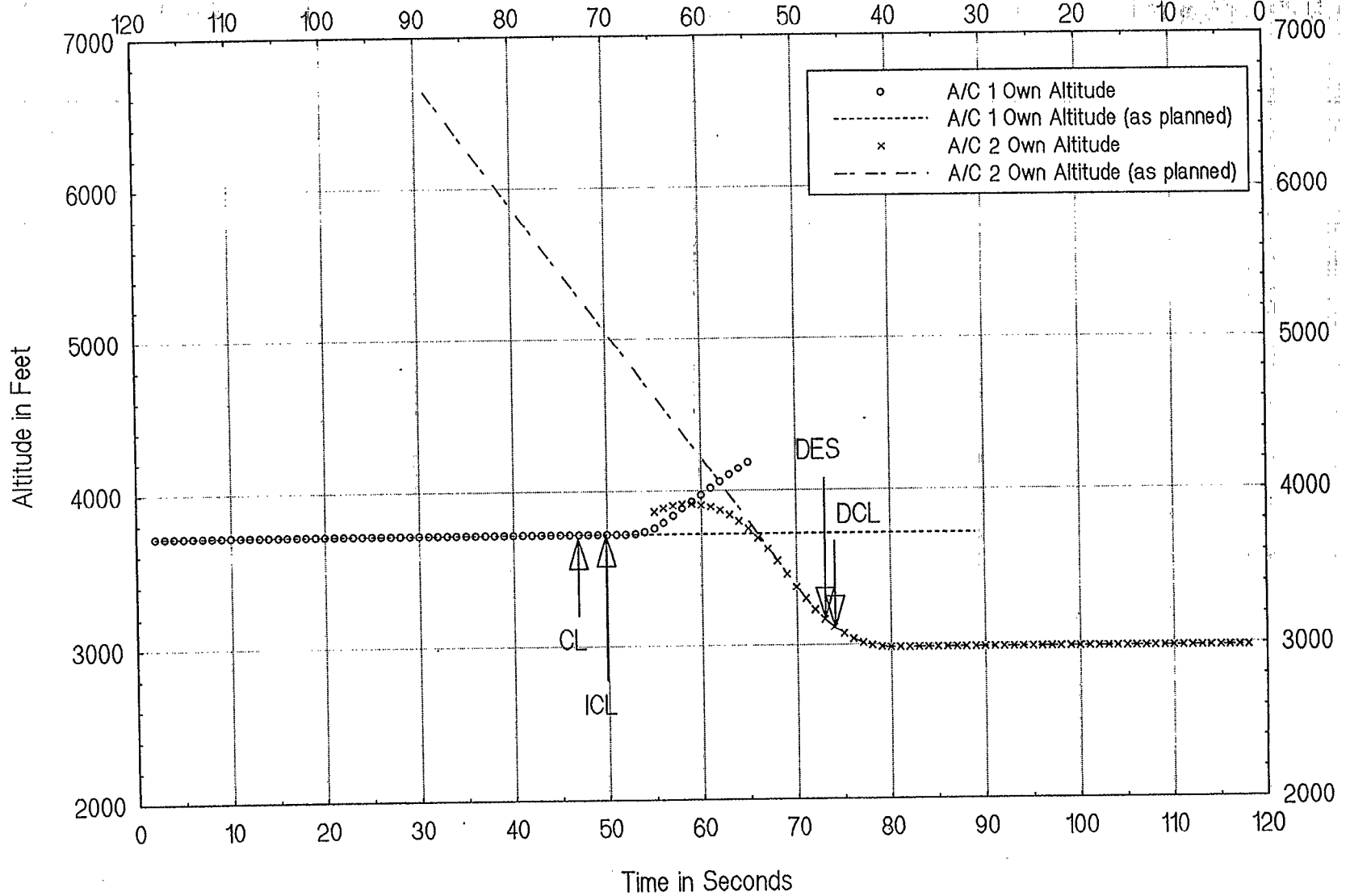
81-N



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND01B.EPC)

C7-100 vs C7-100 Data File Name=CL2B1MDAT; REIT Number=1196

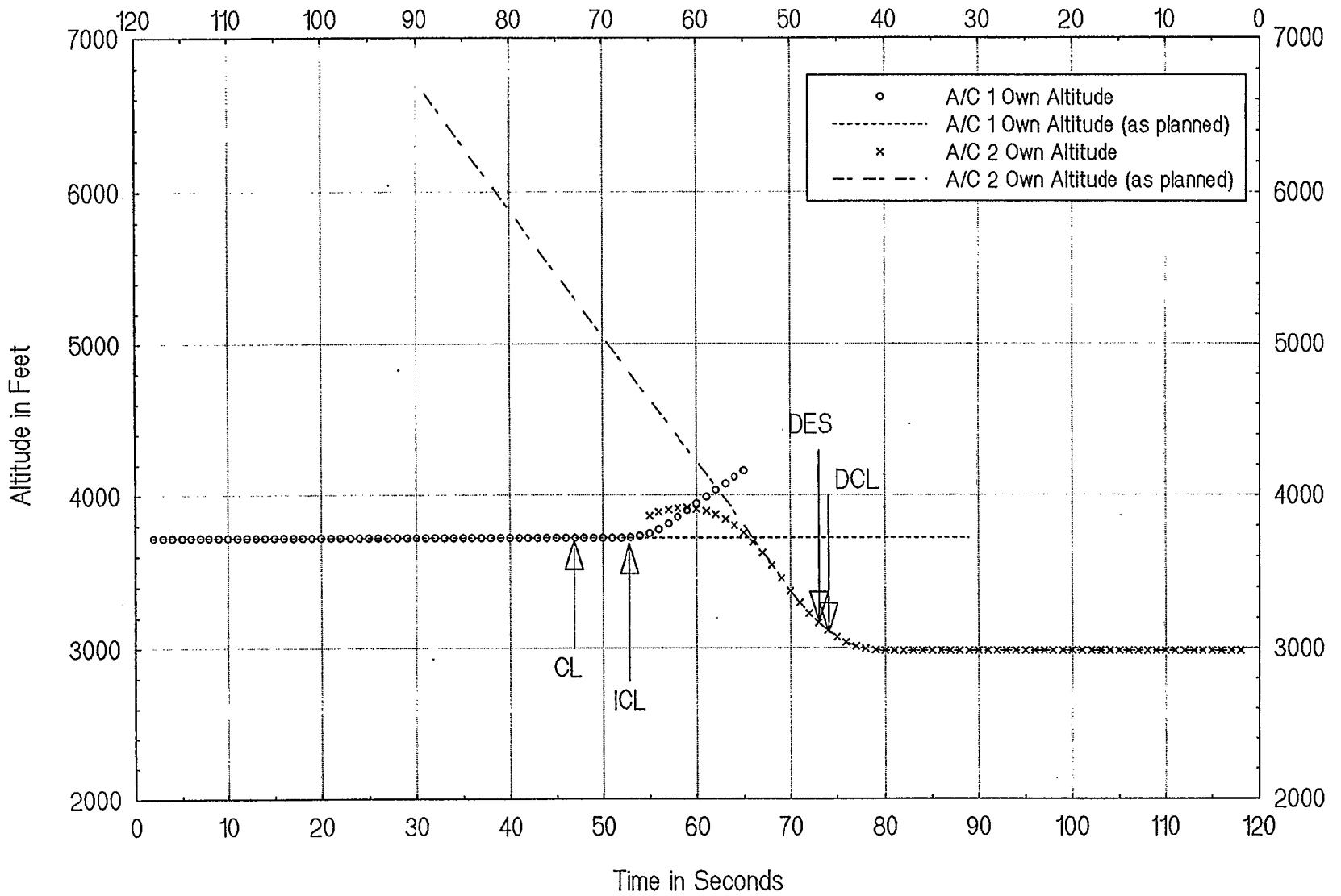
SIM MODE = 1171033 (Source: LL FTEG Run, October, 1997)



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND01C.EPC)

C7-25 vs C7-25 Data File Name=CL2B1T.DAT; REIT Number=1196

SIM MODE = 1175044 (Source: LL FTEG Run, October 1997)



N-20

Change 7 Representative NMAC I2

Mitre Encounter Class : 5

Reit Number : 2998

NMAC Characterization

100% had 25 ft tracker
100% had planned separation 500 ft
AC1 rates : 5000 fpm
AC2 rates : 3000 fpm
AC1 acceleration : 0 g
AC2 acceleration : 0.35 g
AC2 accel time : CPA - 20 sec
0% of encounters had reversed RAs

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
95	95	% of RAs were non-crossing
100	100	% of NMACs were non-crossing
99.9	99.8	% of RAs were not reversed
100	100	% of NMACs were not reversed

Comments

Only 1 member in group. Change 7-25 (NMAC) picked a different sense than 6.04a and C7-100 (non-NMACs).

DATA FOR C7IND02

2998 6.04A RL VS 6.04A RH 5 616.07 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 500.0 (5000.0,5000.0) (0.0,3000.0) 0.00 0.35 0.0 -20.0 3720.0
 A/C1: 1165022 TA TIME :35 |PVMD | MCL @47 [NXRA]
 A/C2: 1265122 TA TIME :35 |PVMD | LC2 @47 [NXRA]

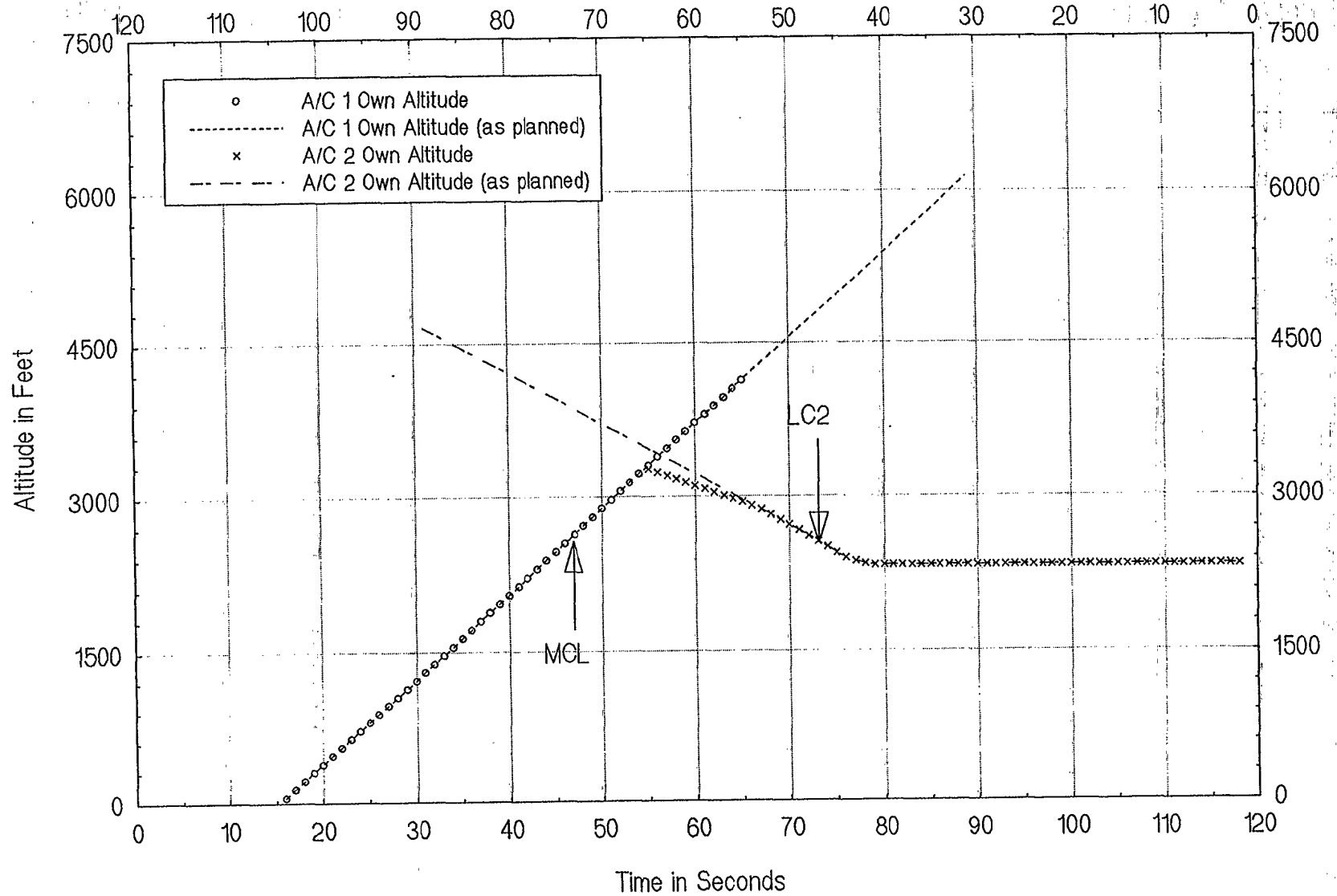
2998 C7 100 FT RL VS C7 100 FT RH 5 616.07 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 500.0 (5000.0,5000.0) (0.0,3000.0) 0.00 0.35 0.0 -20.0 3720.0
 A/C1: 1171033 TA TIME :35 |PVMD | CL @49 [NXRA] | DDES @63
 A/C2: 1271133 TA TIME :35 |PVMD | LC2 @47 [NXRA]

2998 C7 25 FT RL VS C7 25 FT RH 5 -5.11 CROSSING_ENCOUNTER
 SL = 3 ZTHR = 600.0 TAUR = 15.0 TAUUV = 15.0 ALIM = 300.0
 500.0 (5000.0,5000.0) (0.0,3000.0) 0.00 0.35 0.0 -20.0 3720.0
 A/C1: 1175044 TA TIME :35 |TAUR | DES @45 [NXRA] | IDES @50
 A/C2: 1275144 TA TIME :35 |PVMD | CL @47 [NXRA]

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND02A.EPC)

6.04a vs 6.04a Data File Name=CL5B1E.DAT; REIT Number=2998

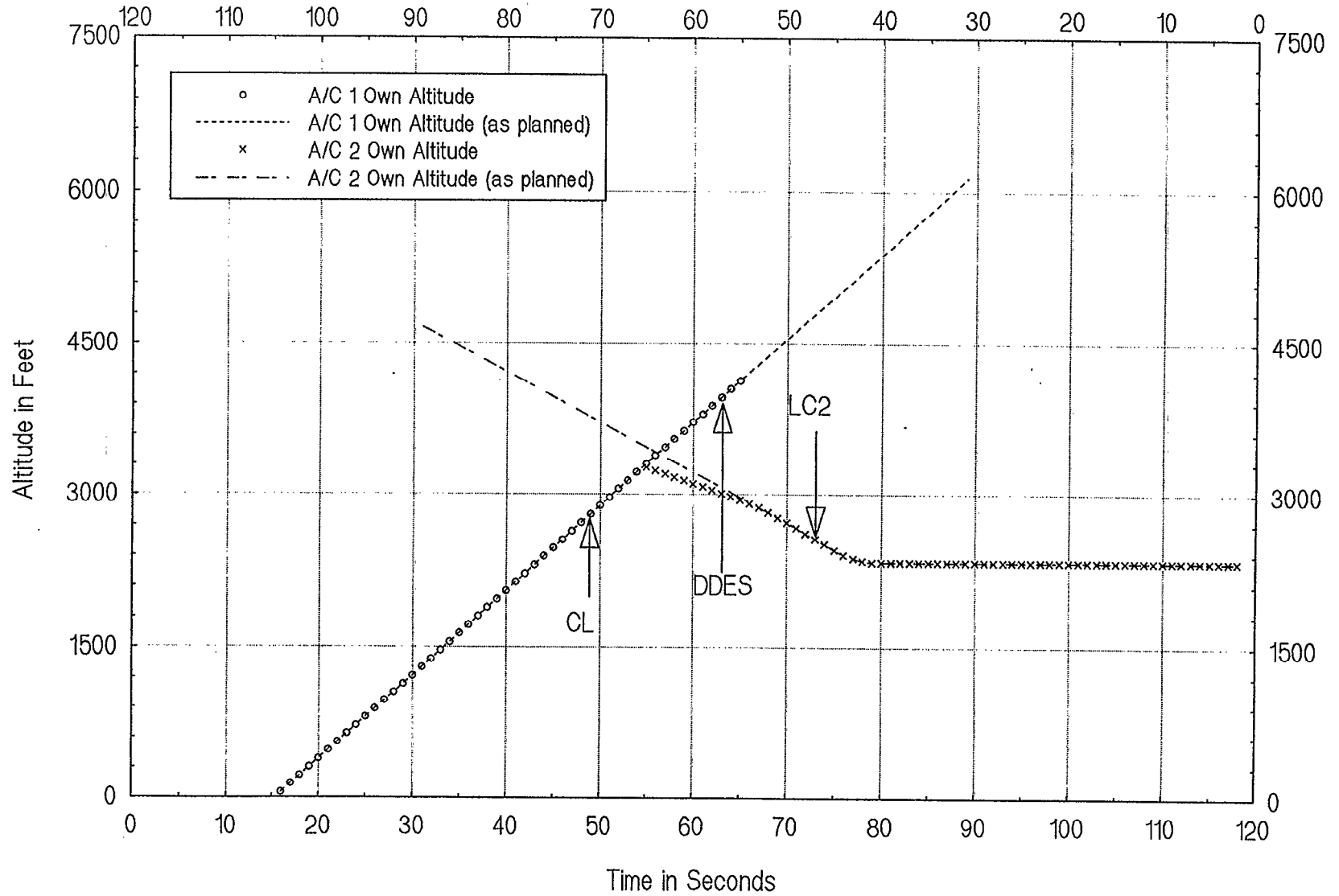
SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND02B.EPC)

C7-100 vs C7-100 Data File Name=CL5B1M.DAT; REIT Number=2998

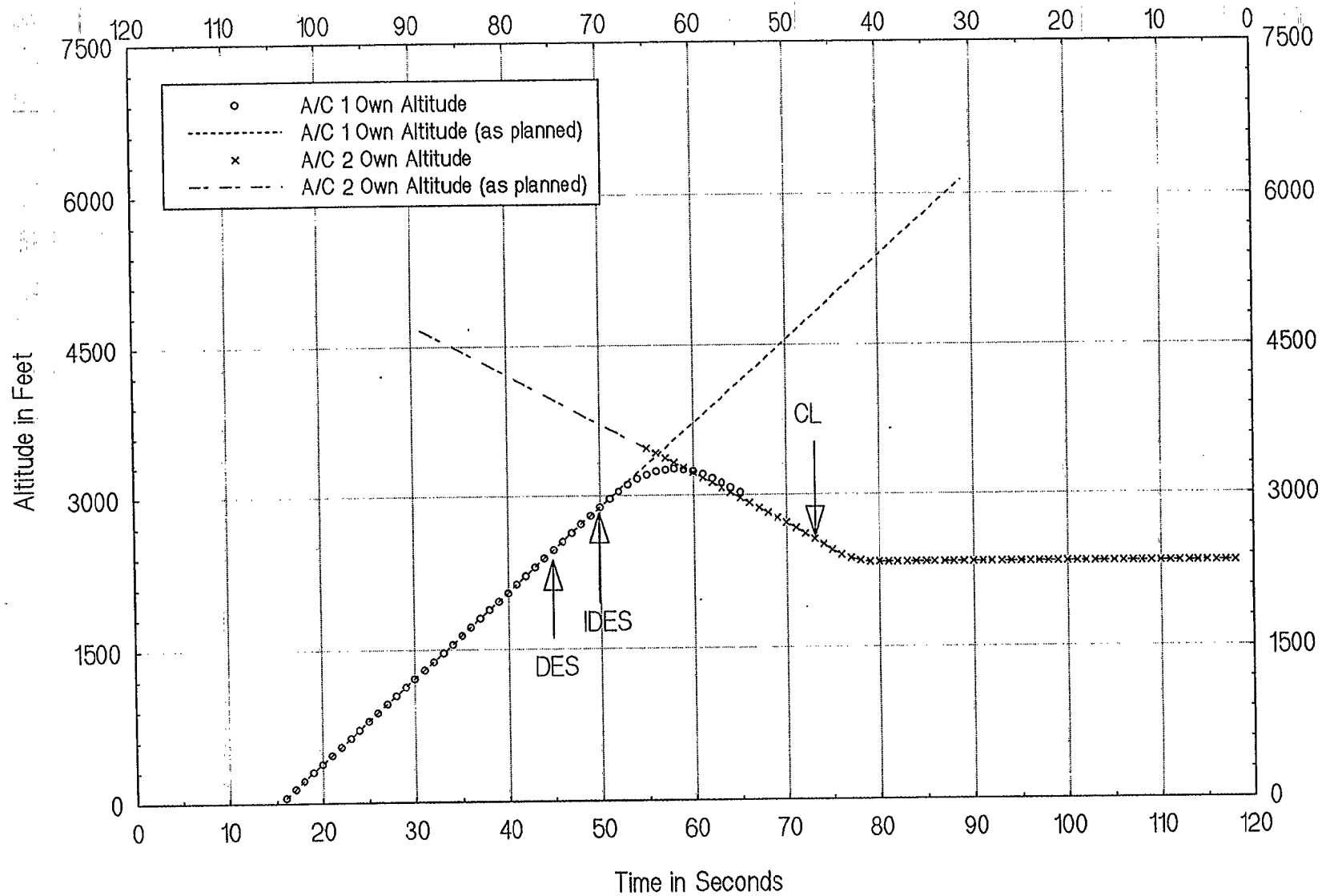
SIM MODE = 1171033 (Source: LL FTEG Run, October 1997)



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND02C.EPC)

C7-25 vs C7-25 Data File Name=CL5B1T.DAT; REIT Number=2998

SIM MODE = 1175044 (Source: LL FTEG Run, October 1997)



Change 7 Representative NMAC I3

Mitre Encounter Class : 5

Reit Number : 693

NMAC Characterization

40% had 100 ft tracker
60% had 25 ft tracker
100% had planned separation -750 ft
AC1 rates : -1000 fpm
AC2 rates : 5000 fpm
AC1 acceleration : 0 g
AC2 acceleration : 0.25,0.35 g
AC2 accel time : CPA - 20 sec
0% of encounters had reversed RAs

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
95	95	% of RAs were non-crossing
100	100	% of NMACs were non-crossing
99.9	99.8	% of RAs were not reversed
100	100	% of NMACs were not reversed

Comments

10 members in group.
Late maneuver at high rate, nothing alarming.

