



Attachment 1

Table A6-1. Vertical distances between critical points on aircraft at maximum pitch attitude (VREF) (ILS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
B717-200	4.0 40	5.9	13.7	19.6	10.9	17.2	3.5	5.9	13.7	19.6	10.4	16.7
B737-300	5.1 30	0.8	17.7	18.6	15.6	16.6	4.6	0.8	17.7	18.6	15.2	16.2
B737-400	4.9 30	0.8	18.3	19.2	16.0	17.0	4.4	0.8	18.4	19.2	15.5	16.5
B737-500	5.2 30	0.8	17.2	18.0	15.3	16.3	4.7	0.8	17.2	18.0	14.9	15.9
B737-600 B737-600IGW	5.5 30	0.8	17.8	18.6	15.8	16.8	5.0	0.8	17.8	18.6	15.4	16.4
B737-600 w/Winglets	5.2 30	0.8	17.6	18.4	15.6	16.6	4.7	0.8	17.6	18.4	15.2	16.2
B737-700	5.5 30	0.8	18.4	19.2	16.3	17.2	5.0	0.8	18.4	19.2	15.8	16.8
B737-700 w/Winglets	5.2 30	0.8	18.2	19.0	16.0	17.0	4.7	0.8	18.2	19.0	15.6	16.5
B737-800	3.9 30	0.9	18.2	19.1	15.5	16.6	3.4	0.9	18.2	19.1	15.0	16.2
B737-800 w/Winglets	3.7 30	0.9	17.9	18.9	15.3	16.4	3.2	0.9	18.0	18.9	14.8	16.0
B737-900	3.0 30	1.0	17.7	18.7	14.9	16.0	2.5	1.0	17.7	18.7	14.3	15.5



Attachment 1

Table A6-1. Vertical distances between critical points on aircraft at maximum pitch attitude (VREF) (ILS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
B737-900 w/Winglets	2.7 30	1.0	17.4	18.4	14.5	15.7	2.2	1.0	17.4	18.4	14.0	15.2
B747-400 B747-400ER B747-400ERF	5 25	21.0	23.4	44.4	19.4	40.3	4.5	21.0	23.4	44.4	18.6	39.4
747-8I	4.6 25.0	21.0	24.6	45.5	19.9	40.8	4.1	21.0	24.6	45.6	19.0	39.8
747-8F	4.4 25.0	21.0	24.2	45.2	19.6	40.4	3.9	20.9	23.3	44.2	18.6	39.4
B757-200	5.9 25	6.1	22.5	28.6	19.2	25.5	5.4	6.1	22.5	28.6	18.5	24.9
B757-300	4.2 25	6.2	21.8	28.1	17.9	24.3	3.7	6.2	21.8	28.1	17.1	23.6
B767-200 B767-200ER	5.6 25	6.6	23.9	30.6	20.8	27.6	5.1	6.6	23.9	30.6	20.1	27
B767-300 B767-300ER	3.7 25	6.8	22.6	29.4	19.0	26.0	3.2	6.8	22.6	29.4	18.3	25.3
B767-400	3.7 25	6.8	24.6	31.4	20.5	27.1	3.2	6.8	24.6	31.4	19.6	25.3
B777-200 B777-200ER	3.5 25	12.9	21.4	34.2	17.3	29.9	3.0	12.9	21.4	34.3	16.5	29.0
B777-200LR	3.7 25	12.9	21.7	34.6	17.6	30.2	3.2	12.9	21.7	34.6	16.8	29.4



Attachment 1

Table A6-1. Vertical distances between critical points on aircraft at maximum pitch attitude (VREF) (ILS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
B777-300	3.2 25	12.8	22.1	35.0	17.3	29.8	2.8	12.8	22.3	35.2	16.5	29.0
B777-300ER	3.4 25	12.9	22.5	35.4	17.6	30.2	2.9	12.9	22.5	35.4	16.7	29.2
B777 Freighter	3.2 25	12.8	22.1	35.0	17.3	29.8	2.8	12.8	22.3	35.2	16.5	29.0
B787-8	4.6 25	8.0	23.9	32.0	20.0	28.3	4.1	8.0	23.9	32.0	19.2	27.6
B787-9	2.9 25	8.2	22.4	30.6	17.9	26.4	2.4	8.2	22.4	30.6	17.0	25.6
DC-8-62	2.4 35	6.6	16.4	23.0	13.1	20.0	1.9	6.6	16.4	23.0	12.4	19.4
DC-8-63	1.4 35	6.7	16.2	22.9	12.2	19.2	0.9	6.7	16.2	22.9	11.4	18.5
DC-8-61/71	2.6 25	6.6	18.1	24.7	14.1	21.0	2.1	6.6	18.1	24.7	13.3	20.3
DC-8-72	2.5 35	6.6	16.5	23.1	13.2	20.1	2.0	6.6	16.5	23.1	12.6	19.5
DC-8-73	1.6 35	6.7	16.5	23.2	12.5	19.5	1.1	6.7	16.5	23.2	11.7	18.8
DC-9-10	3.6 20	6.0	11.5	17.4	9.3	15.6	3.1	6.0	11.5	17.4	15.3	38.5



Attachment 1

Table A6-1. Vertical distances between critical points on aircraft at maximum pitch attitude (VREF) (ILS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
DC-9-20	7.5 25	5.4	14.7	20.1	12.6	18.4	7.0	5.4	14.7	20.1	12.2	18.1
DC-9-30	7.4 25	5.5	16.3	21.7	13.8	19.6	6.9	5.5	16.3	21.7	13.3	19.1
DC-9-33	6.2 25	5.6	15.3	20.9	12.8	18.7	5.7	5.6	15.3	20.9	12.3	18.3
DC-9-40	6.4 25	5.6	16.0	21.6	13.4	19.3	5.9	5.6	16.0	21.6	12.9	18.9
DC-9-50	7.2 25	5.5	17.6	23.1	14.8	20.6	6.7	5.5	17.7	23.1	14.3	20.2
DC-10-30	6.7 35	20.3	17.2	37.5	14.0	33.5	6.2	20.3	17.2	37.5	13.3	32.6
DC-10-40	7.5 35	20.5	18.3	38.8	15.0	34.7	7.0	20.5	18.3	38.8	14.4	33.9
MD-11	6.1 35	20.1	17.9	38.0	14.3	33.5	5.6	20.1	17.9	38.0	13.5	32.6
MD-80/81/ 82/83/88	6.9 28	5.5	20.1	25.6	16.8	22.7	6.4	5.5	20.1	25.6	16.1	22.1
MD-87	7.0 28	5.5	18.7	24.2	15.8	21.6	6.5	5.5	18.7	24.2	15.2	21.1
MD-90	6.1 28	5.6	19.8	25.4	16.2	22.2	5.6	5.6	19.8	25.4	15.5	21.6



Attachment 2

Table A6-2. Vertical distances between critical points on aircraft at minimum pitch attitude (VREF+5) (ILS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
B717-200	1.8 40	6.2	11.3	17.5	8.5	15.1	1.3	6.2	11.3	17.5	8.0	14.6
B737-300	2.1 40	1.0	15.2	16.2	13.0	14.3	1.6	1.0	15.2	16.