DATA FOR C7IND03

693 6.04A RL VS 6.04A RH 5 -119.14 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 -750.0 (-1000.0,-1000.0) (0.0,5000.0) 0.00 0.25 0.0 -20.0 3680.0
 A/C1: 1165022 TA TIME :38 |RELZ | CL @47 [NXRA] | ICL @50
 A/C2: 1265122 TA TIME :38 |TAUV | POTRA @45 (DFD) | DES @47 [NXRA] | IDES @52

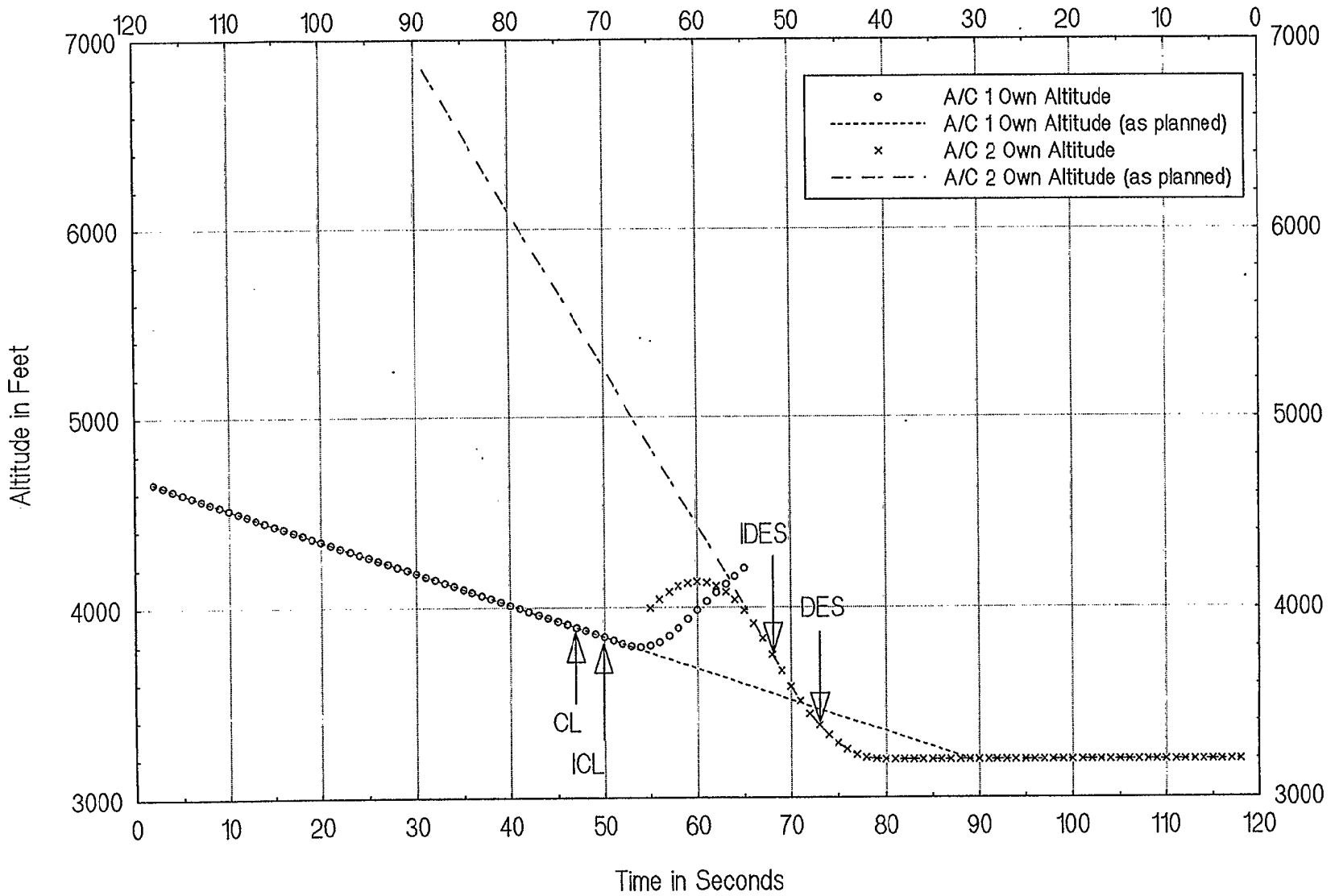
693 C7 100 FT RL VS C7 100 FT RH 5 20.92 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 -750.0 (-1000.0,-1000.0) (0.0,5000.0) 0.00 0.25 0.0 -20.0 3680.0
 A/C1: 1171033 TA TIME :38 |RELZ | CL @47 [NXRA] | ICL @51
 A/C2: 1271133 TA TIME :38 |TAUV | DES @45 [NXRA] | IDES @53

693 C7 25 FT RL VS C7 25 FT RH 5 -21.89 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 -750.0 (-1000.0,-1000.0) (0.0,5000.0) 0.00 0.25 0.0 -20.0 3680.0
 A/C1: 1175044 TA TIME :38 |PVMD | CL @48 [NXRA] | ICL @51
 A/C2: 1275144 TA TIME :39 |TAUV | DES @45 [NXRA] | IDES @53

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND03A.EPC)

6.04a vs 6.04a Data File Name=CL5B1E.DAT; REIT Number=693

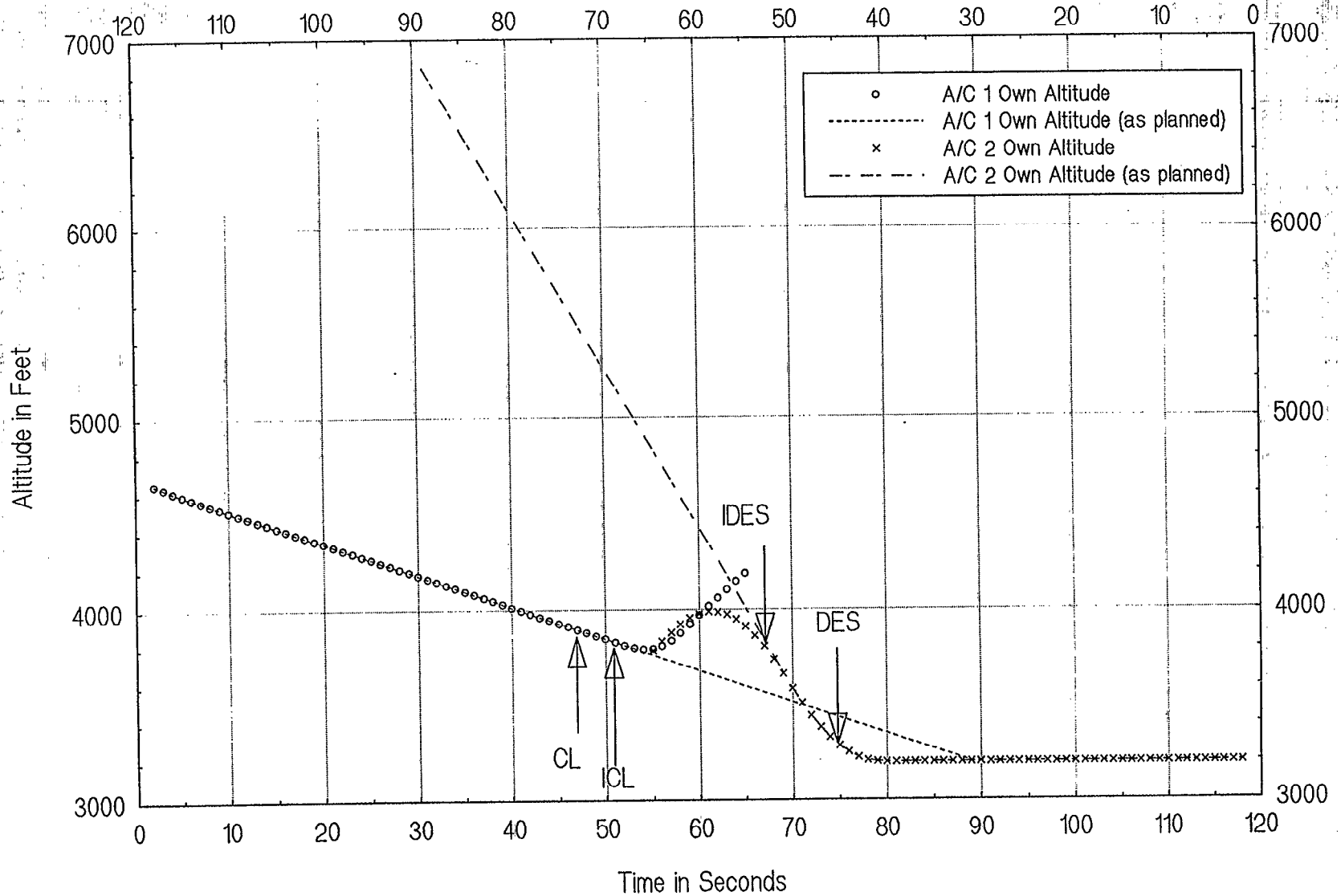
SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND03B.EPC)

C7-100 vs C7-100 Data File Name=CL5B1M.DAT; REIT Number=693

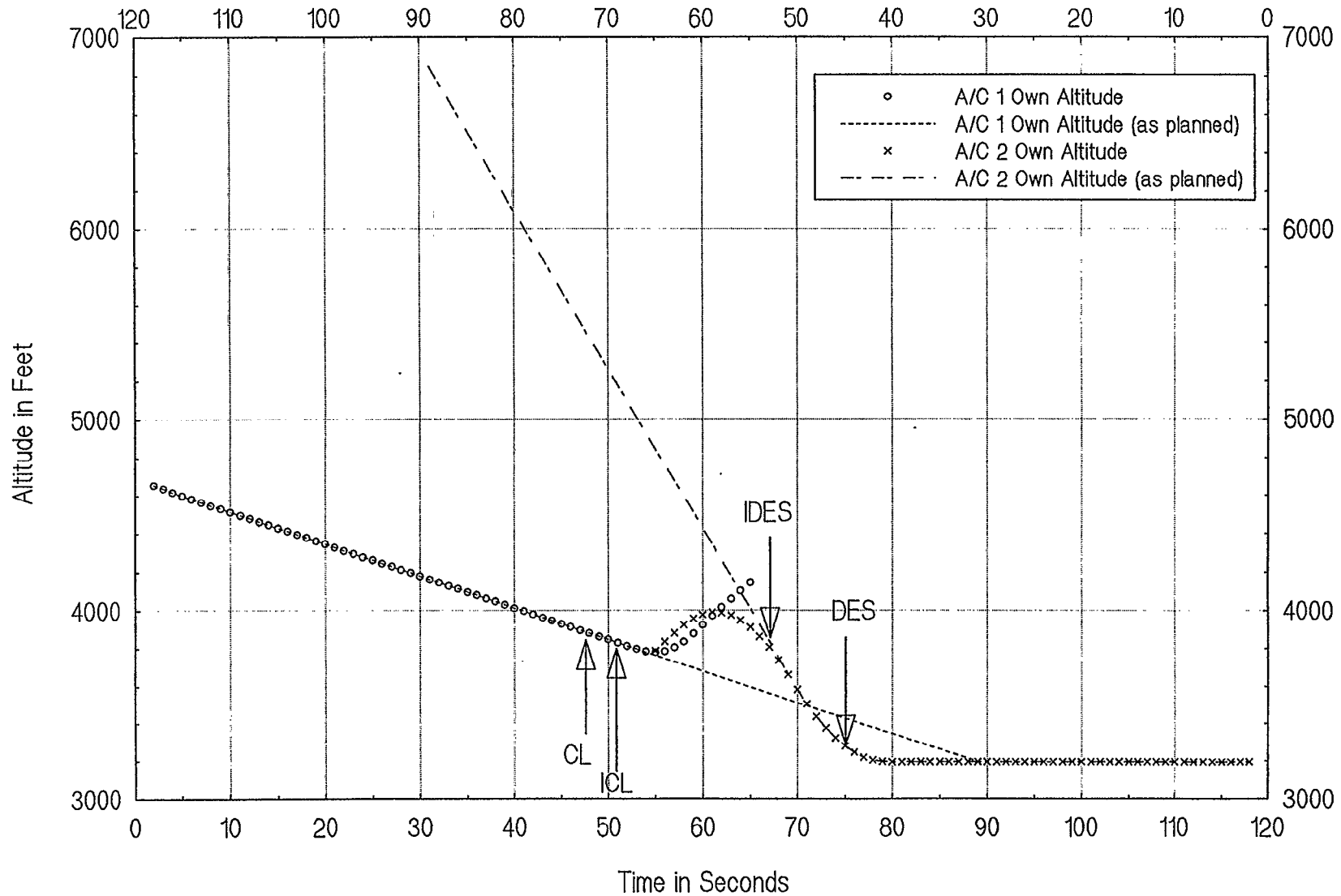
SIM MODE = 1171033 (Source: LL FTEG Run, October 1997)



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND03C.EPC)

C7-25 vs C7-25 Data File Name=CL5B1T.DAT; REIT Number=693

SIM MODE = 1175044 (Source: LL FTEG Run, October 1997)



Change 7 Representative NMAC I4

Mitre Encounter Class : 6

Reit Number : 209

NMAC Characterization

75% had 100 ft tracker
25% had 25 ft tracker
100% had planned separation -500 ft
AC1 rate : -5000 fpm
AC2 rate : -5000 fpm
AC2 acceleration : 0.25,0.35 g
AC2 accel time : CPA - 20 sec
0% of encounters had reversed RAs

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
84	85	% of RAs were non-crossing
89	80	% of NMACs were non-crossing
99	99	% of RAs were not reversed
97	97	% of NMACs were not reversed

Comments

16 members in group.
Change 7-25 picked different sense than 6.04a and Change 7-100 and barely had an NMAC.

DATA FOR C7IND04

209 6.04A RL VS 6.04A RH 6 -611.14 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUU = 25.0 ALIM = 350.0
 -500.0 (-5000.0,-5000.0) (-5000.0,0.0) 0.00 0.35 0.0 -20.0 3680.0
 A/C1: 1165022 TA TIME :21 |TAUV | DES @49 [XRA] | MDES @55
 A/C2: 1265122 TA TIME :21 |TAUV | POTRA @45 (VTT) | CL @49 [XRA]

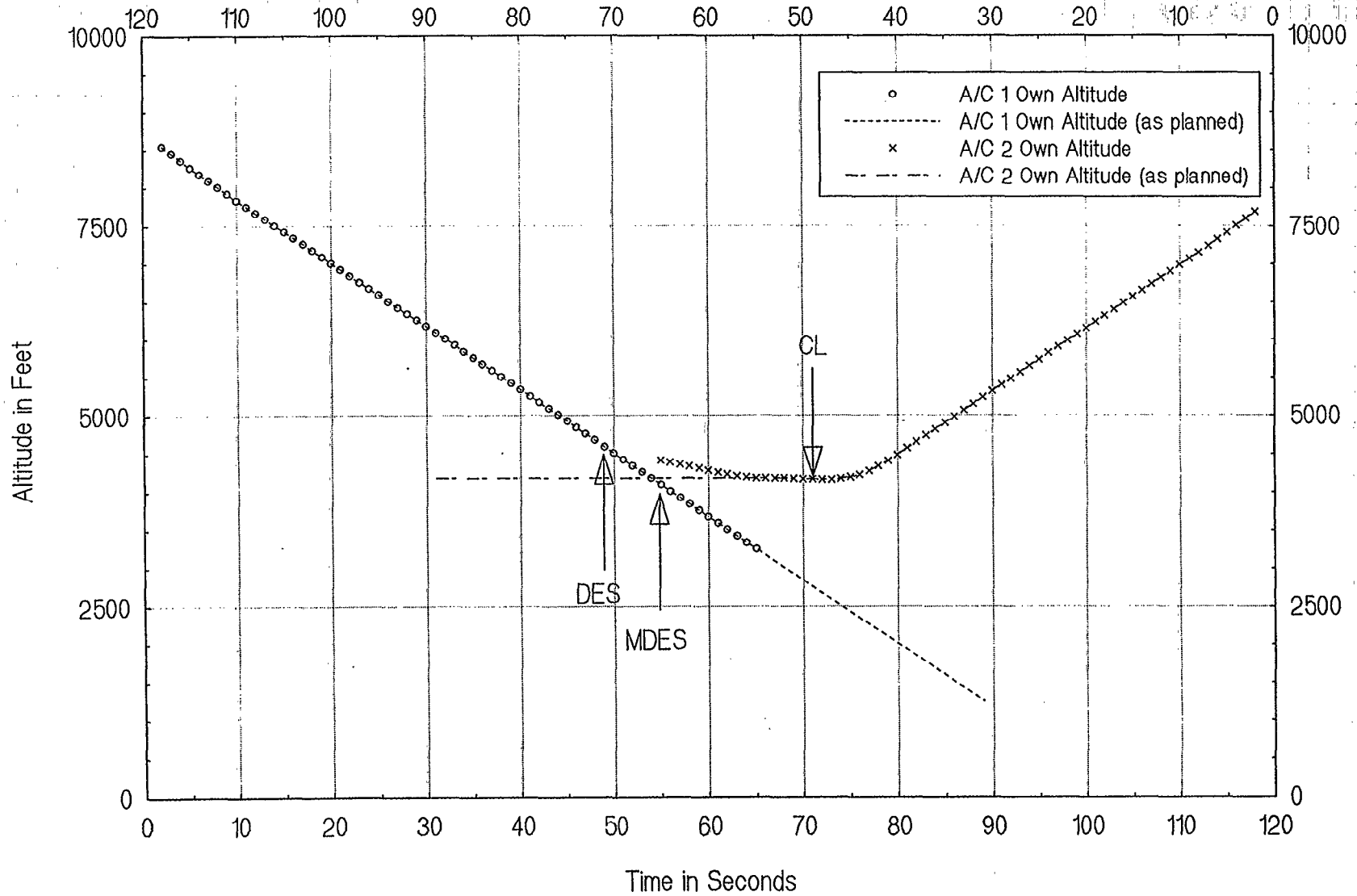
209 C7 100 FT RL VS C7 100 FT RH 6 -730.86 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUU = 25.0 ALIM = 350.0
 -500.0 (-5000.0,-5000.0) (-5000.0,0.0) 0.00 0.35 0.0 -20.0 3680.0
 A/C1: 1171033 TA TIME :43 |TAUV | POTRA @46 | DES @48 [XRA]
 A/C2: 1271133 TA TIME :41 |TAUV | POTRA @45 (VTT) | CL @47 [XRA] | ICL @53
 | DDES @63

209 C7 25 FT RL VS C7 25 FT RH 6 92.45 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUU = 25.0 ALIM = 350.0
 -500.0 (-5000.0,-5000.0) (-5000.0,0.0) 0.00 0.35 0.0 -20.0 3680.0
 A/C1: 1175044 TA TIME :42 |TAUV | POTRA @46 | CL @47 [NXRA] | ICL @51
 A/C2: 1275144 TA TIME :42 |TAUV | POTRA @45 (VTT) | DES @47 [NXRA] | IDES @50

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND04A.EPC)

6.04a vs 6.04a Data File Name=CL6B1E.DAT; REIT Number=209

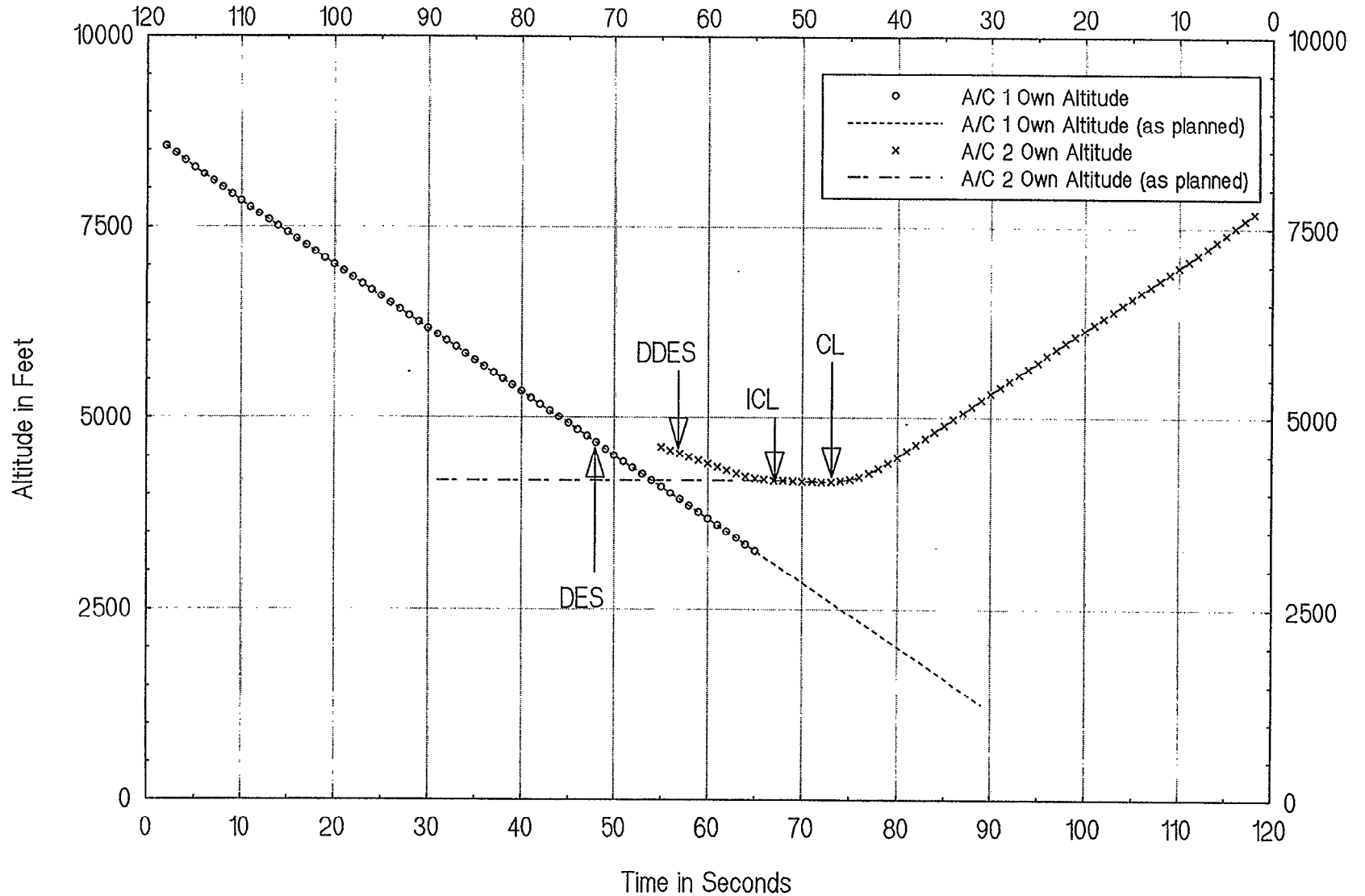
SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND04B.EPC)

C7-100 vs C7-100 Data File Name=CL6B1M.DAT; REIT Number=209

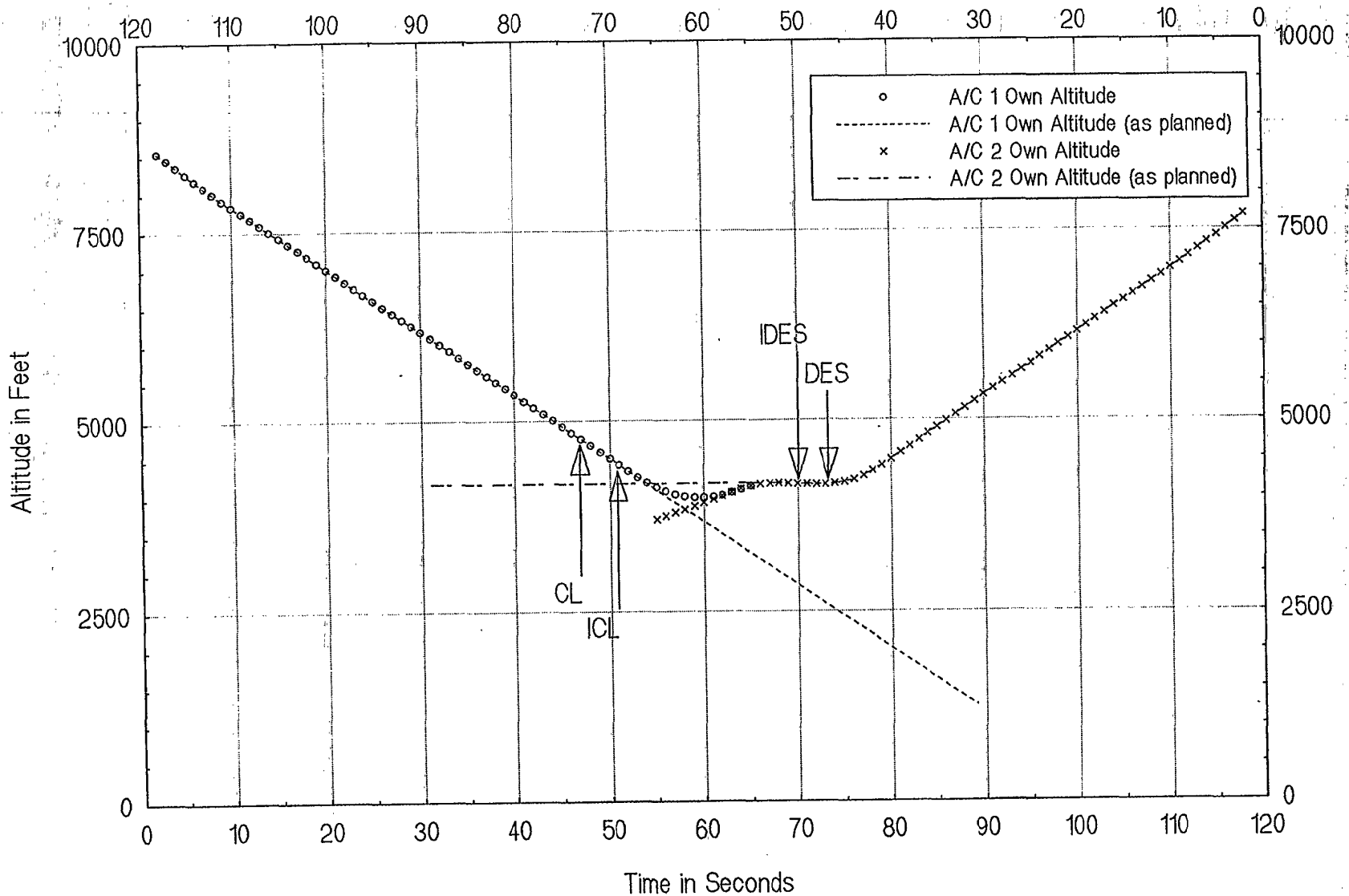
SIM MODE = 1171033 (Source: LL FTEG Run, October 1997)



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND04C.EPC)

C7-25 vs C7-25 Data File Name=CL6B1T.DAT; REIT Number=209

SIM MODE = 1175044 (Source: LL FTEG Run, October 1997)



Change 7 Representative NMAC I5

Mitre Encounter Class : 7

Reit Number : 4503

NMAC Characterization

100% had 25 ft tracker
100% had planned separation 500 ft
AC1 rates : 5000 fpm
AC2 rates : 3000 fpm
AC1 acceleration : 0.25 g
AC2 acceleration : 0.35 g
AC1,AC2 accel time : CPA - 25 sec
0% of encounters had reversed RAs

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
97	98	% of RAs were non-crossing
100	100	% of NMACs were non-crossing
99.8	99.8	% of RAs were not reversed
100	100	% of NMACs were not reversed

Comments

Only one member, Change 7-25 (NMAC) picked different sense than 6.04a and Change7-100 (non-NMACs).

DATA FOR C7IND05

4503 6.04A RL VS 6.04A RH 7 649.40 CROSSING_ENCOUNTER
 SL = 3 ZTHR = 600.0 TAUR = 15.0 TAUUV = 15.0 ALIM = 300.0
 500.0 (0.0,5000.0) (0.0,3000.0) 0.25 0.35 -25.0 -25.0 3700.0
 A/C1: 1165022 TA TIME :35 |TAUR | MCL @45 [NXRA]
 A/C2: 1265122 TA TIME :35 |TAUR | LC2 @45 [NXRA]

4503 C7 100 FT RL VS C7 100 FT RH 7 844.59 CROSSING_ENCOUNTER
 SL = 3 ZTHR = 600.0 TAUR = 15.0 TAUUV = 15.0 ALIM = 300.0
 500.0 (0.0,5000.0) (0.0,3000.0) 0.25 0.35 -25.0 -25.0 3700.0
 A/C1: 1171033 TA TIME :35 |TAUR | CL @45 [NXRA]
 A/C2: 1271133 TA TIME :35 |TAUR | DCL @45 [NXRA]

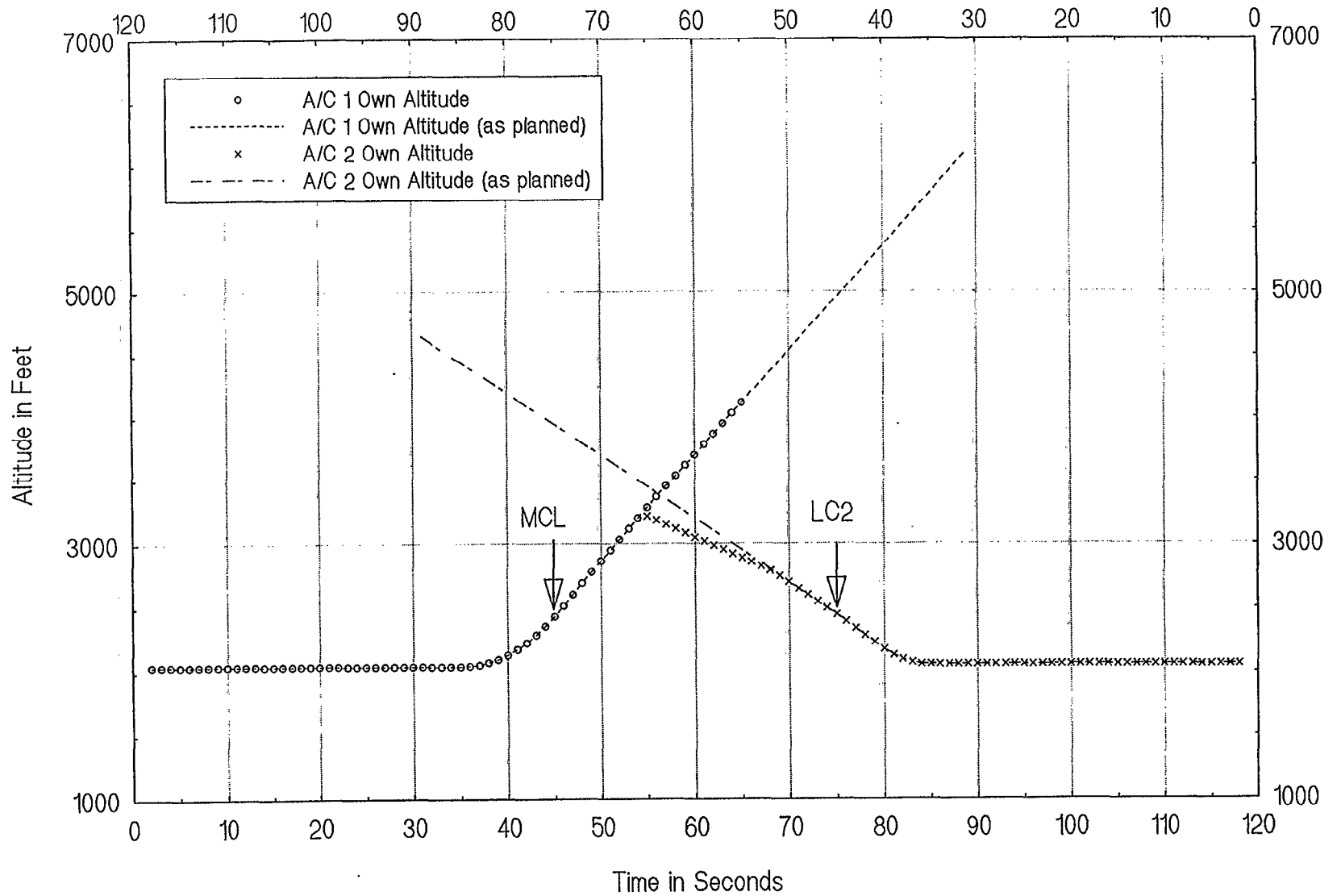
4503 C7 25 FT RL VS C7 25 FT RH 7 -79.85 CROSSING_ENCOUNTER
 SL = 3 ZTHR = 600.0 TAUR = 15.0 TAUUV = 15.0 ALIM = 300.0
 500.0 (0.0,5000.0) (0.0,3000.0) 0.25 0.35 -25.0 -25.0 3700.0
 A/C1: 1175044 TA TIME :35 |TAUR | DES @45 [NXRA] | IDES @48
 A/C2: 1275144 TA TIME :35 |TAUR | CL @45 [NXRA]

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND05A.EPC)

6.04a vs 6.04a Data File Name=CL7B1E.DAT; REIT Number= 4503

SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)

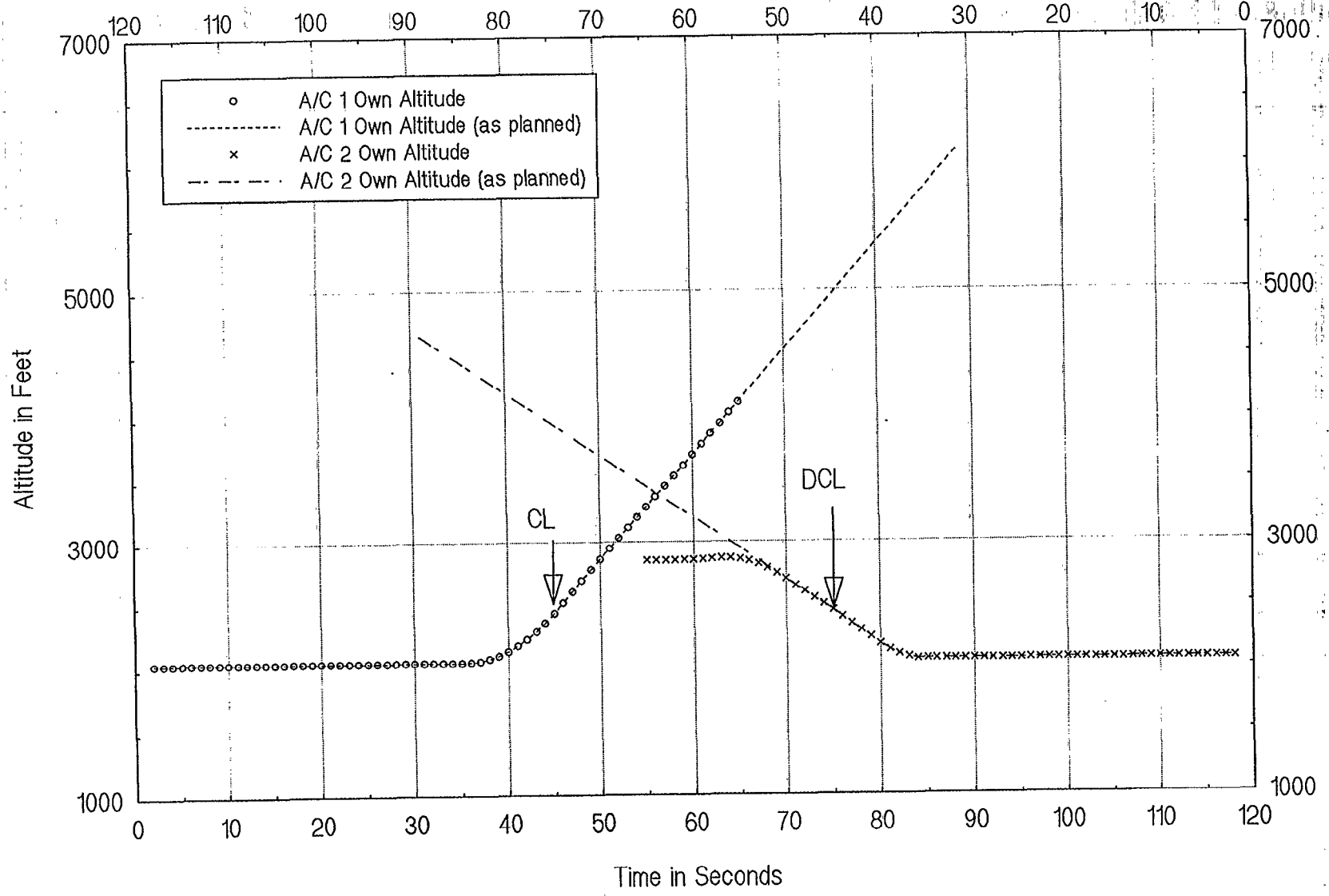
N-38



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND05B.EPC)

C7-100 vs C7-100 Data File Name=CL7B1M.DAT; REIT Number=4503

SIM MODE = 1171033 (Source: LL FTEG Run, October 1997)



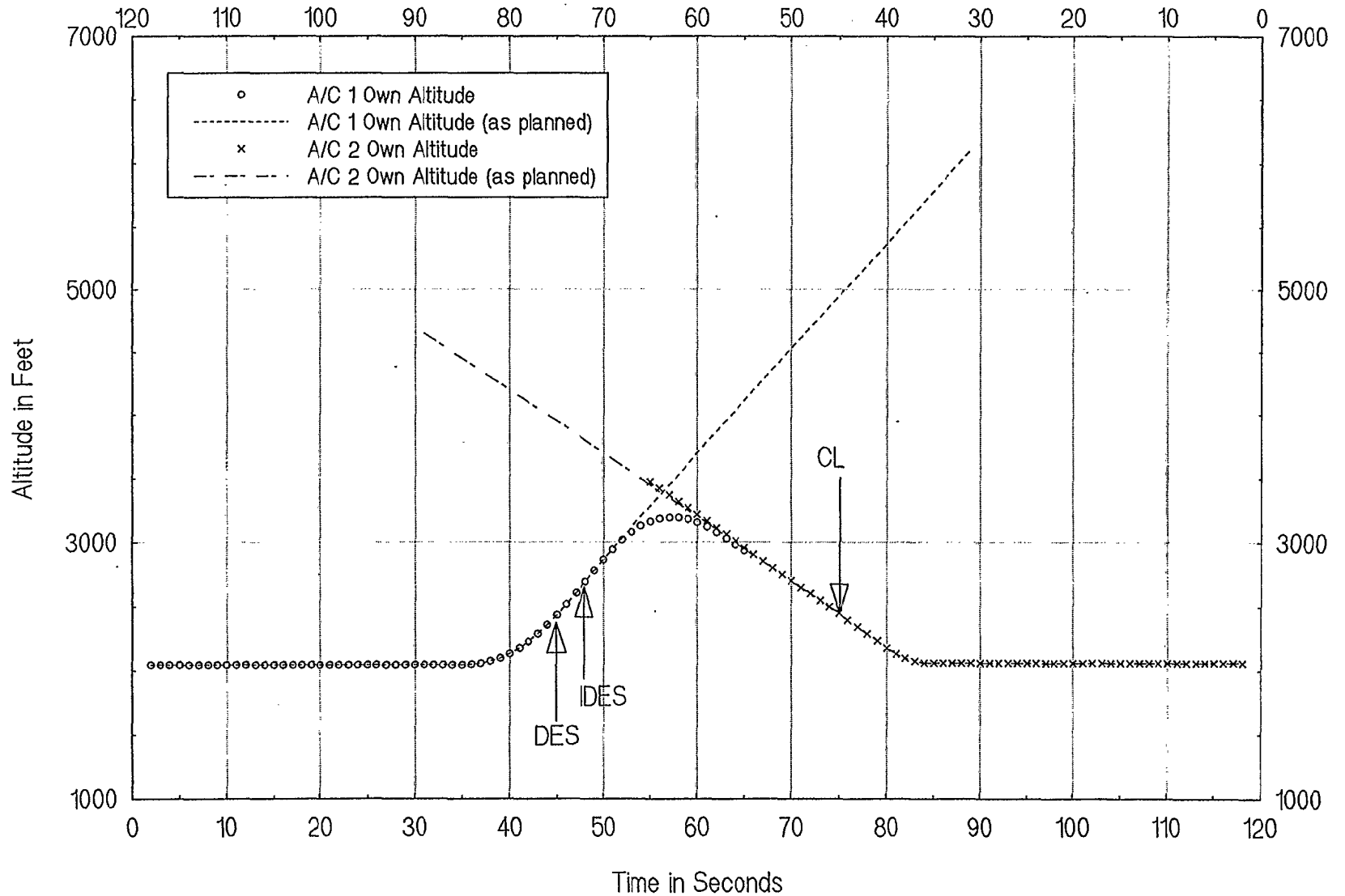
N-39

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND05C.EPC)

C7-25 vs C7-25 Data File Name=CL7B1T.DAT; REIT Number=4503

SIM MODE = 1175044 (Source: LL FTEG Run, October 1997)

04-N



Change 7 Representative NMAC I6

Mitre Encounter Class : 7

Reit Number : 1275

NMAC Characterization

71% had 100 ft tracker

29% had 25 ft tracker

planned separation

250, 500, 750 ft

AC1 rates :

1000, 3000, 5000 fpm

AC2 rates :

-1000, -3000, -5000 fpm

AC1 acceleration :

0.05, 0.15, 0.25 g

AC2 acceleration :

-0.05, -0.15, -0.25, -0.35 g

AC1,AC2 accel time :

CPA - 20, 25, or 30 sec

0% of encounters had reversed RAs

Performance Statistics (relate to whole class)

100 ft

25 ft

97

98

% of RAs were non-crossing

100

100

% of NMACs were non-crossing

99.8

99.8

% of RAs were not reversed

100

100

% of NMACs were not reversed

Comments

118 members in Group.

All three versions failed, similar to 6.04a Representative NMAC 9.

DATA FOR C7IND06

1275 6.04A RL VS 6.04A RH 7 29.79 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 750.0 (0.0,5000.0) (0.0,-5000.0) 0.05 -0.25 -25.0 -20.0 3700.0
 A/C1: 1165022 TA TIME :46 |TAUV | DES @46 [NXRA] | IDES @52
 A/C2: 1265122 TA TIME :45 |TAUV | DDES @47 [NXRA] | CL @48 | ICL @53

1275 C7 100 FT RL VS C7 100 FT RH 7 -8.82 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 750.0 (0.0,5000.0) (0.0,-5000.0) 0.05 -0.25 -25.0 -20.0 3700.0
 A/C1: 1171033 TA TIME :46 |TAUV | DES @46 [NXRA] | IDES @52
 A/C2: 1271133 TA TIME :45 |TAUV | DDES @47 [NXRA] | CL @48 | ICL @51

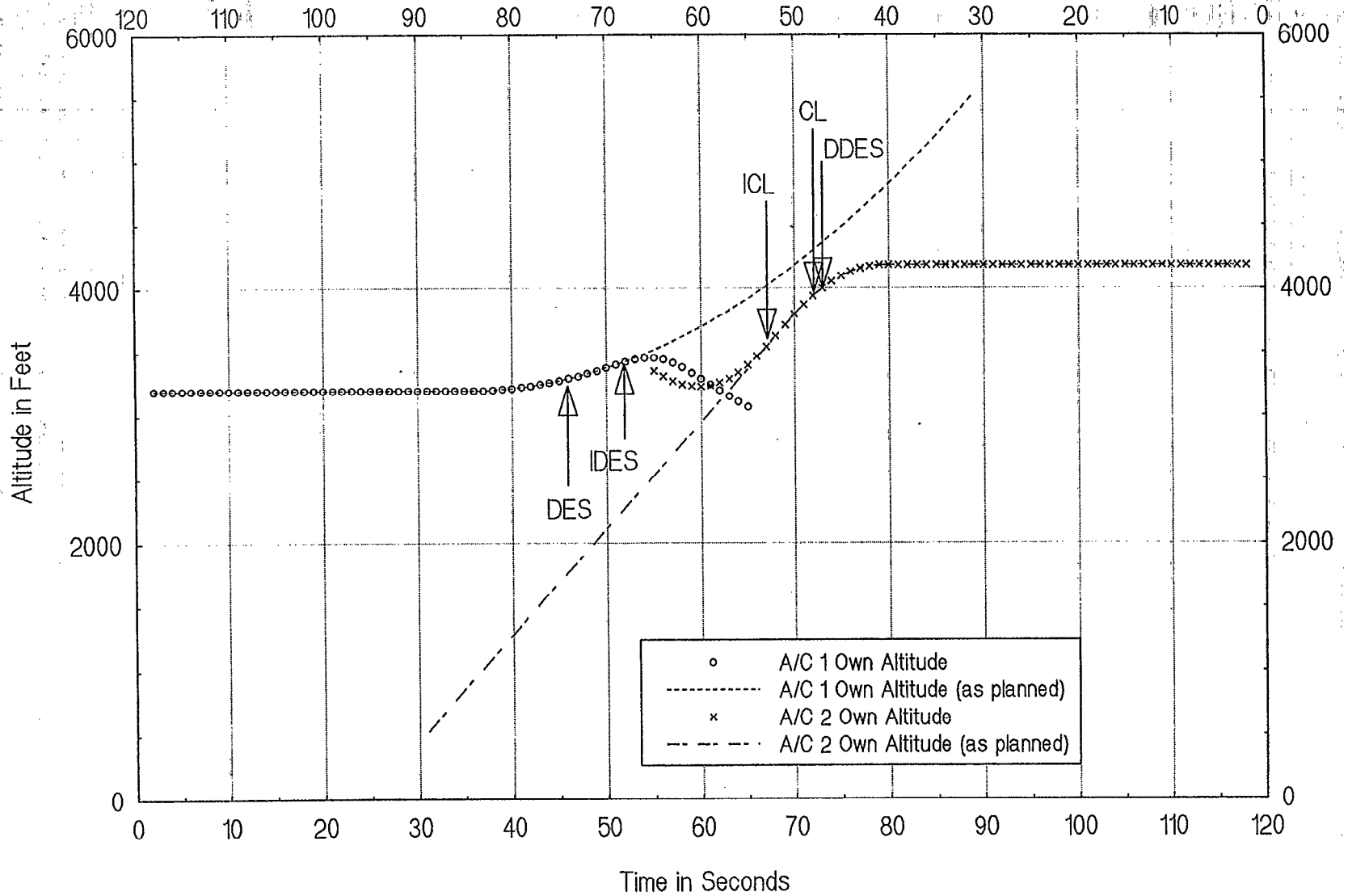
1275 C7 25 FT RL VS C7 25 FT RH 7 26.78 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 750.0 (0.0,5000.0) (0.0,-5000.0) 0.05 -0.25 -25.0 -20.0 3700.0
 A/C1: 1175044 TA TIME :45 |TAUV | POTRA @46 | DES @47 [NXRA] | IDES @52
 A/C2: 1275144 TA TIME :45 |TAUV | CL @46 [NXRA] | ICL @53

N-42

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND06A.EPC)

6.04a vs 6.04a Data File Name=CL7B1E.DAT; REIT Number=1275

SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)



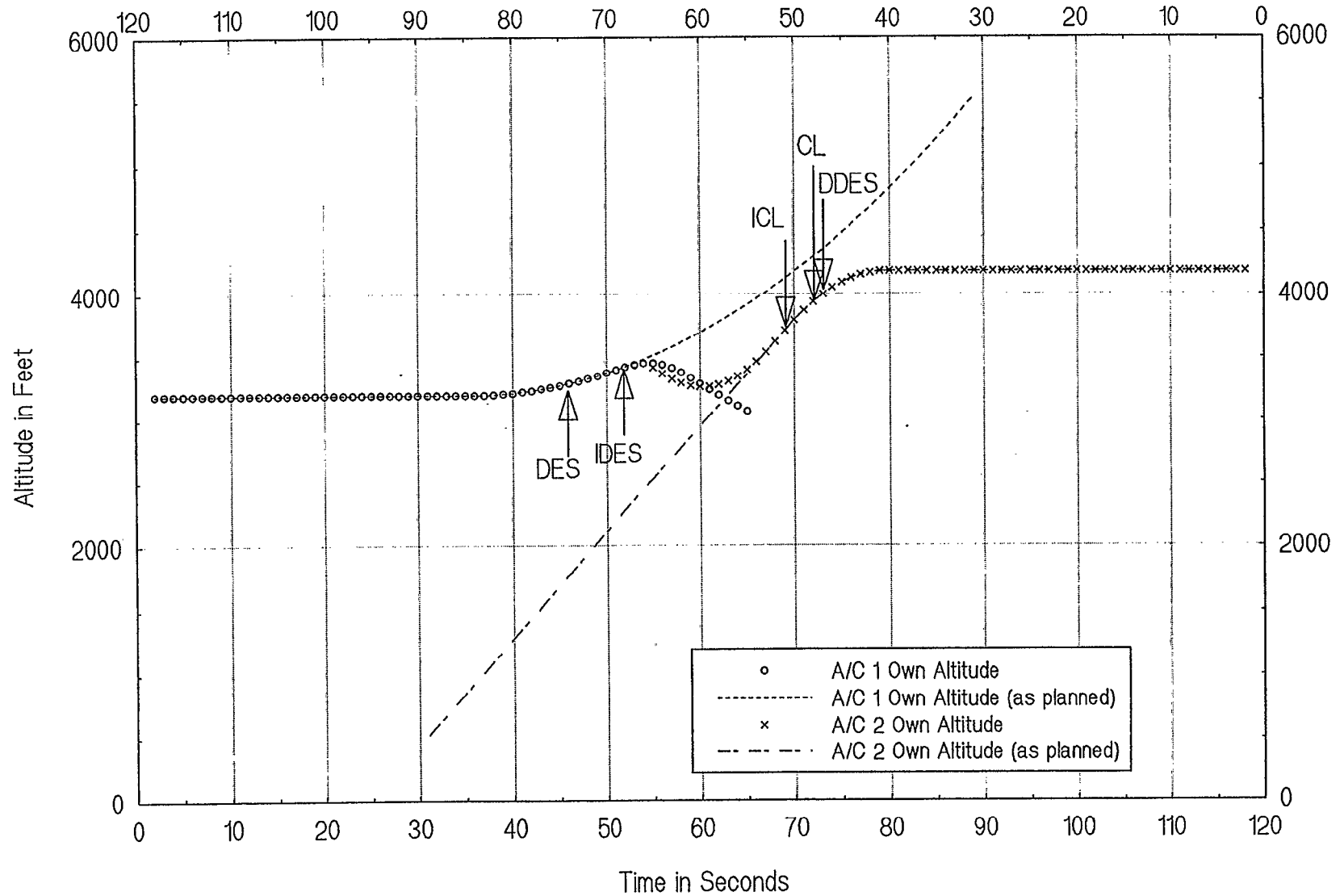
N-43

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND06B.EPC)

C7-100 vs C7-100 Data File Name=CL7B1M.DAT; REIT Number=1275

SIM MODE = 1171033 (Source: LL FTEG Run, October 1997)

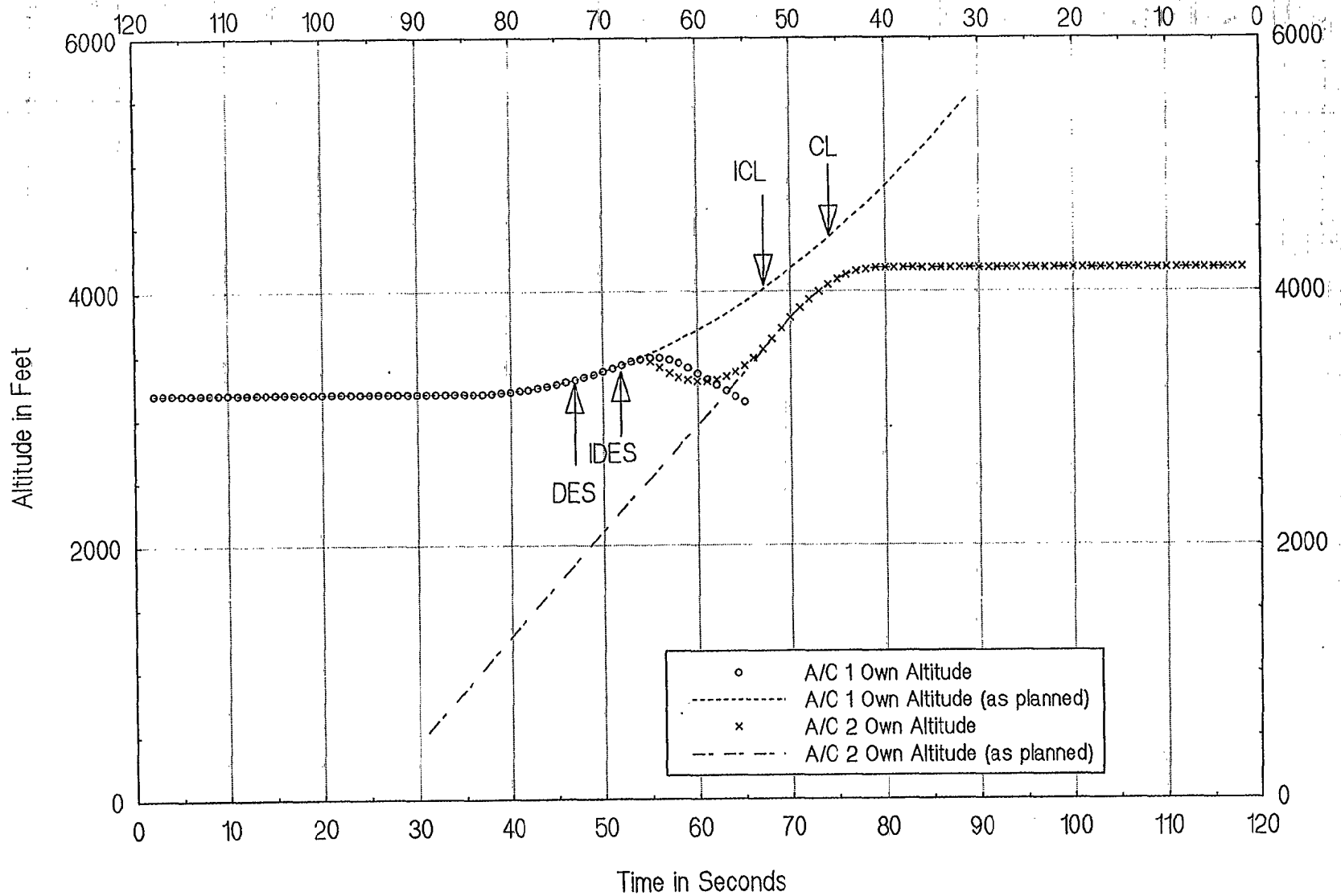
44-N



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND06C.EPC)

C7-25 vs C7-25 Data File Name=CL7B1T.DAT; REIT Number=1275

SIM MODE = 1175044 (Source: LL FTEG Run, October 1997)



N-45

Change 7 Representative NMAC I7

Mitre Encounter Class : 8

Reit Number : 2897

NMAC Characterization

50% had 100 ft tracker
50% had 25 ft tracker
100% had planned separation -500 ft
AC1 rates : -1000, -3000 fpm
AC2 rates : 5000 fpm
AC1 acceleration : 0.05, 0.15, 0.25 g
AC2 acceleration : 0.25 g
AC2 accel time : CPA - 20 sec
0% of encounters had reversed RAs

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
93	94	% of RAs were non-crossing
100	100	% of NMACs were non-crossing
99	99.5	% of RAs were not reversed
98	100	% of NMACs were not reversed

Comments

24 members in group.

All 3 versions of logic failed, comparable to 6.04a Representative NMAC 17.

DATA FOR C7IND07

2897 6.04A RL VS 6.04A RH 8 -62.63 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 -500.0 (-1000.0,0.0) (0.0,5000.0) 0.15 0.25 -25.0 -20.0 3700.0
 A/C1: 1165022 TA TIME :30 |RELZ | CL @48 [NXRA] | ICL @50
 A/C2: 1265122 TA TIME :30 |TAUV | POTRA @46 (DFD) | DES @48 [NXRA] | IDES @54

2897 C7 100 FT RL VS C7 100 FT RH 8 81.99 NON_CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 -500.0 (-1000.0,0.0) (0.0,5000.0) 0.15 0.25 -25.0 -20.0 3700.0
 A/C1: 1171033 TA TIME :30 |RELZ | CL @47 [NXRA] | ICL @50
 A/C2: 1271133 TA TIME :30 |TAUV | DCL @46 [NXRA] | DES @47

2897 C7 25 FT RL VS C7 25 FT RH 8 62.78 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 -500.0 (-1000.0,0.0) (0.0,5000.0) 0.15 0.25 -25.0 -20.0 3700.0
 A/C1: 1175044 TA TIME :30 |RELZ | CL @47 [NXRA] | ICL @52
 A/C2: 1275144 TA TIME :30 |TAUV | DCL @46 [NXRA] | DES @47

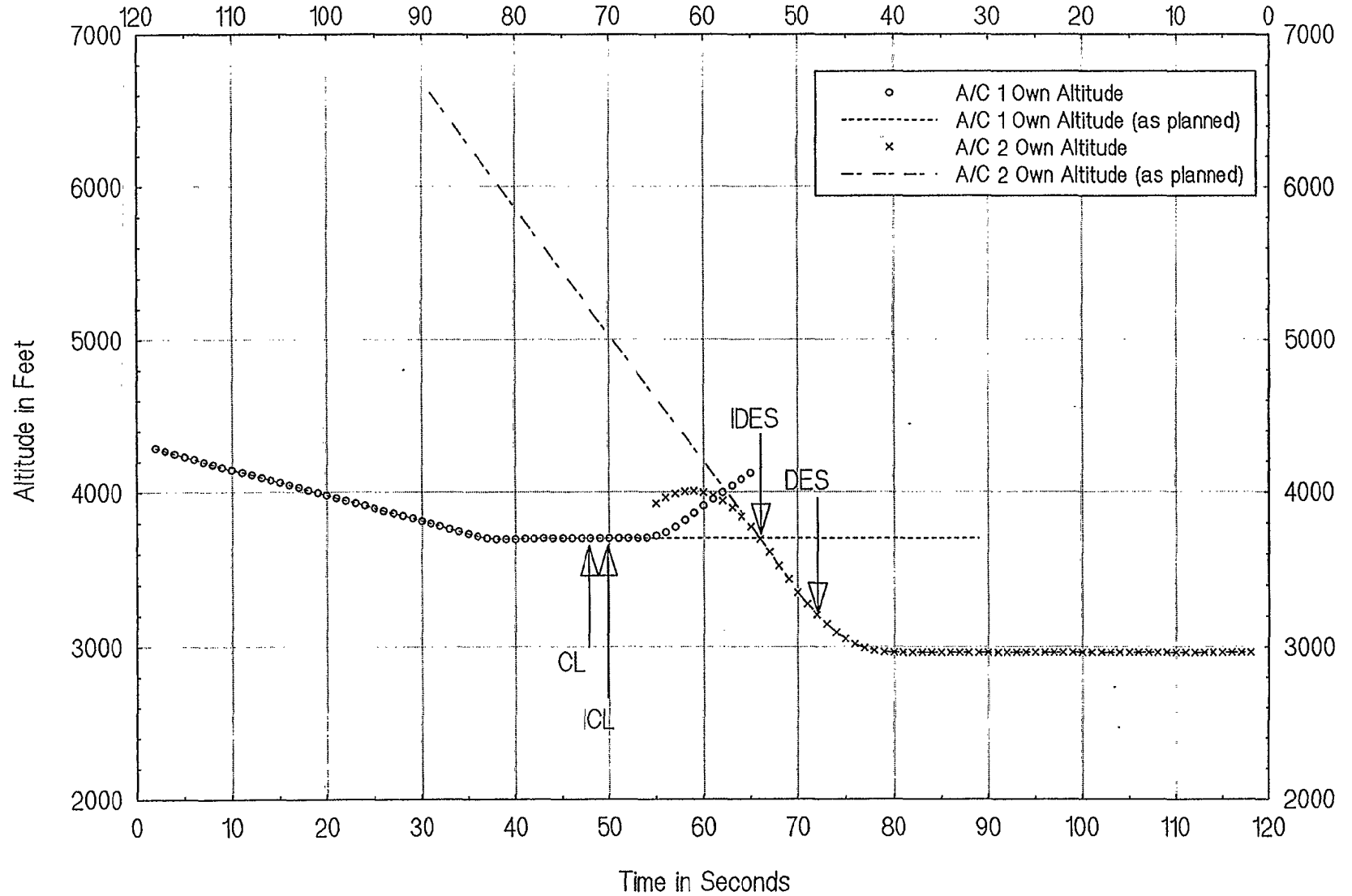
N-47

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND07A.EPC)

6.04a vs 6.04a Data File Name=CL8B1E.DAT; REIT Number=2897

SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)

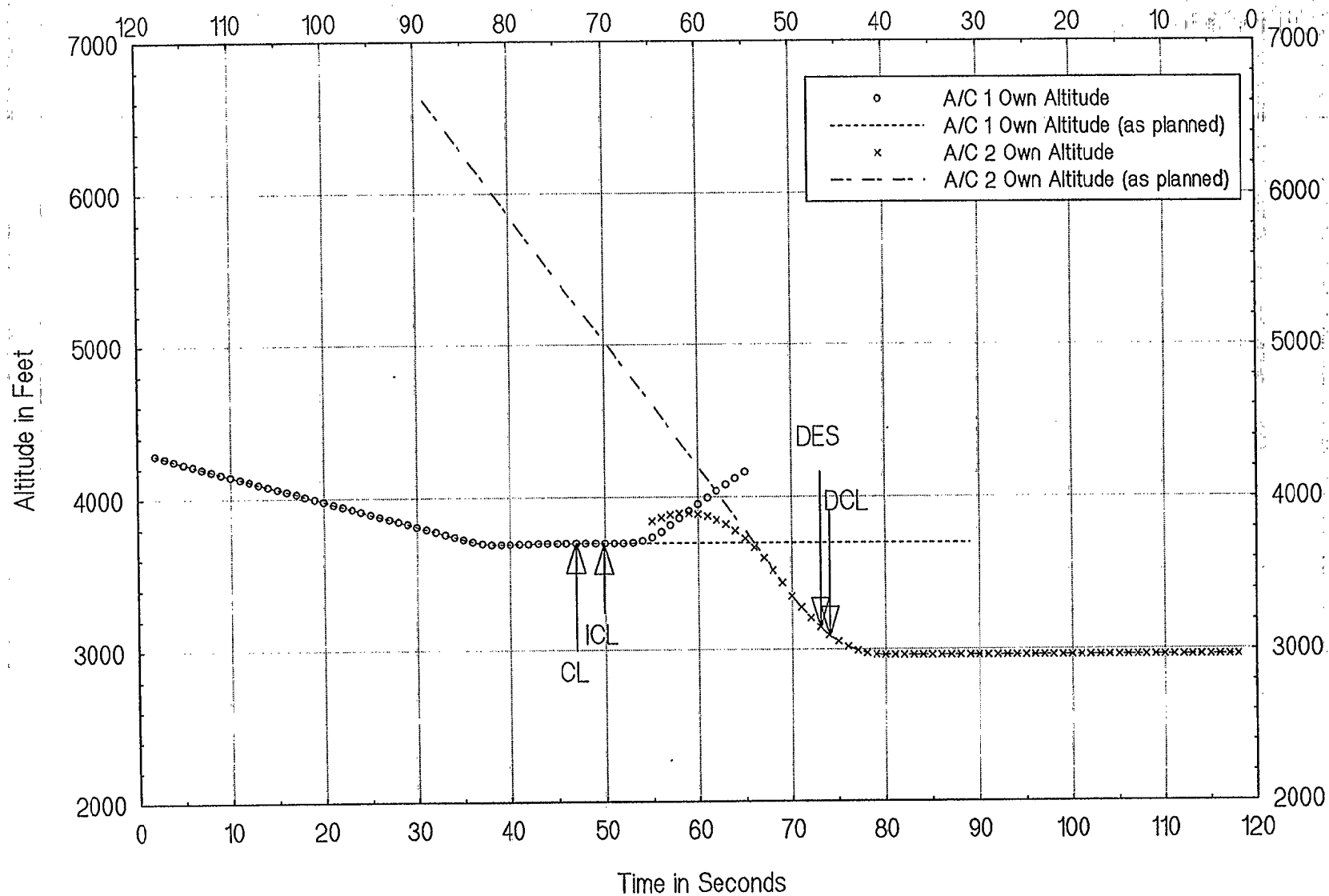
N-48



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND07B.EPC)

C7-100 vs C7-100 Data File Name=CL8B1M.DAT; REIT Number=2897

SIM MODE = 1171033 (Source: LL FTEG Run, October 1997)

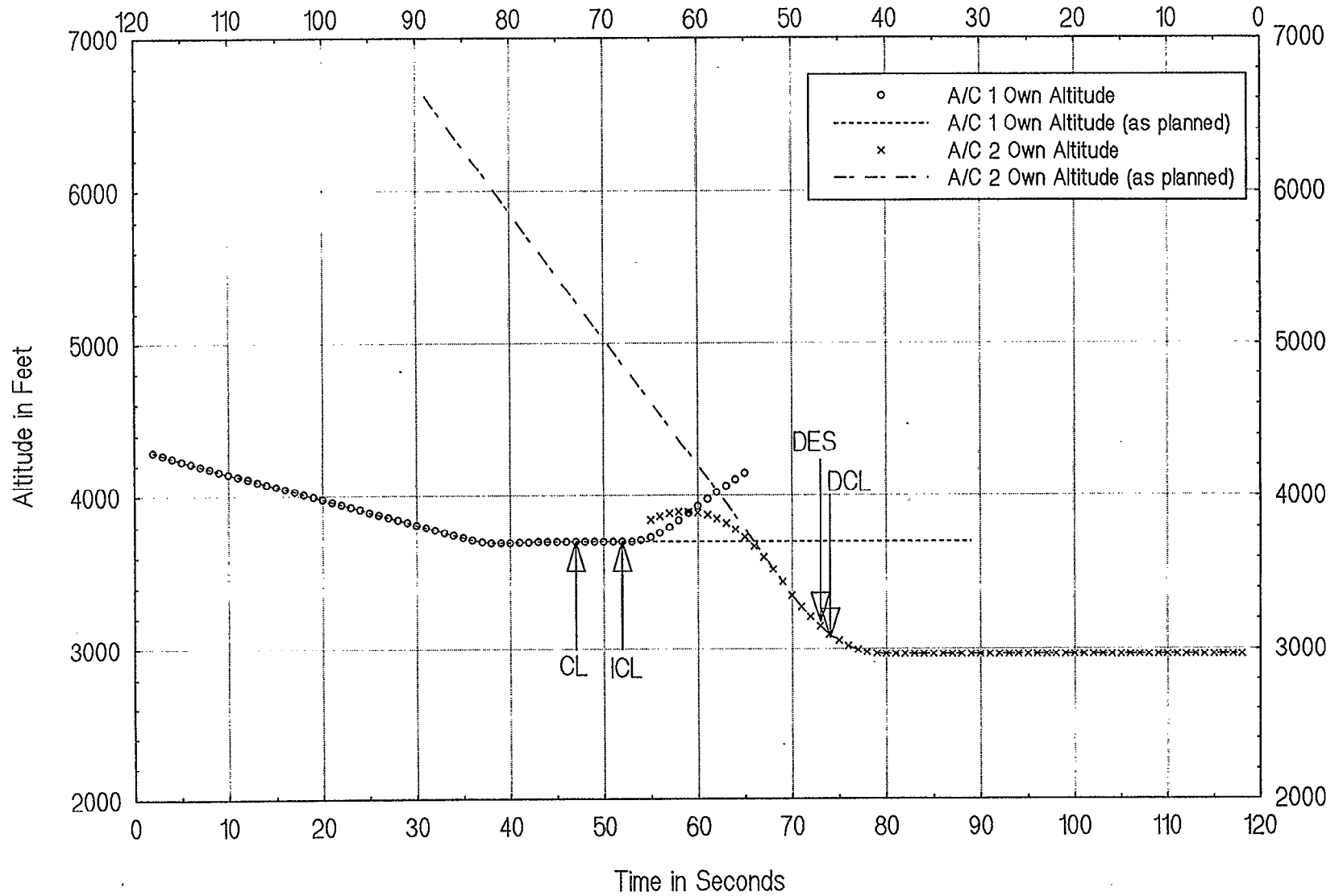


ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND07C.EPC)

C7-25 vs C7-25 Data File Name=CL8B1T.DAT; REIT Number=2897

SIM MODE = 1175044 (Source: LL FTEG Run, October 1997)

N-50



Change 7 Representative NMAC I8

Mitre Encounter Class : 8

Reit Number : 1647

NMAC Characterization

59% had 100 ft tracker

41% had 25 ft tracker

planned separation

250, 500, 750 ft

AC1 rates :

-1000, -3000, -5000 fpm

AC2 rates :

-3000, -5000 fpm

AC1 acceleration :

0.05, 0.15, 0.25 g

AC2 acceleration :

-0.15, -0.25, -0.35 g

AC1,AC2 accel time :

CPA - 20, 25, 30 sec

small number of encounters had RAs that reversed LATE

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
93	94	% of RAs were non-crossing
100	100	% of NMACs were non-crossing
99	99.5	% of RAs were not reversed
98	100	% of NMACs were not reversed

Comments

130 members in group.

Comparable to 6.04a Representative NMAC 16.

DATA FOR C7IND08

1647 6.04A RH VS 6.04A RL 8 45.06 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUU = 20.0 ALIM = 300.0
 500.0 (-5000.0,0.0) (0.0,-5000.0) 0.15 -0.15 -25.0 -25.0 3700.0
 A/C1: 1165122 TA TIME :19 |PVMD | DES @49 [NXRA] | IDES @51
 A/C2: 1265022 TA TIME :19 |PVMD | LD2 @47 [NXRA] | CL @51 | ICL @55

1647 C7 100 FT RH VS C7 100 FT RL 8 28.62 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUU = 20.0 ALIM = 300.0
 500.0 (-5000.0,0.0) (0.0,-5000.0) 0.15 -0.15 -25.0 -25.0 3700.0
 A/C1: 1171133 TA TIME :19 |PVMD | POTRA @47 | DES @48 [NXRA] | IDES @52
 A/C2: 1271033 TA TIME :19 |PVMD | LD2 @47 [NXRA] | LD1 @49 | CL @50

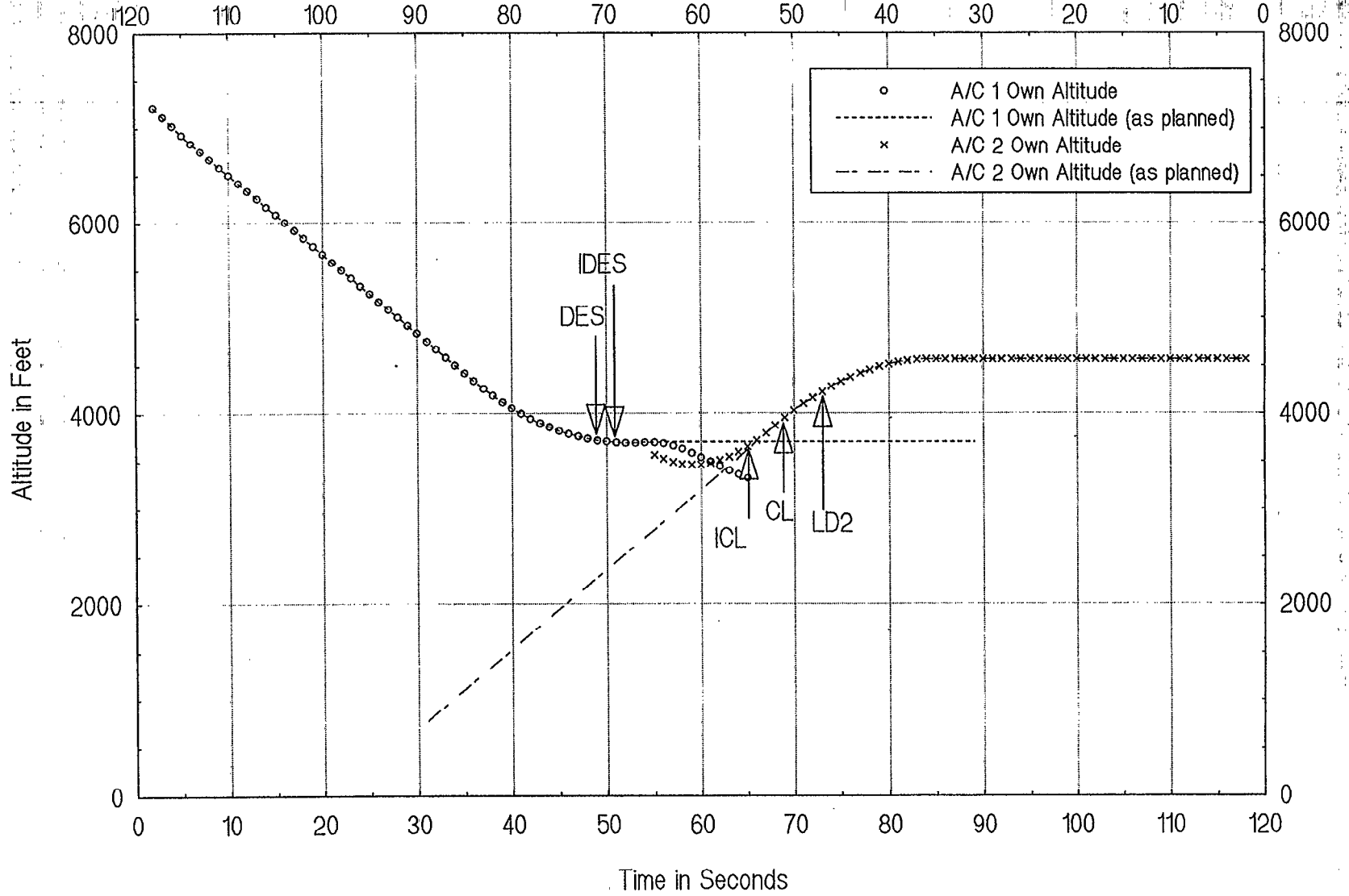
1647 C7 25 FT RH VS C7 25 FT RL 8 -345.42 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUU = 20.0 ALIM = 300.0
 500.0 (-5000.0,0.0) (0.0,-5000.0) 0.15 -0.15 -25.0 -25.0 3700.0
 A/C1: 1175144 TA TIME :19 |PVMD | DES @46 [NXRA] | IDES @50
 A/C2: 1275044 TA TIME :19 |PVMD | LD2 @45 [NXRA] | LD1 @49 | CL @50
 | ICL @53

N-52

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND08A.EPC)

6.04a vs 6.04a Data File Name=CL8B1F.DAT; REIT Number=1647

SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)

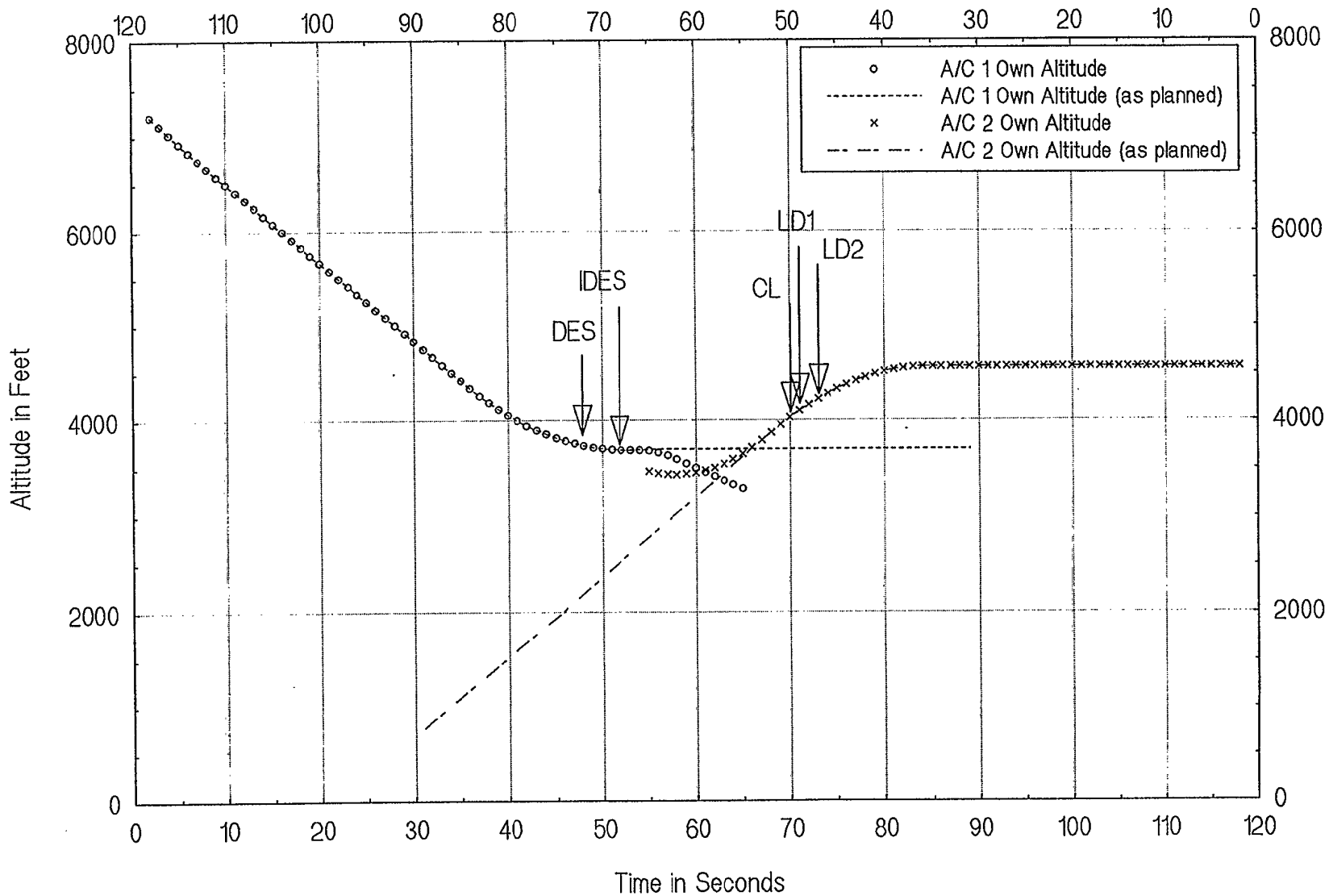


N-53

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND08B.EPC)

C7-100 vs C7-100 Data File Name=CL8B1NDAT; REIT Number=1647

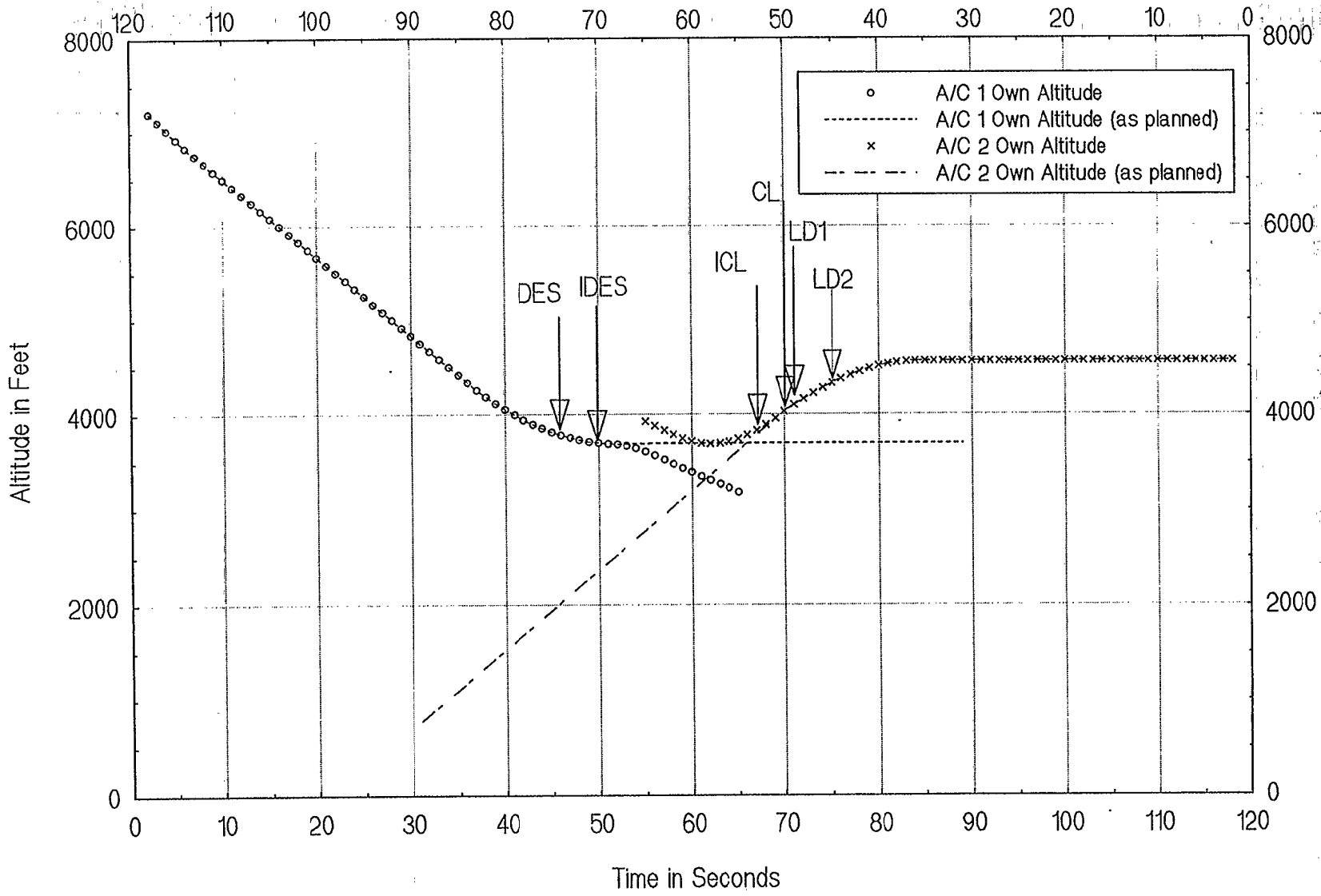
SIM MODE = 1271033 (Source: LL FTEG Run, October 1997)



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND08C.EPC)

C7-25 vs C7-25 Data File Name=CL8B1UDAT; REIT Number=1647

SIM MODE = 1275044 (Source: LL FTEG Run, October 1997)



N-55

Change 7 Representative NMAC I9

Mitre Encounter Class : 9

Reit Number : 3246

NMAC Characterization

71% had 100 ft tracker

29% had 25 ft tracker

planned separation	-250	ft
AC1 rates :	5000	fpm
AC2 rates :	-5000	fpm
AC1 acceleration :	-0.05, -0.15	g
AC2 acceleration :	0.05, 0.15, 0.25, 0.35	g
AC2 accel time :	CPA - 20, 25, 30	sec

one encounter had an RA that reversed LATE

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
72	72	% of RAs were non-crossing
0	0	% of NMACs were non-crossing
99	99.5	% of RAs were not reversed
99	100	% of NMACs were not reversed

Comments

7 members in group.

All three logics fail. Delaying a crossing RA while waiting for level-off.

DATA FOR C7IND09

3246 6.04A RL VS 6.04A RH 9 51.89 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUV = 25.0 ALIM = 300.0
 -250.0 (5000.0,0.0) (-5000.0,0.0) -0.15 0.05 -25.0 -30.0 3700.0
 A/C1: 1165022 TA TIME :19 |TAUR | POTRA @34 (6FT) | CL @48 [XRA] | ICL @50
 A/C2: 1265122 TA TIME :19 |TAUR | POTRA @34 (6FT) | DES @49 [XRA] | IDES @55

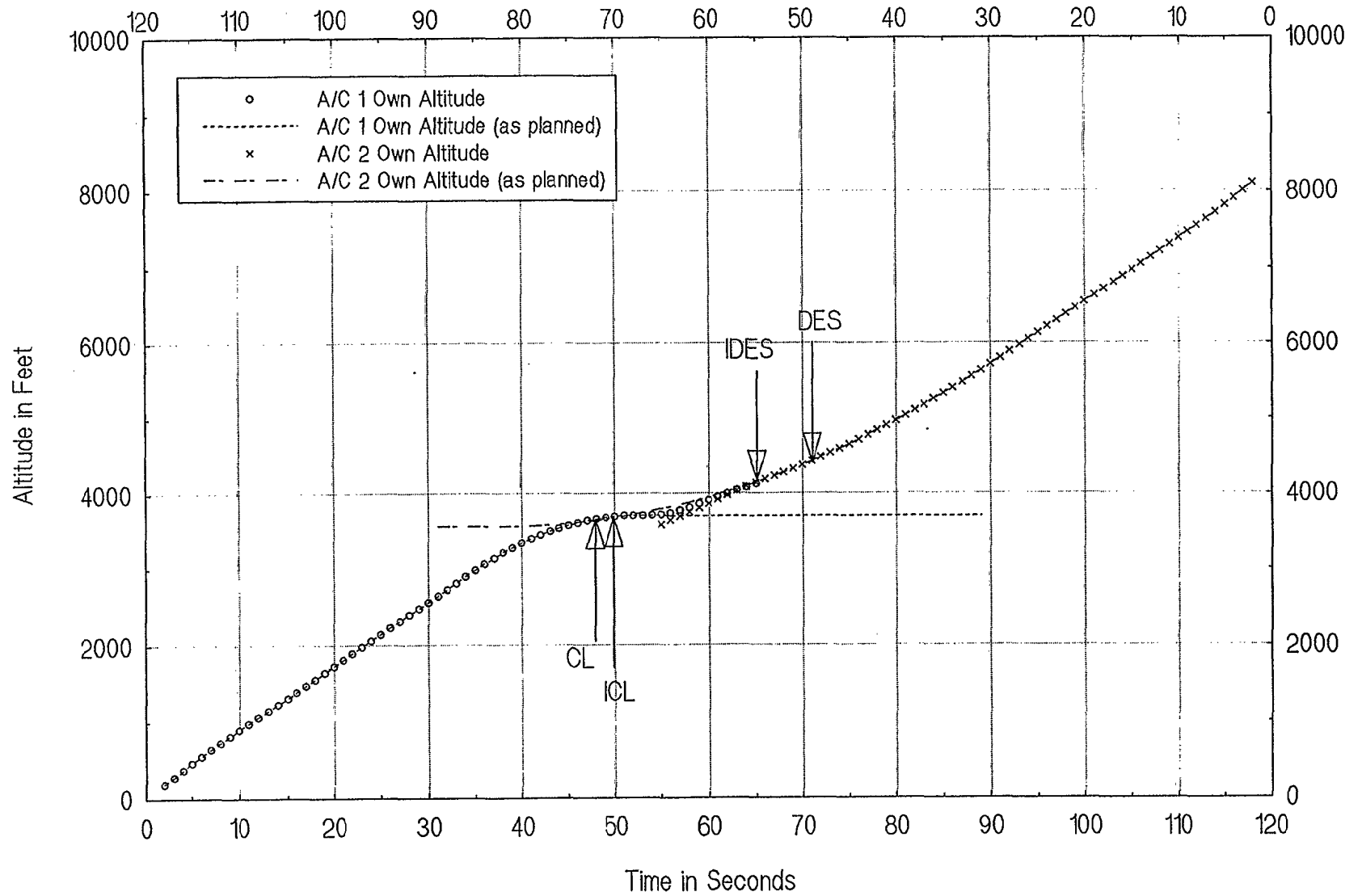
3246 C7 100 FT RL VS C7 100 FT RH 9 73.31 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUV = 25.0 ALIM = 300.0
 -250.0 (5000.0,0.0) (-5000.0,0.0) -0.15 0.05 -25.0 -30.0 3700.0
 A/C1: 1171033 TA TIME :19 |TAUR | POTRA @34 | CL @48 [XRA] | ICL @51
 A/C2: 1271133 TA TIME :19 |TAUR | POTRA @34 | DES @48 [XRA]

3246 C7 25 FT RL VS C7 25 FT RH 9 73.31 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUV = 25.0 ALIM = 300.0
 -250.0 (5000.0,0.0) (-5000.0,0.0) -0.15 0.05 -25.0 -30.0 3700.0
 A/C1: 1175044 TA TIME :19 |TAUR | POTRA @34 | CL @48 [XRA] | ICL @51
 A/C2: 1275144 TA TIME :19 |TAUR | POTRA @34 | DES @48 [XRA]

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND09A.EPC)

6.04a vs 6.04a Data File Name=CL9B1E.DAT; REIT Number=3246

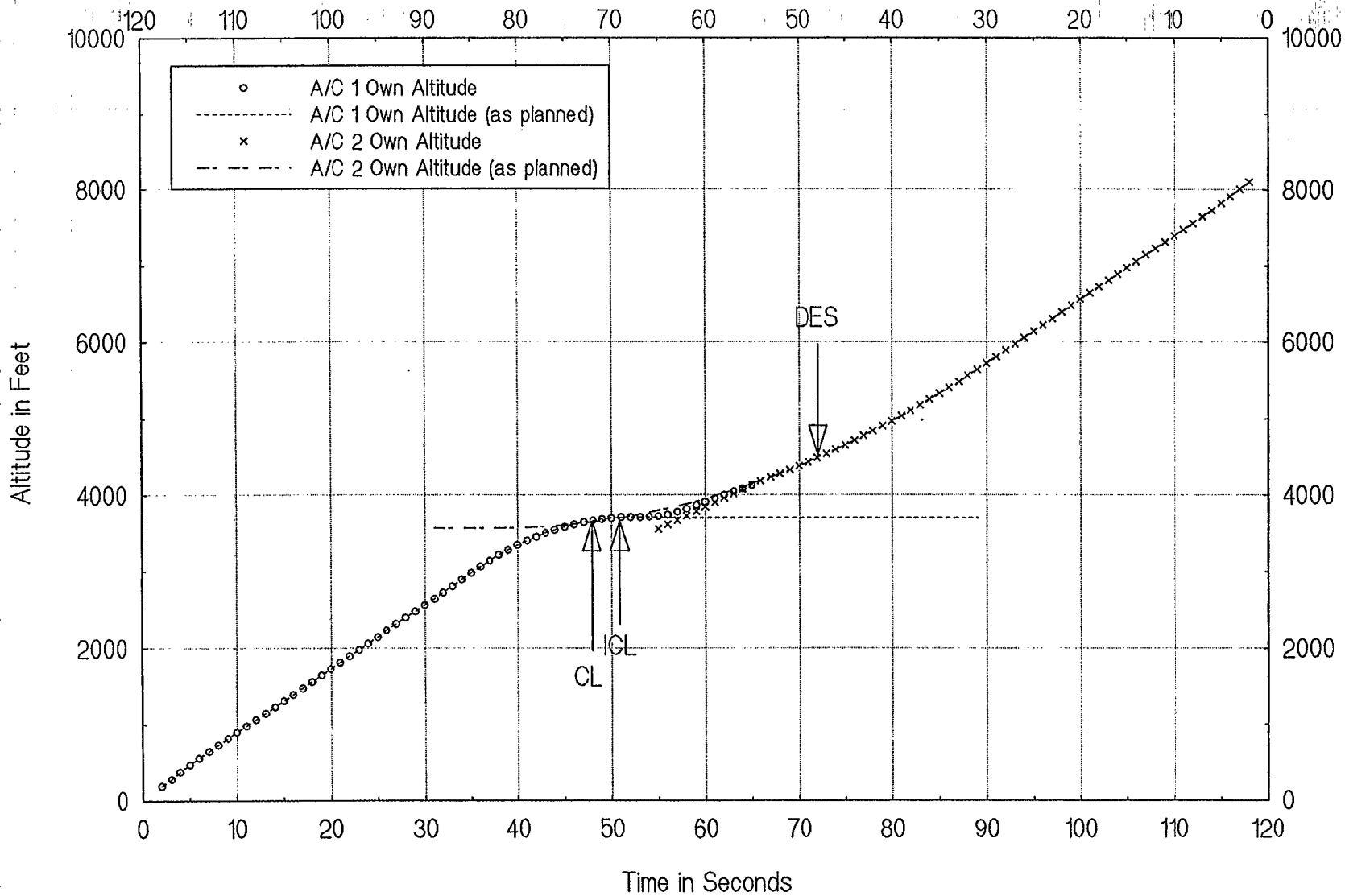
SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND09B.EPC)

C7-100 vs C7-100 Data File Name=CL9B1M.DAT; REIT Number=3246

SIM MODE = 1171033 (Source: LL FTEG Run, October 1997)

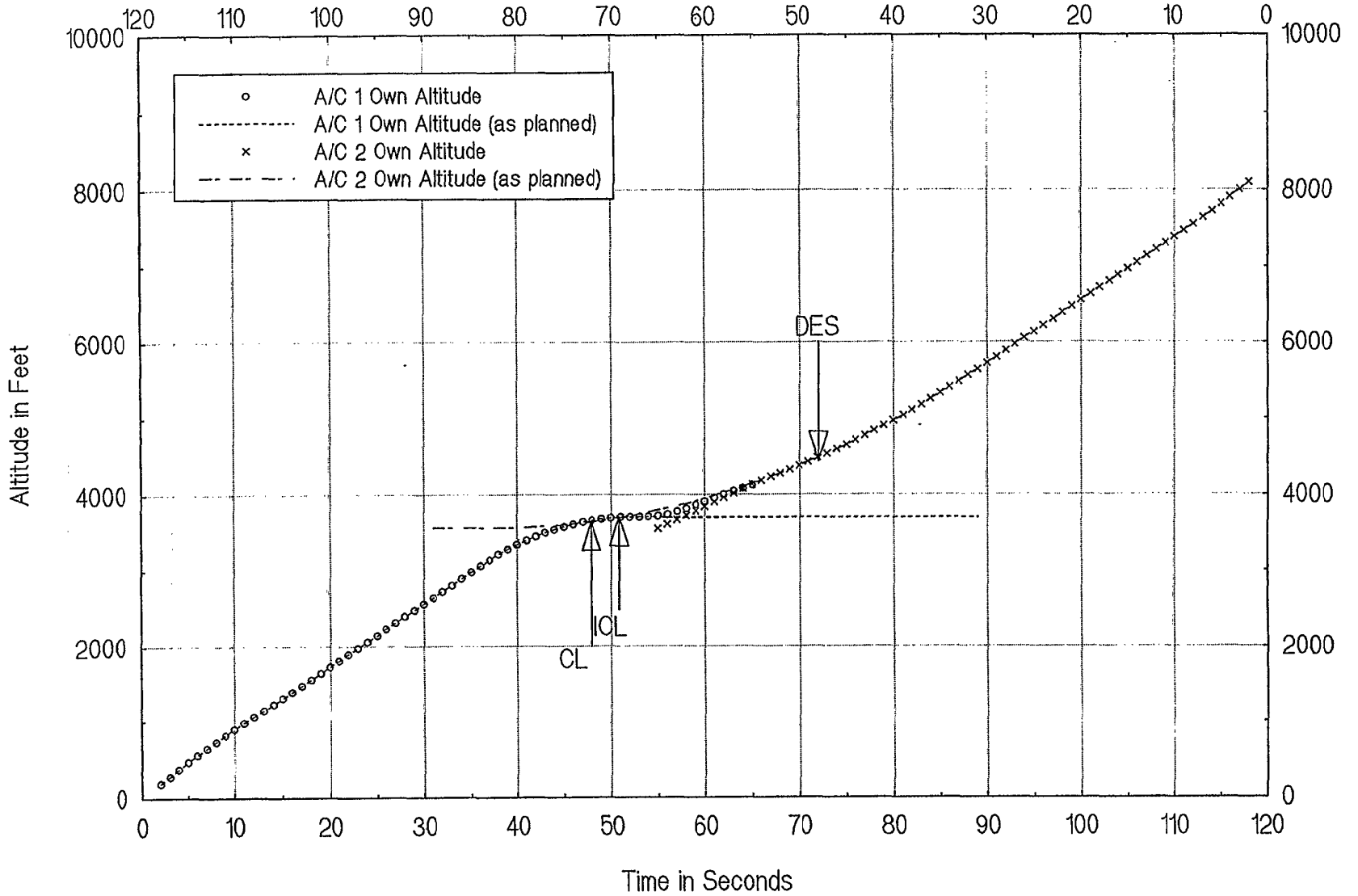


ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND09C.EPC)

C7-25 vs C7-25 Data File Name=CL9B1T.DAT; REIT Number= 3246

SIM MODE = 1175044 (Source: LL FTEG Run, October 1997)

09-N



Change 7 Representative NMAC I10

Mitre Encounter Class : 13

Reit Number : 562

NMAC Characterization

100% had 100 ft tracker
planned separation 250 ft
AC1 rates : 0, 400 fpm
AC2 rates : 5000 fpm
AC1 acceleration : 0 g
AC2 acceleration : -0.25, -0.35 g
AC2 accel time : CPA - 20, 25 sec
100% of encounters had reversed RAs

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
90	89	% of RAs were non-crossing
67	100	% of NMACs were non-crossing
92	91	% of RAs were not reversed
98.5	100	% of NMACs were not reversed

Comments

3 members in group.
Comparable to 6.04a Representative NMAC 22, smaller planned separation.

DATA FOR C7IND10

562 6.04A RH VS 6.04A RL 13 -420.09 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 250.0 (0.0,0.0) (5000.0,0.0) 0.00 -0.25 0.0 -20.0 3680.0
 A/C1: 1165122 TA TIME :30 |TAUR | DES @48 [XRA]
 A/C2: 1265022 TA TIME :30 |TAUR | POTRA @40 (6FT) | CL @44 [XRA] | ICL @48

562 C7 100 FT RH VS C7 100 FT RL 13 : 96.13 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 250.0 (0.0,0.0) (5000.0,0.0) 0.00 -0.25 0.0 -20.0 3680.0
 A/C1:** REV **1171133 TA TIME :30 |TAUR | POTRA @40 (LVW) | LC1 @45 [XRA] | DES @48
 | CL @52
 A/C2:** REV **1271033 TA TIME :30 |TAUR | POTRA @40 | CL @44 [XRA] | DES @51

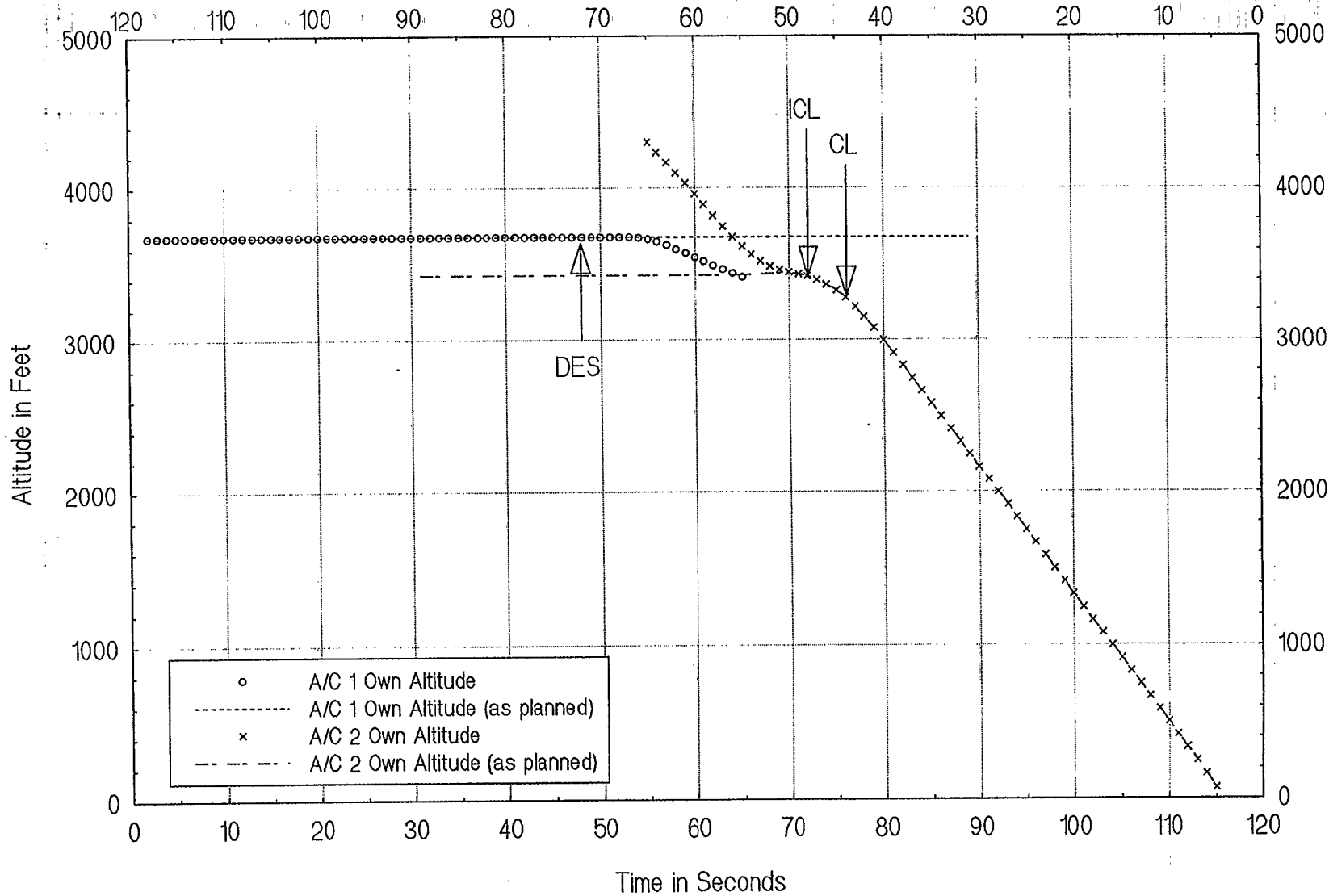
562 C7 25 FT RH VS C7 25 FT RL 13 117.16 NON_CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 250.0 (0.0,0.0) (5000.0,0.0) 0.00 -0.25 0.0 -20.0 3680.0
 A/C1:** REV **1175144 TA TIME :30 |TAUR | POTRA @40 (LVW) | POTRA @45 (LVW) | DCL @46 [XRA]
 | DES @47 | CL @53
 A/C2:** REV **1275044 TA TIME :30 |TAUR | POTRA @40 | CL @45 [XRA] | DES @52

N-62

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND10A.EPC)

Data File Name=CL3B1F.DAT; REIT Number=562

SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)

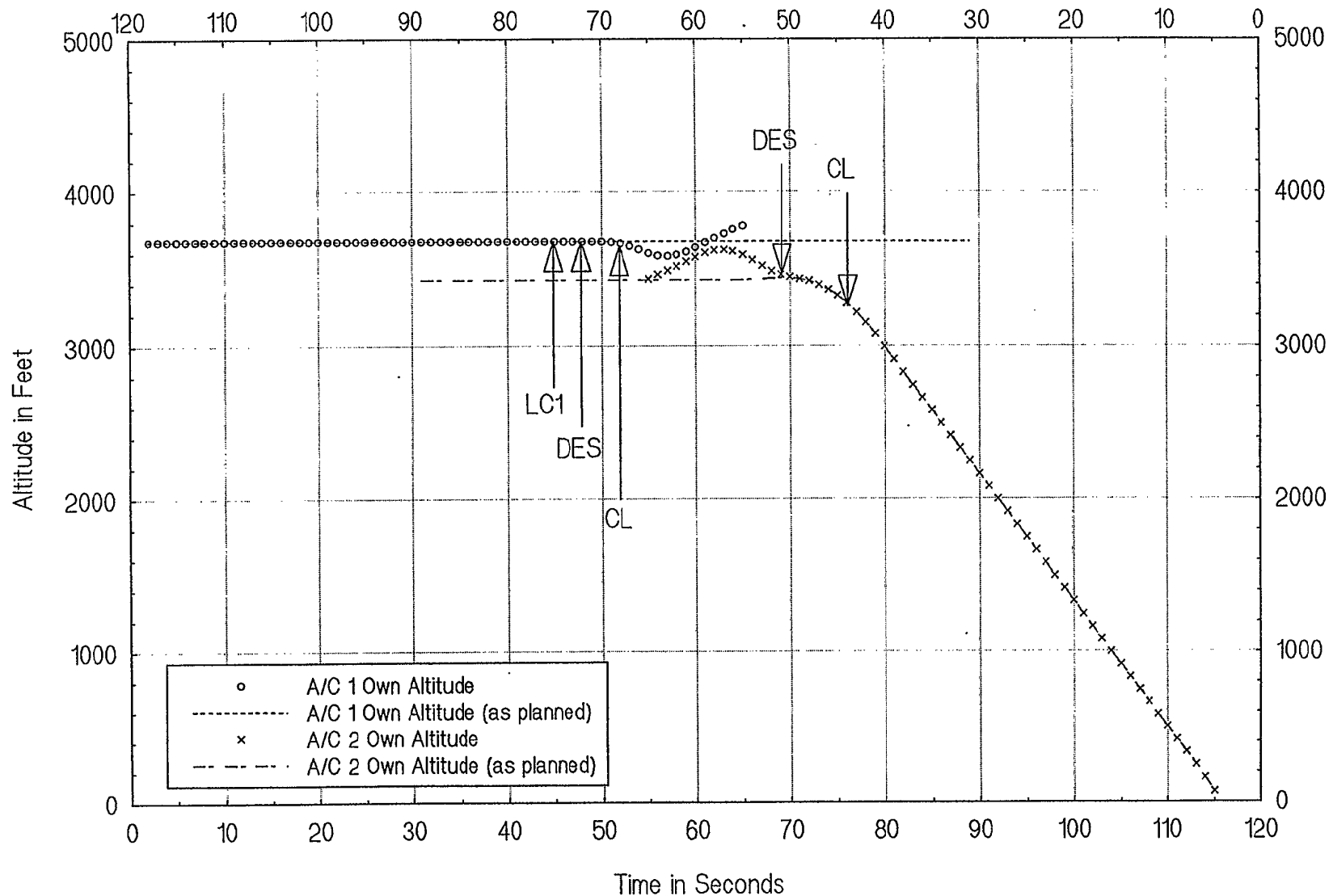


ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND10B.EPC)

C7-100 vs C7-100 Data File Name=CL3B1.DAT; REIT Number=562

SIM MODE = 1271033 (Source: LL FTEG Run, October 1997)

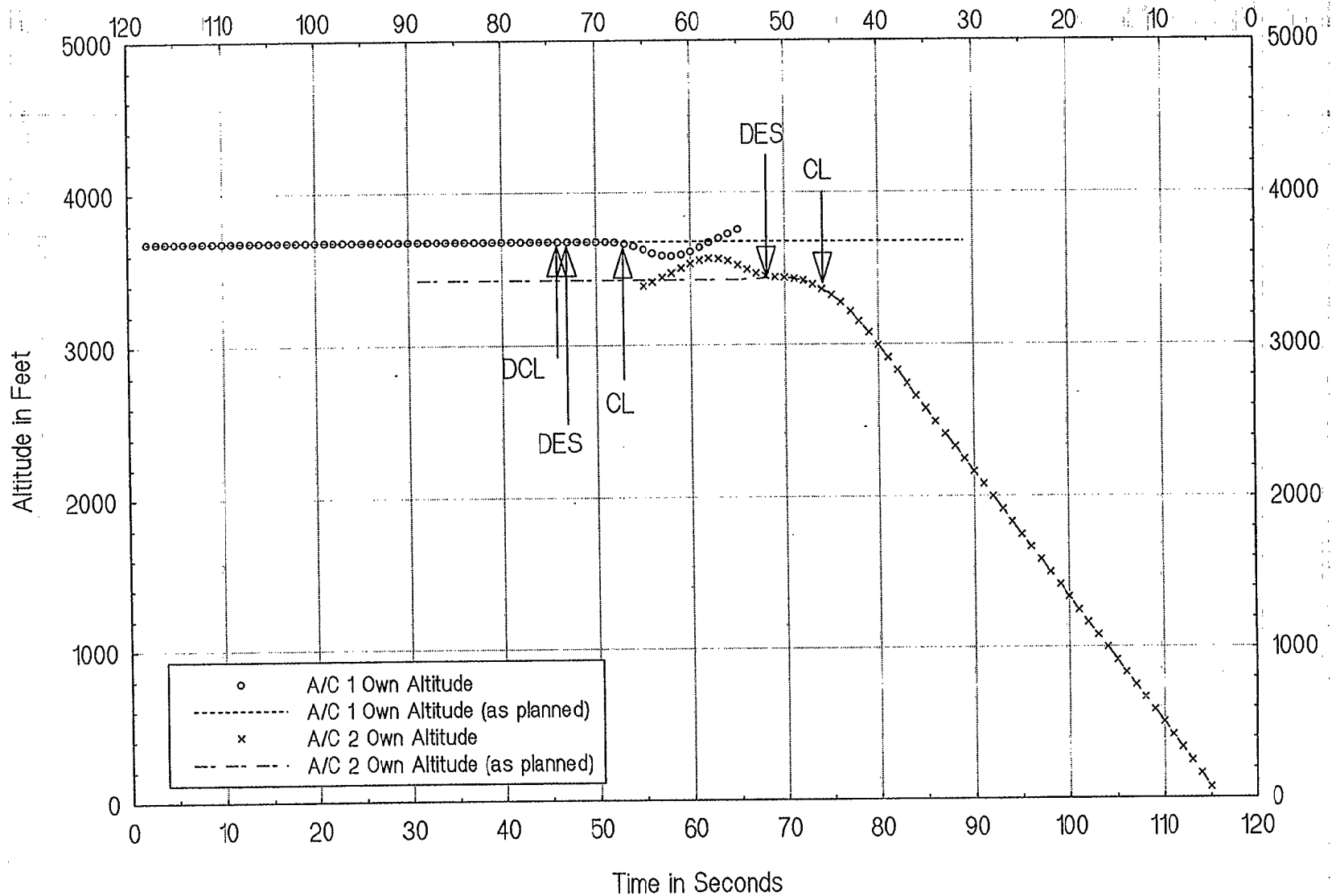
N-64



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND10C.EPC)

C7-25 vs C7-25 Data File Name=CL3B1U.DAT; REIT Number=562

SIM MODE = 1275044 (Source: LL FTEG Run, October 1997)



N-65

Change 7 Representative NMAC I11

Mitre Encounter Class : 15

Reit Number : 1448

NMAC Characterization

50% had 100 ft tracker
50% had 25 ft tracker
planned separation : -500 ft
AC1 rates : 5000 fpm
AC2 rates : 5000 fpm
AC1 acceleration : 0 g
AC2 acceleration : 0.25, 0.35 g
AC2 accel time : CPA - 20 sec
0% of encounters had reversed RAs

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
91	93	% of RAs were non-crossing
0	0	% of NMACs were non-crossing
97	98	% of RAs were not reversed
100	100	% of NMACs were not reversed

Comments

4 members in group.
Similar to 6.04a Representative NMAC 23.

DATA FOR C7IND11

1448 6.04A RH VS 6.04A RL 15 -116.34 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUW = 20.0 ALIM = 300.0
 -500.0 (5000.0,5000.0) (0.0,5000.0) 0.00 0.25 0.0 -20.0 3680.0
 A/C1: 1165122 TA TIME :30 |TAUR | POTRA @40 (6FT) | POTRA @46 (DFD) | CL @47 [XRA]
 | ICL @49
 A/C2: 1265022 TA TIME :30 |TAUR | POTRA @43 (6FT) | DES @46 [XRA] | IDES @52

1448 C7 100 FT RH VS C7 100 FT RL 15 -184.71 NON_CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUW = 20.0 ALIM = 300.0
 -500.0 (5000.0,5000.0) (0.0,5000.0) 0.00 0.25 0.0 -20.0 3680.0
 A/C1:** REV **1171133 TA TIME :30 |TAUR | POTRA @40 | CL @46 [XRA] | DES @57
 A/C2:** REV **1271033 TA TIME :30 |TAUR | POTRA @40 (LVW) | DES @46 [XRA] | IDES @53
 | CL @56

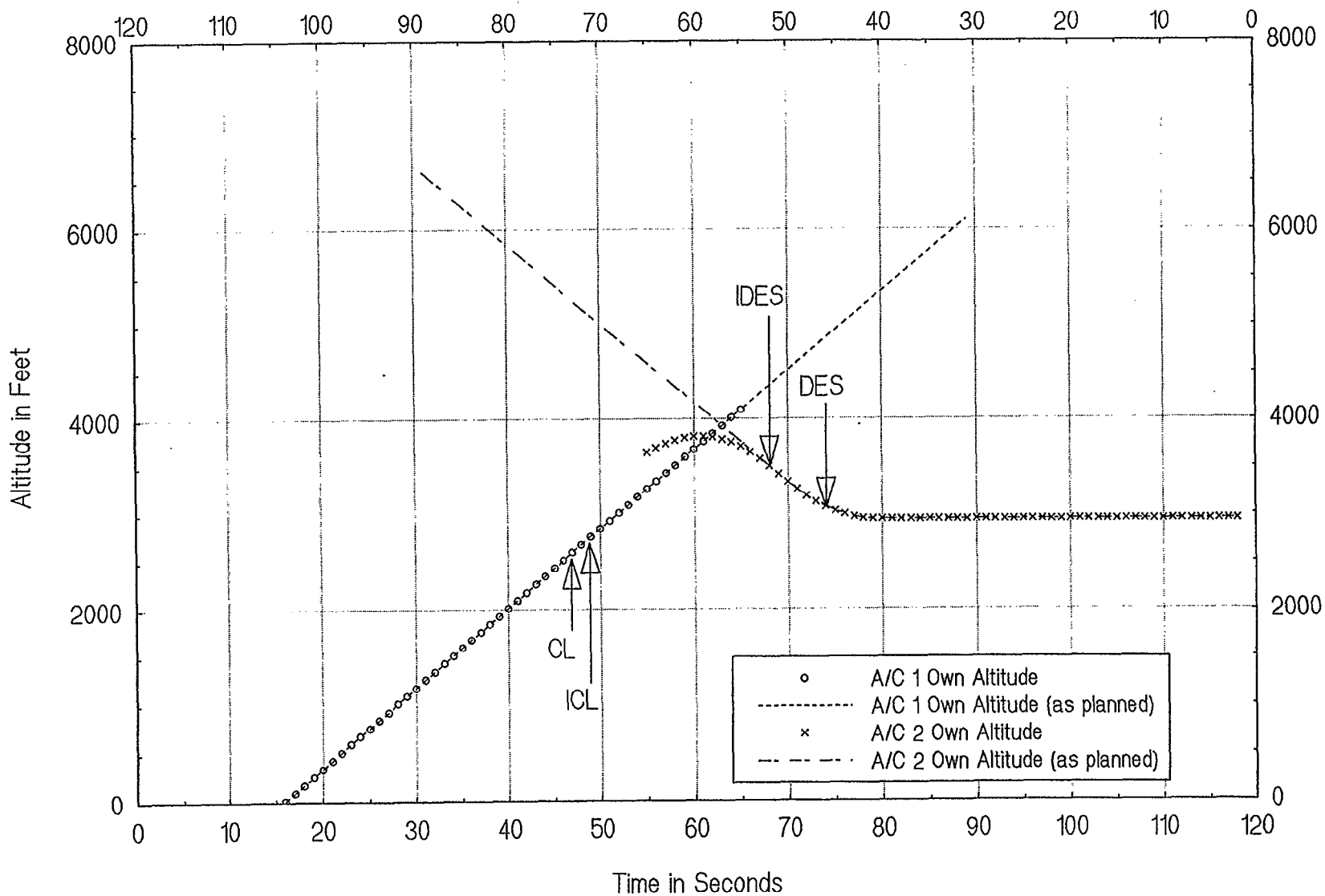
1448 C7 25 FT RH VS C7 25 FT RL 15 -71.30 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUW = 20.0 ALIM = 300.0
 -500.0 (5000.0,5000.0) (0.0,5000.0) 0.00 0.25 0.0 -20.0 3680.0
 A/C1: 1175144 TA TIME :30 |TAUR | POTRA @40 | CL @47 [XRA]
 A/C2: 1275044 TA TIME :30 |TAUR | POTRA @40 (LVW) | DCL @46 [XRA] | DES @47
 | IDES @50

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND11A.EPC)

Data File Name=CL5B1F.DAT; REIT Number=1448

SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)

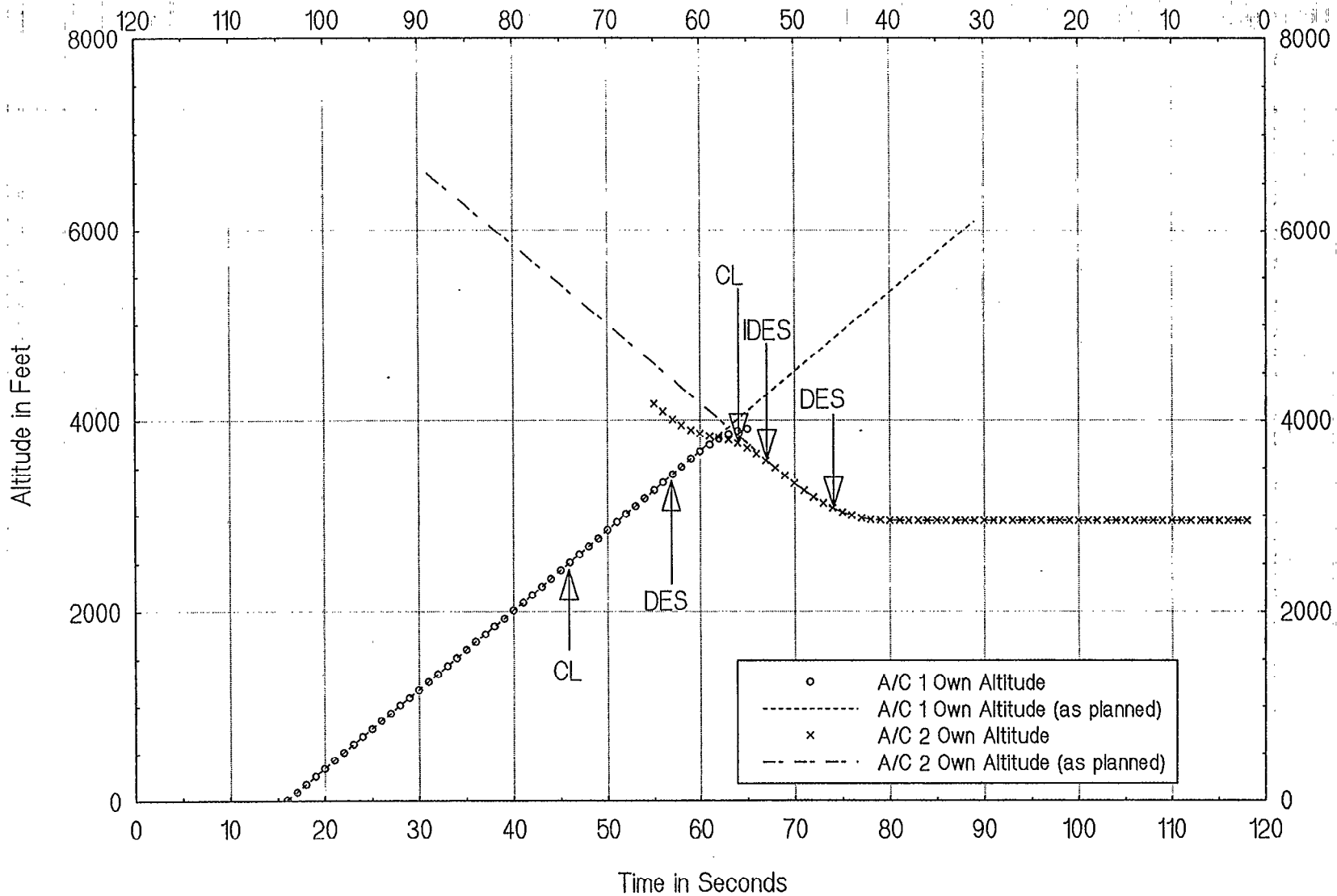
89-N



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND11B.EPC)

C7-100 vs C7-100 Data File Name=CL5B1NDAT; REIT Number=1448

SIM MODE = 1271033 (Source: LL FTEG Run, October 1997)

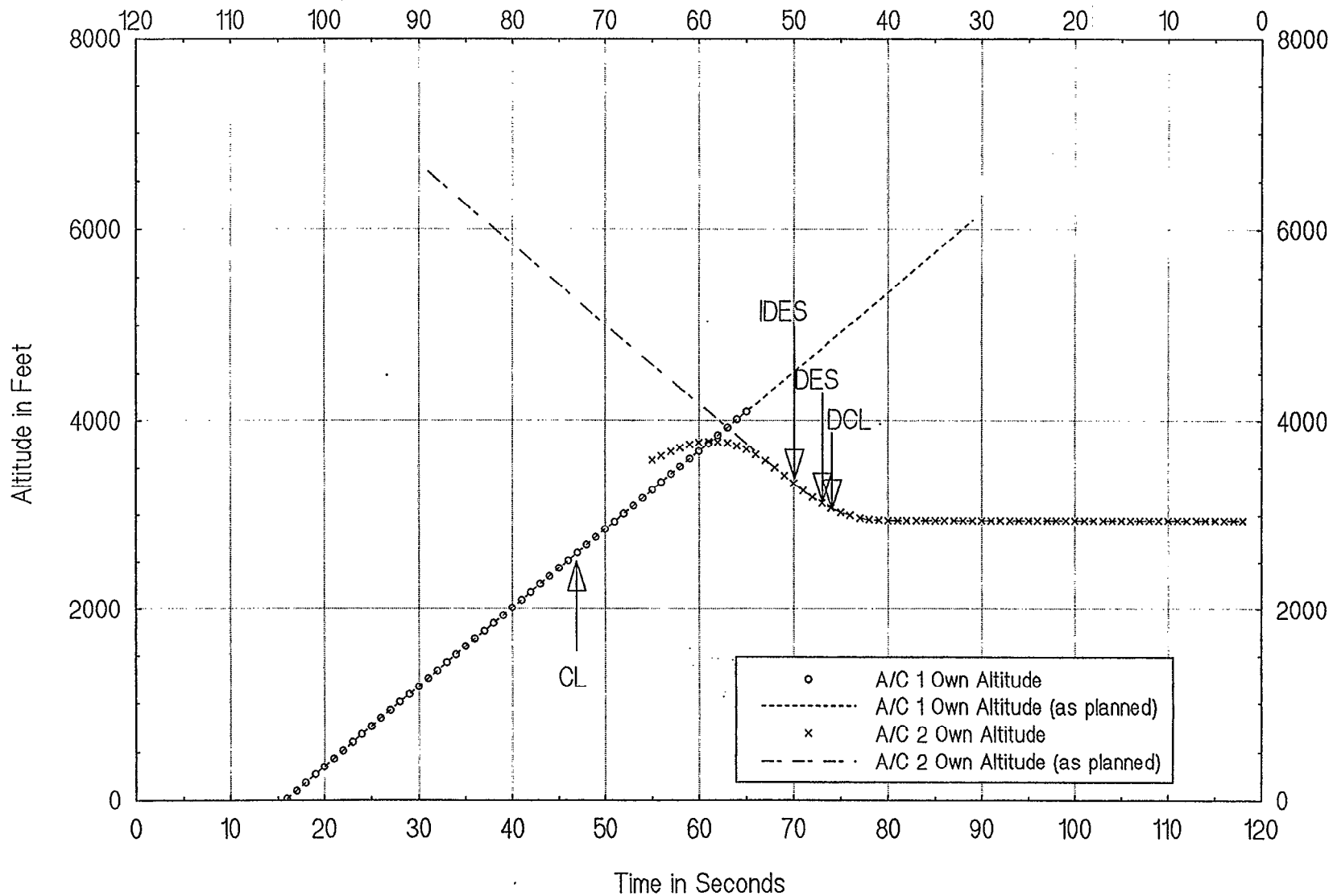


ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND11C.EPC)

C7-25 vs C7-25 Data File Name=CL5B1U.DAT; REIT Number=1448

SIM MODE = 1275044 (Source: LL FTEG Run, October 1997)

N-70



Change 7 Representative NMAC I12

Mitre Encounter Class : 17

Reit Number : 2991

NMAC Characterization

54% had 100 ft tracker

46% had 25 ft tracker

planned separation

500 ft

AC1, AC2 rates :

5000 fpm

AC1 acceleration : 0.15(93%), 0.25(7%)

g

AC2 acceleration : 0.15, 0.25, 0.35

g

AC2 accel time : CPA - 25, 30

sec

one encounter had an RA that reversed LATE

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
99	85.5	% of RAs were non-crossing
14	0	% of NMACs were non-crossing
99.8	99.8	% of RAs were not reversed
90	100	% of NMACs were not reversed

Comments

13 members in group.

Similar to 6.04a Representative NMAC 26.

DATA FOR C7IND12

2991 6.04A RL VS 6.04A RH 17 -41.77 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUV = 20.0 ALIM = 300.0
 500.0 (0.0,5000.0) (0.0,3000.0) 0.15 0.35 -25.0 -25.0 3700.0
 A/C1: 1165022 TA TIME :35 |TAUR | DES @45 [XRA] | IDES @54
 A/C2: 1265122 TA TIME :35 |TAUR | CL @45 [XRA] | ICL @49

2991 C7 100 FT RL VS C7 100 FT RH 17 849.53 NON_CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUV = 20.0 ALIM = 300.0
 500.0 (0.0,5000.0) (0.0,3000.0) 0.15 0.35 -25.0 -25.0 3700.0
 A/C1: 1171033 TA TIME :35 |TAUR | CL @45 [NXRA]
 A/C2: 1271133 TA TIME :35 |TAUR | DES @45 [NXRA] | DCL @55

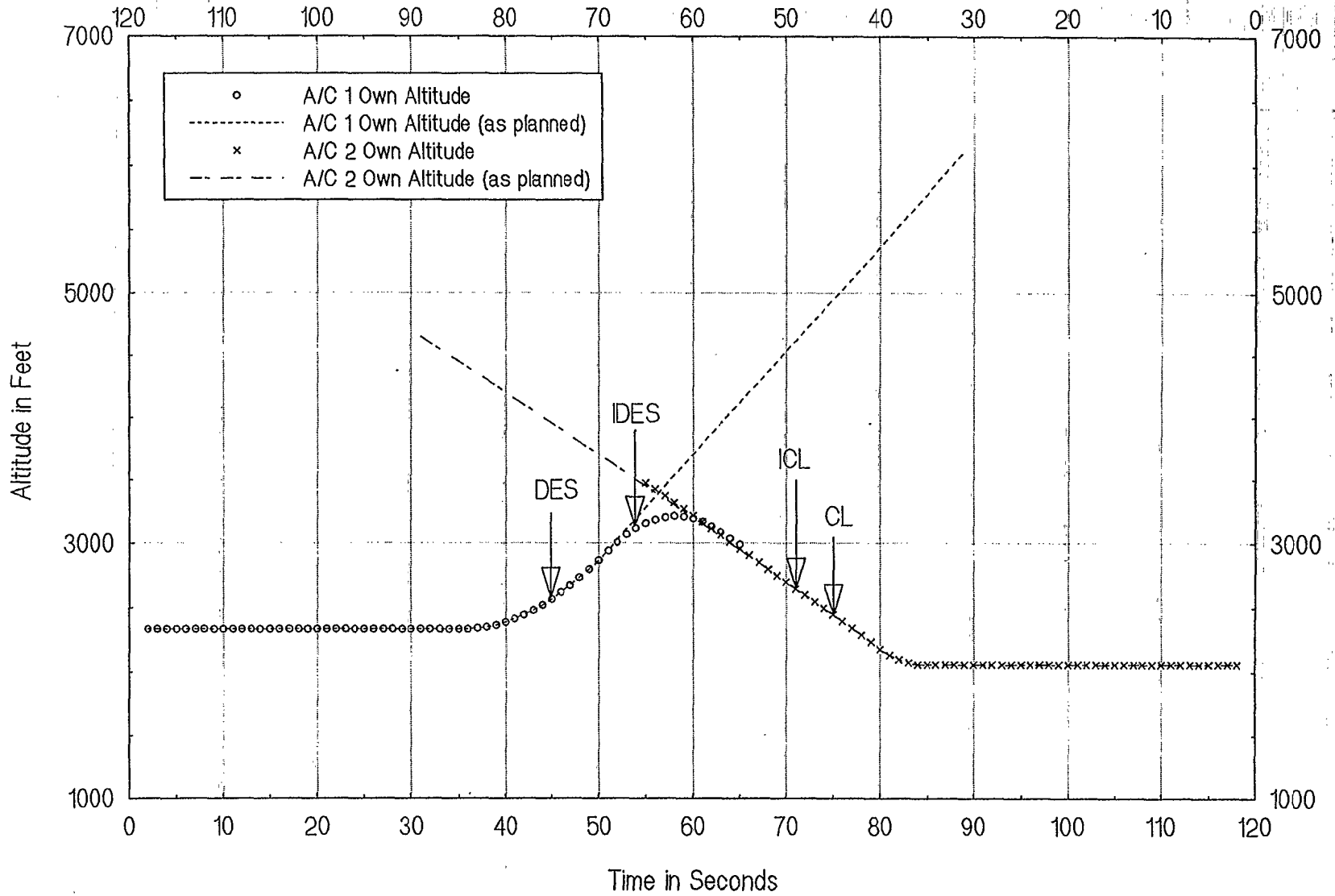
2991 C7 25 FT RL VS C7 25 FT RH 17 -56.24 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUV = 20.0 ALIM = 300.0
 500.0 (0.0,5000.0) (0.0,3000.0) 0.15 0.35 -25.0 -25.0 3700.0
 A/C1: 1175044 TA TIME :35 |TAUR | DCL @45 [XRA] | DES @46 | IDES @53
 A/C2: 1275144 TA TIME :35 |TAUR | CL @45 [XRA]

N-72

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND12A.EPC)

Data File Name=CL7B1E.DAT; REIT Number=2991

SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)



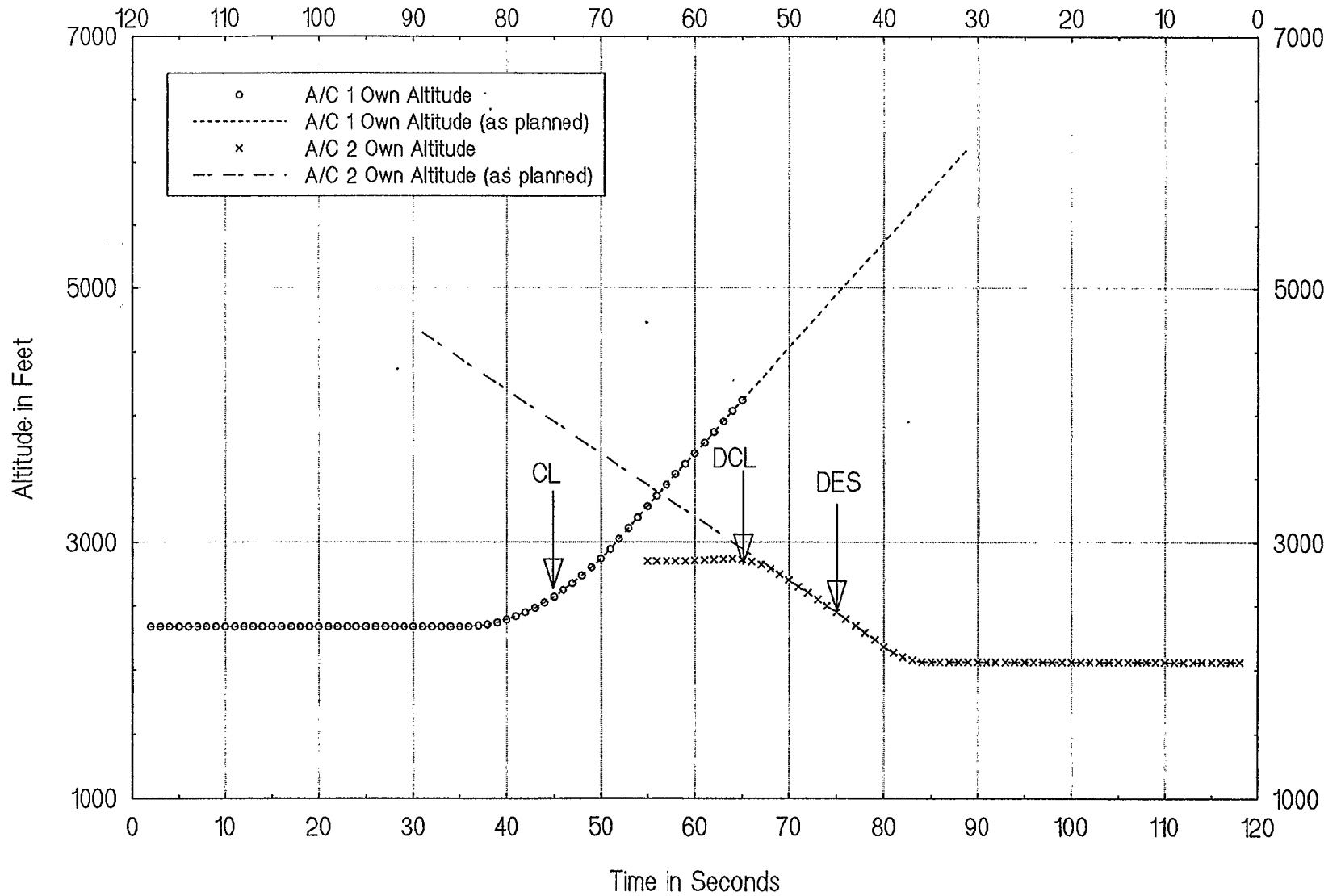
N-73

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND12B.EPC)

C7-100 vs C7-100 Data File Name=CL7B1M.DAT; REIT Number=2991

SIM MODE = 1171033 (Source: LL FTEG Run, October 1997)

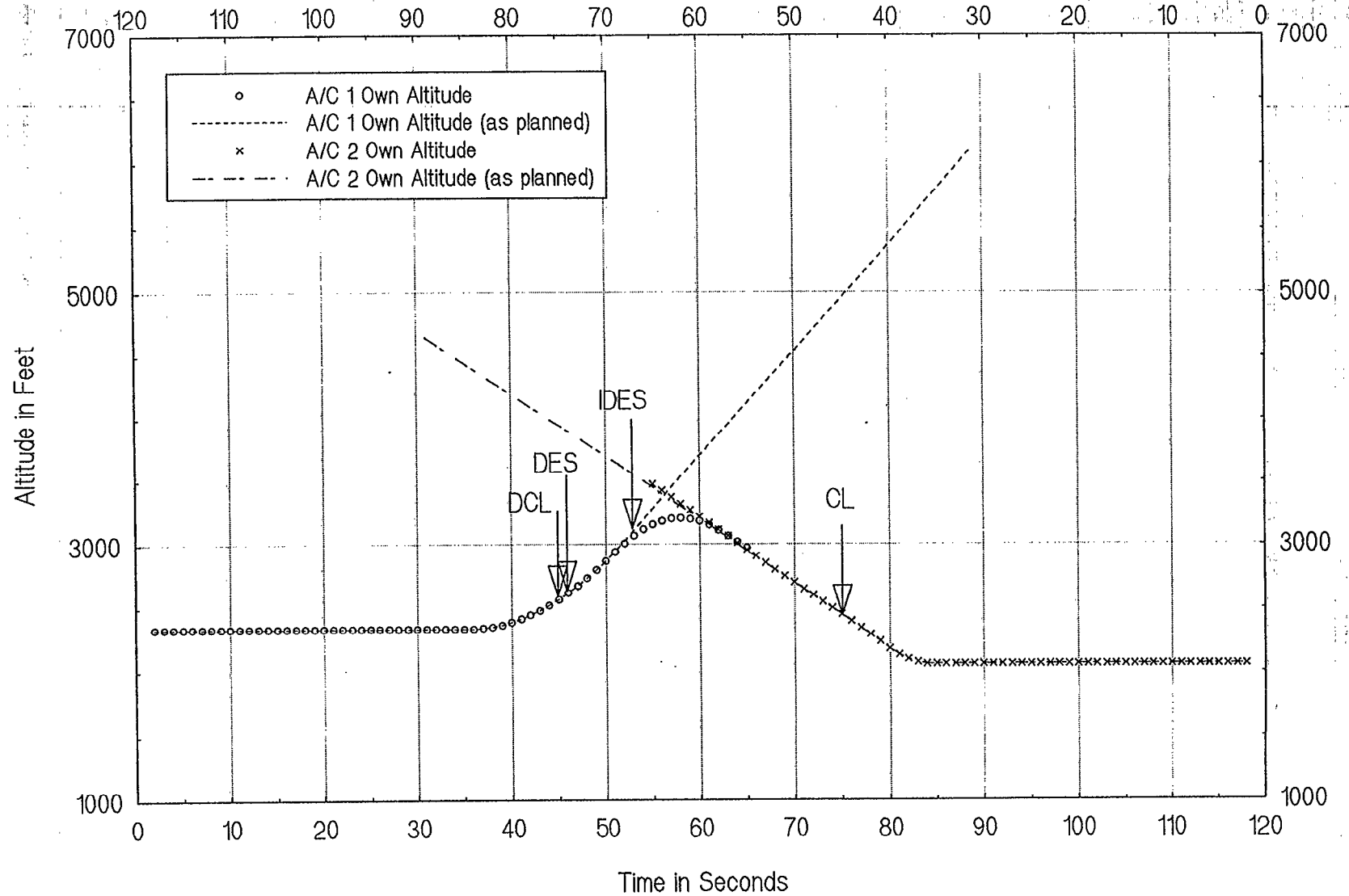
N-74



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND12C.EPC)

C7-25 vs C7-25 Data File Name=CL7B1T.DAT; REIT Number=2991

SIM MODE = 1175044 (Source: LL FTEG Run, October 1997)



N-75

Change 7 Representative NMAC I13

Mitre Encounter Class : 18

Reit Number : 1541

NMAC Characterization

90% had 100 ft tracker

10% had 25 ft tracker

planned separation 500, 750 ft

AC1 rates : -5000 fpm

AC2 rates : -1000, -3000, -5000 fpm

AC1 acceleration : 0.15, 0.25 g

AC2 acceleration : -0.05, -0.15, -0.25, -0.35 g

AC2 accel time : CPA - 20, 25 sec

100% of encounters had reversed RAs

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
87	87	% of RAs were non-crossing
0	0	% of NMACs were non-crossing
91	92	% of RAs were not reversed
97	99	% of NMACs were not reversed

Comments

10 members in group.

Similar to 6.04a Representative NMAC 27.

DATA FOR C7IND13

1541 6.04A RH VS 6.04A RL 18 -144.58 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUV = 25.0 ALIM = 350.0
 750.0 (-5000.0,0.0) (0.0,-3000.0) 0.15 -0.05 -25.0 -25.0 3700.0
 A/C1: 1165122 TA TIME :19 |TAUR | POTRA @34 (6FT) | DES @45 [XRA] | IDES @47
 A/C2: 1265022 TA TIME :19 |TAUR | DDES @43 [XRA] | CL @47

1541 C7 100 FT RH VS C7 100 FT RL 18 2.12 CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUV = 25.0 ALIM = 300.0
 750.0 (-5000.0,0.0) (0.0,-3000.0) 0.15 -0.05 -25.0 -25.0 3700.0
 A/C1:** REV **1171133 TA TIME :19 |TAUR | POTRA @34 | POTRA @40 | DES @44 [XRA]
 | CL @54
 A/C2:** REV **1271033 TA TIME :19 |TAUR | POTRA @34 (LVW) | POTRA @40 (LVW) | POTRA @42
 | DDES @43 [XRA] | CL @46 | DES @53

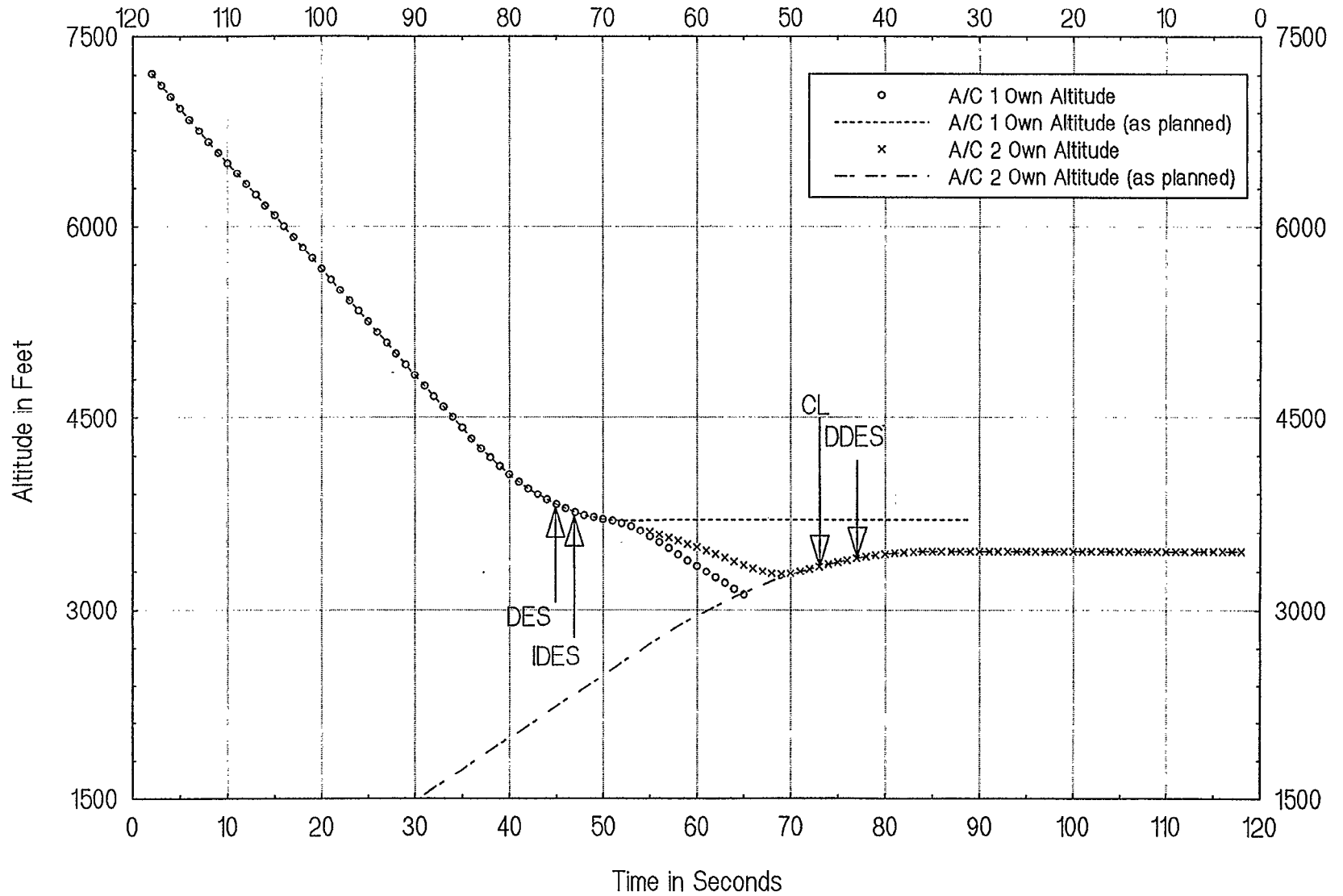
1541 C7 25 FT RH VS C7 25 FT RL 18 1373.09 NON_CROSSING_ENCOUNTER
 SL = 5 ZTHR = 600.0 TAUR = 25.0 TAUV = 25.0 ALIM = 300.0
 750.0 (-5000.0,0.0) (0.0,-3000.0) 0.15 -0.05 -25.0 -25.0 3700.0
 A/C1: 1175144 TA TIME :19 |TAUR | CL @34 [NXRA] | DDES @46
 A/C2: 1275044 TA TIME :19 |TAUR | DES @34 [NXRA] | IDES @41 | DCL @51

N-77

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND13A.EPC)

Data File Name=CL8B1F.DAT; REIT Number=1541

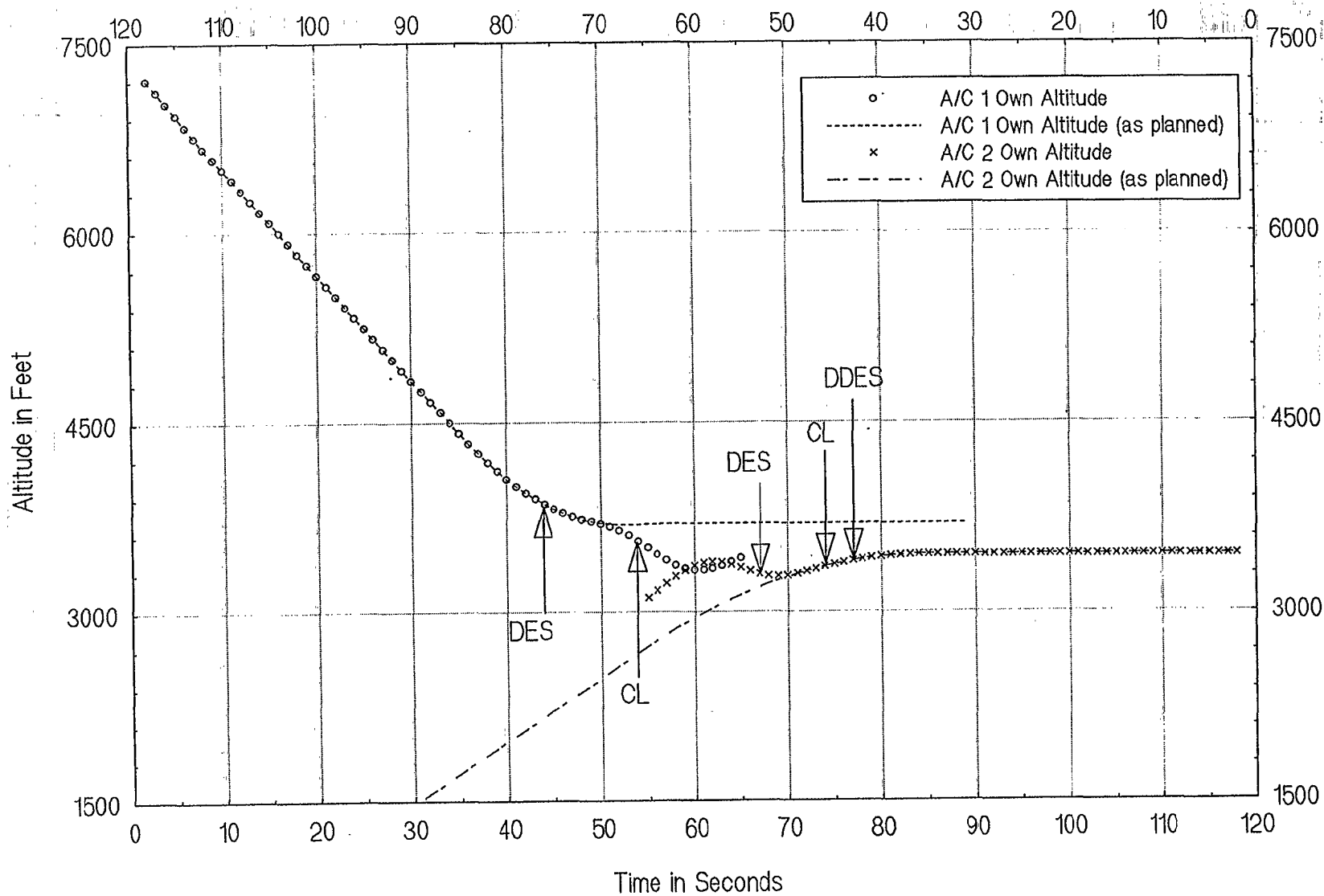
SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND13B.EPC)

C7-100 vs C7-100 Data File Name=CL8B1N.DAT; REIT Number=1541

SIM MODE = 1271033 (Source: LL FTEG Run, October 1997)

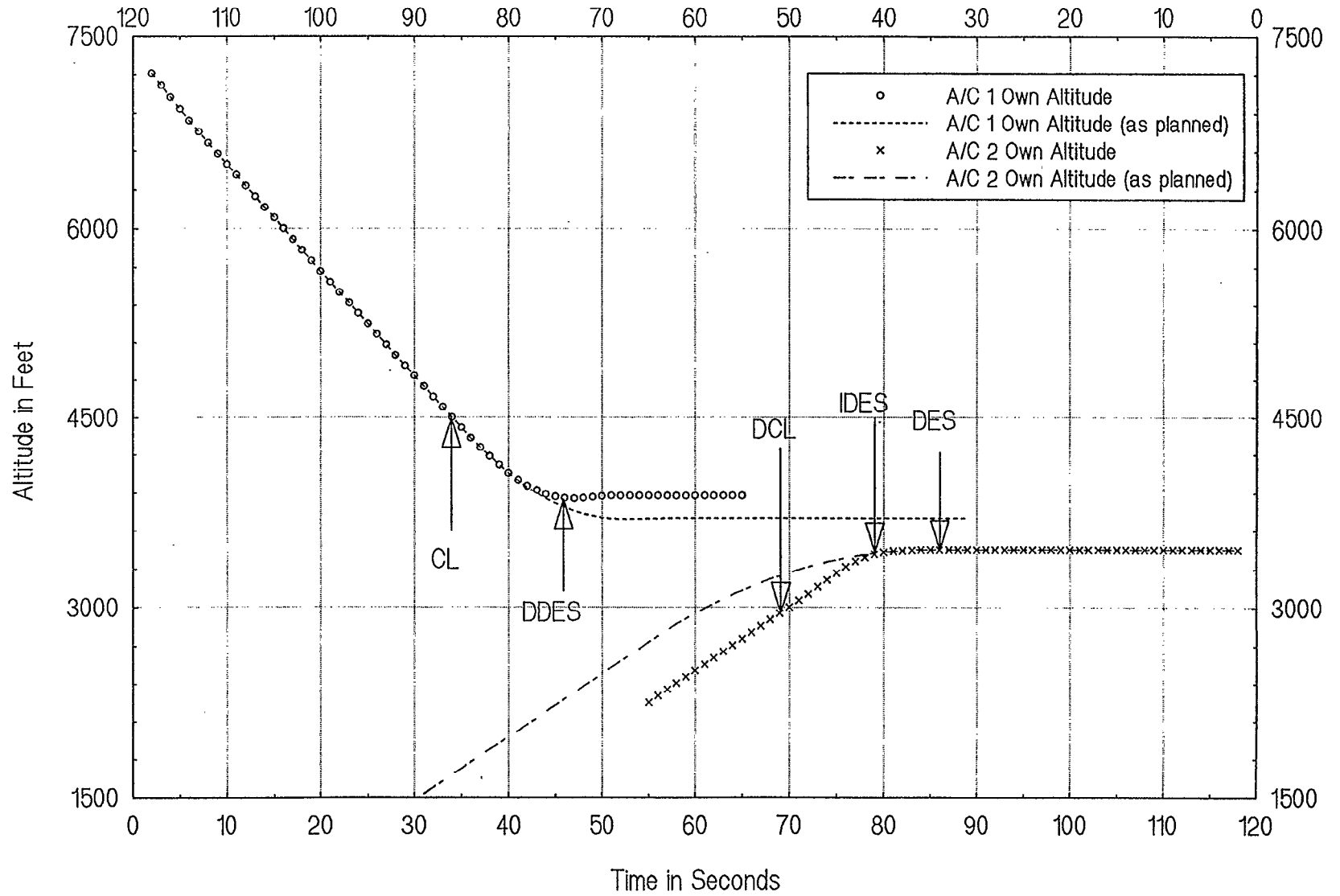


ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND13C.EPC)

C7-25 vs C7-25 Data File Name=CL8B1U.DAT; REIT Number=1541

SIM MODE = 1275044 (Source: LL FTEG Run, October 1997)

08-N



Change 7 Representative NMAC I14

Mitre Encounter Class : 19

Reit Number : 366

NMAC Characterization

81% had 100 ft tracker

19% had 25 ft tracker

planned separation

-250, -500 ft

AC1 rates :

1000, 3000, 5000 fpm

AC2 rates :

-3000, -5000 fpm

AC1 acceleration :

-0.05, -0.15 g

AC2 acceleration :

0.05, 0.15, 0.25, 0.35 g

AC2 accel time :

CPA - 20, 25 sec

100% of encounters had reversed RAs

Performance Statistics (relate to whole class)

<u>100 ft</u>	<u>25 ft</u>	
81	81	% of RAs were non-crossing
0	0	% of NMACs were non-crossing
93	92	% of RAs were not reversed
97	99	% of NMACs were not reversed

Comments

16 members in group.
New behavior not seen in 6.04a.

18-N

DATA FOR C7IND14

366 6.04A RH VS 6.04A RL 19 717.21 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 -250.0 (1000.0,0.0) (-3000.0,0.0) -0.05 0.25 -25.0 -25.0 3700.0
 A/C1: 1165122 TA TIME :19 |TAUR | POTRA @40 (DFD) | CL @41 [XRA] | ICL @44
 | MCL @55 | LD2 @56
 A/C2: 1265022 TA TIME :19 |TAUR | DES @40 [XRA] | IDES @49 | MDES @61

366 C7 100 FT RH VS C7 100 FT RL 19 -12.09 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 -250.0 (1000.0,0.0) (-3000.0,0.0) -0.05 0.25 -25.0 -25.0 3700.0
 A/C1:** REV **1171133 TA TIME :19 |TAUR | POTRA @40 | CL @41 [XRA] | ICL @44
 | DES @51 | IDES @53
 A/C2:** REV **1271033 TA TIME :19 |TAUR | DES @40 [XRA] | CL @50 | ICL @54

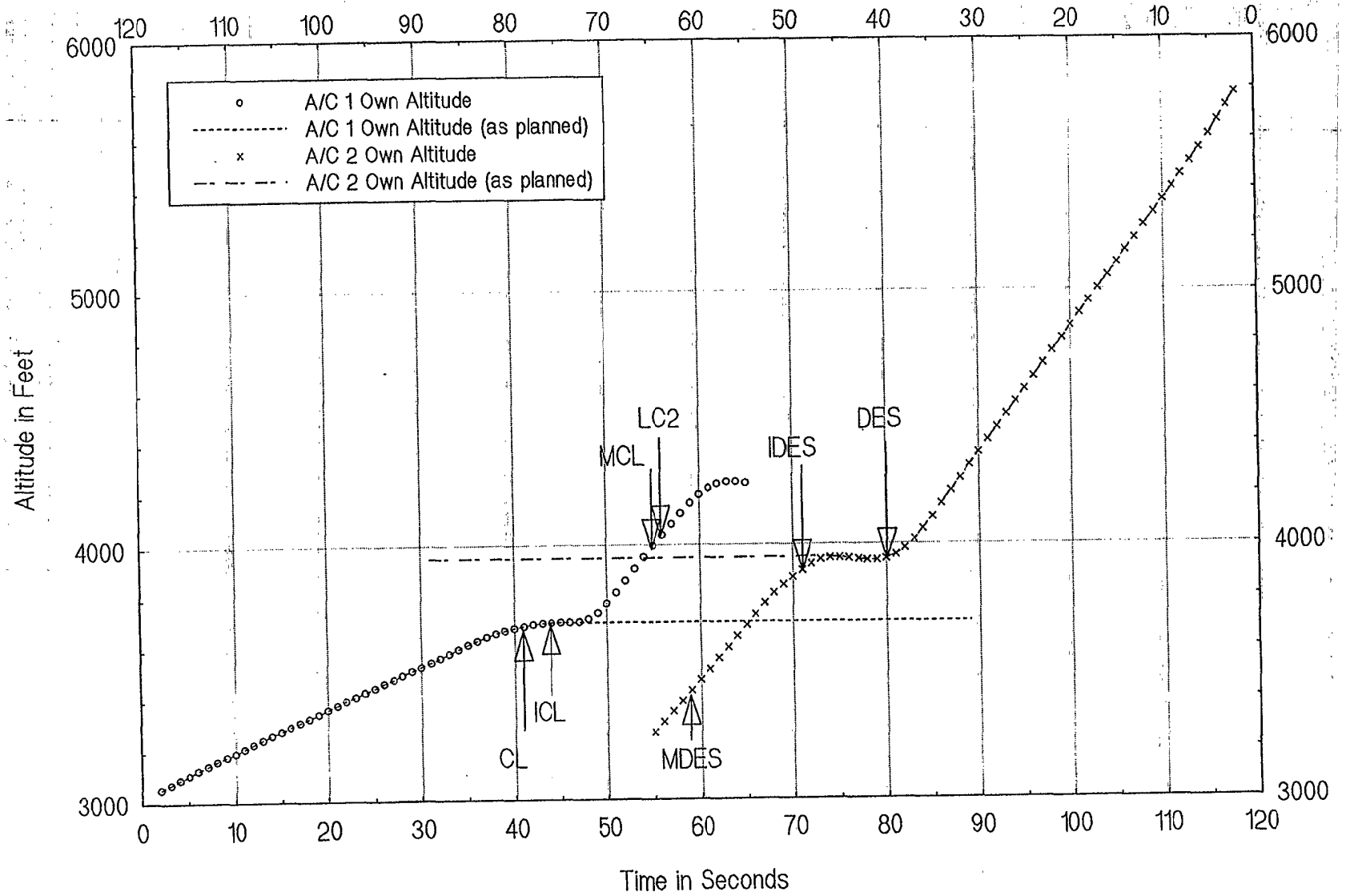
366 C7 25 FT RH VS C7 25 FT RL 19 593.96 CROSSING_ENCOUNTER
 SL = 4 ZTHR = 600.0 TAUR = 20.0 TAUUV = 20.0 ALIM = 300.0
 -250.0 (1000.0,0.0) (-3000.0,0.0) -0.05 0.25 -25.0 -25.0 3700.0
 A/C1: 1175144 TA TIME :19 |TAUR | CL @40 [XRA] | ICL @45 | DDES @56
 A/C2: 1275044 TA TIME :19 |TAUR | DES @40 [XRA] | DCL @56

N-82

ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND14A.EPC)

Data File Name=CL9B1F.DAT; REIT Number=366

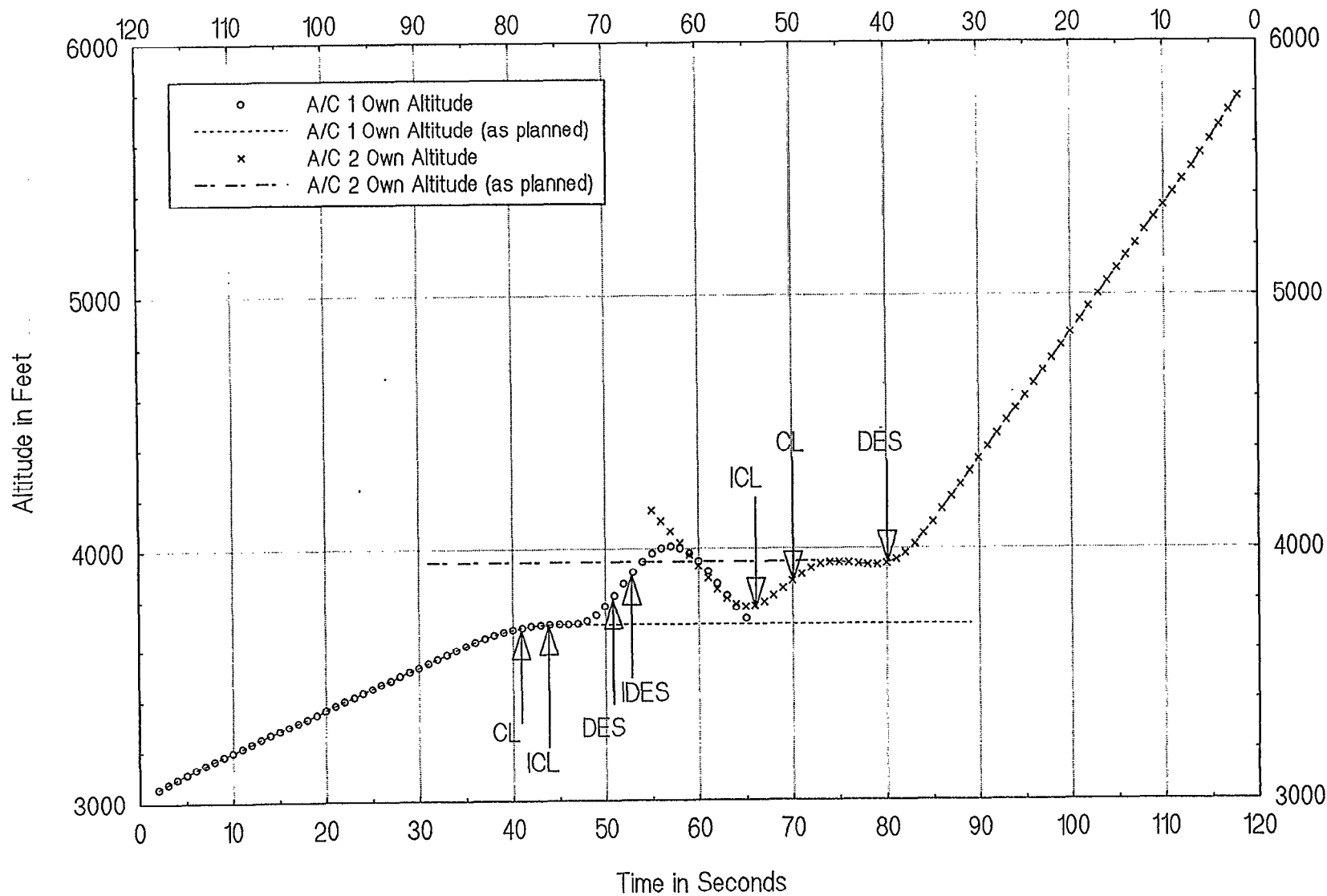
SIM MODE = 1165022 (Source: LL FTEG Run, October 1997)



ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND14B.EPC)

C7-100 vs C7-100 Data File Name=CL9B1NDAT; REIT Number=366

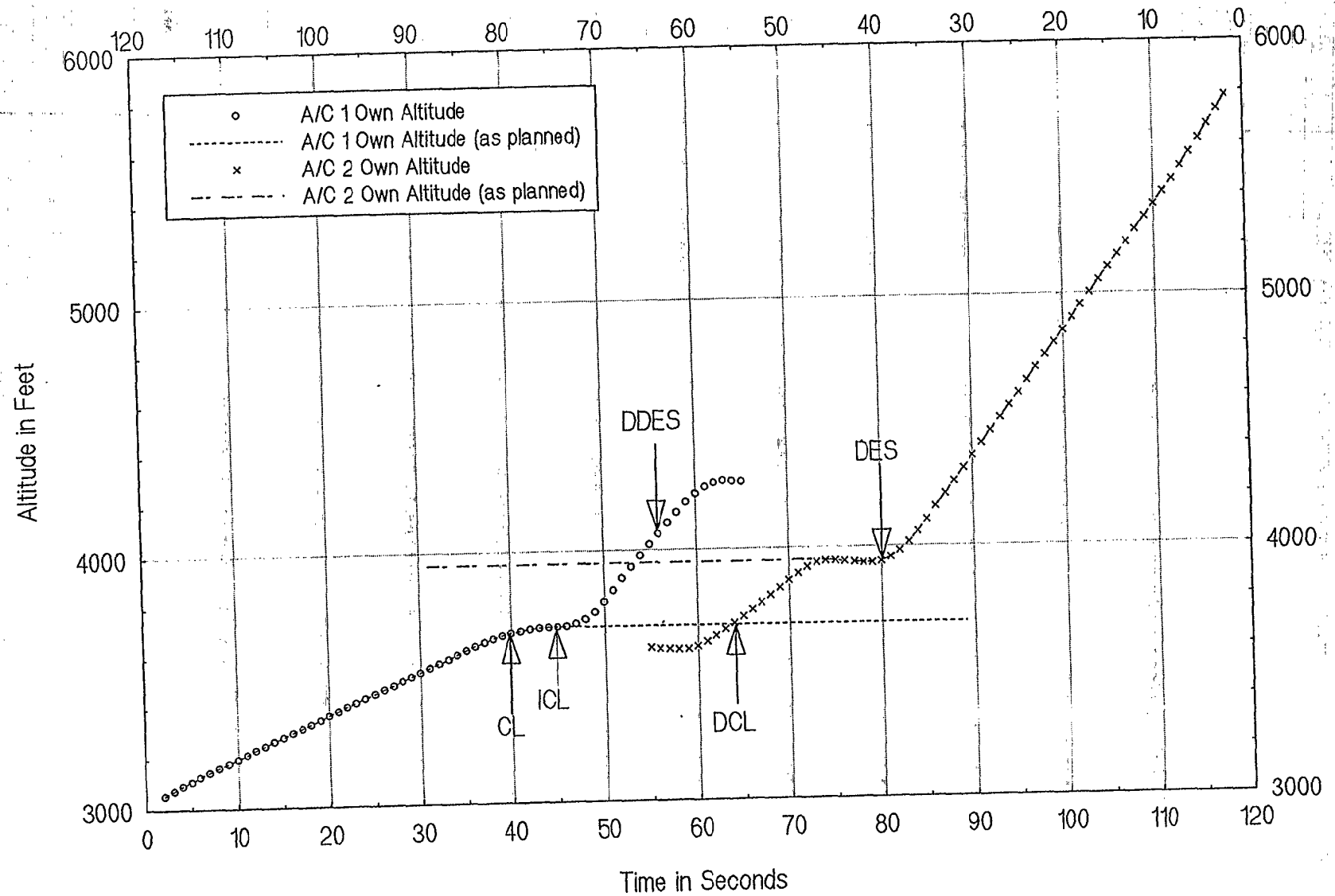
SIM MODE = 1271033 (Source: LL FTEG Run, October 1997)



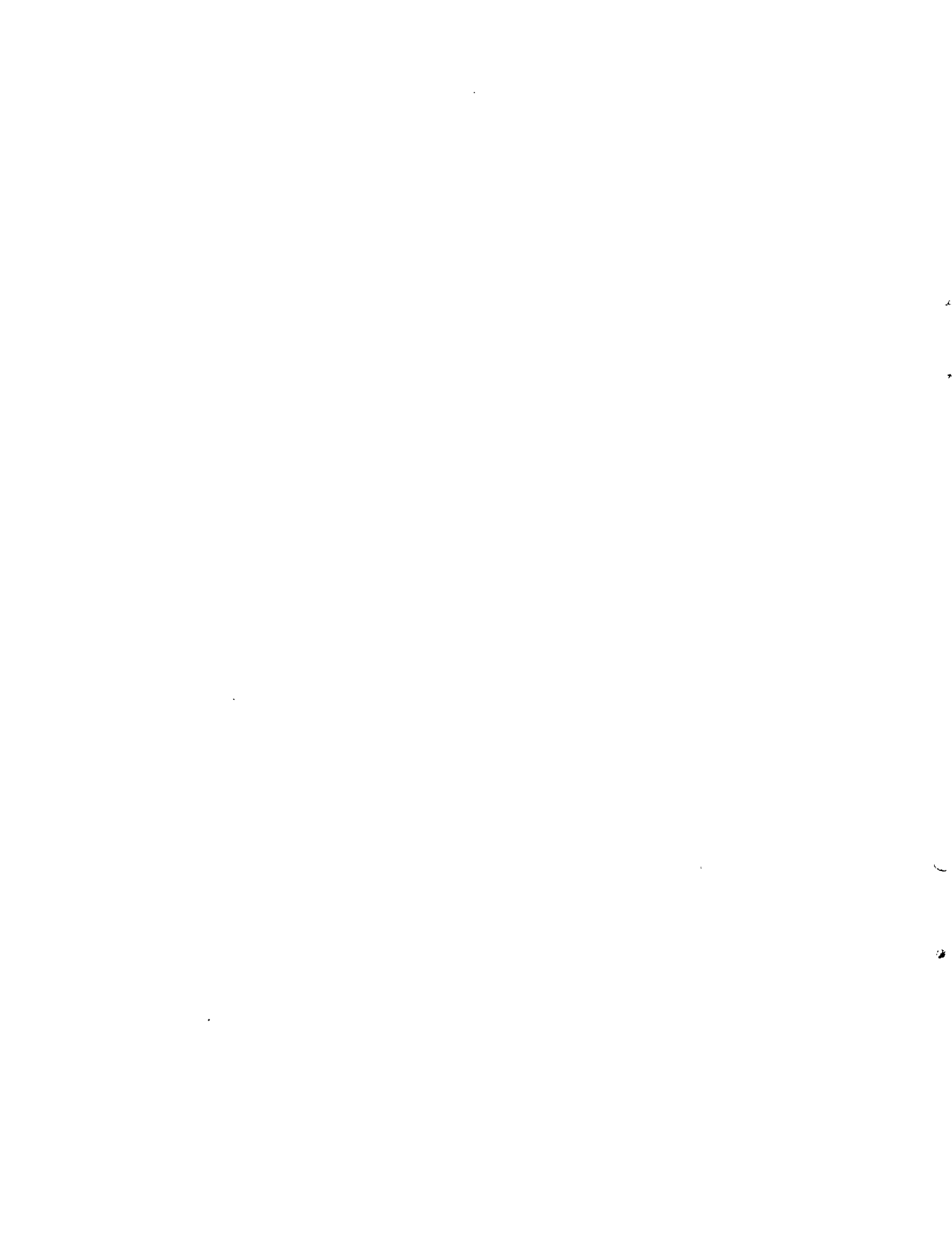
ENCOUNTER SUMMARY - AIRCRAFT ALTITUDES (File C7IND14C.EPC)

C7-25 vs C7-25 Data File Name=CL9B1U.DAT; REIT Number=366

SIM MODE = 1275044 (Source: LL FTEG Run, October 1997)



58-N



Appendix O

Glossary

ACAS	Airborne Collision Avoidance System
ALIM	Vertical Separation TCAS is trying to achieve
ARTS	Automated Radar Terminal System
ATCRBS	Air Traffic Control Radar Beacon System
CAS	Collision Avoidance System
CL	Climb RA
CPA	Closest Point of Approach
CRF	Change Request Form
DCL	Don't Climb RA
DDES	Don't Descend RA
DES	Descend RA
ERD	Encounter Recorded Data
FAA	Federal Aviation Administration
FAATC	Federal Aviation Administration Technical Center
FTEG	Fast Time Encounter Generator
ICL	Increase Climb RA
IDES	Increase Descend RA
LC1	Limit Climb 1000 fpm RA
LC2	Limit Climb 2000 fpm RA
LC5	Limit Climb 500 fpm RA
LD1	Limit Descent to 1000 fpm RA
LD2	Limit Descent to 2000 fpm RA
LD5	Limit Descent to 500 fpm RA
LLP	Lincoln Laboratory Parameter
MOPS	Minimum Operational Performance Standard
NMAC	Near Mid-Air Collision
PNR	Pilot Not Responding
PTR	Problem Trouble Report
PVMD	Projected Vertical Miss Distance
RA	Resolution Advisory
RELZ	Relative Altitude between two aircraft
TAUR	Range Tau

TAUV
TCAS

Vertical Tau
Traffic Alert and Collision Avoidance System

WJHTC

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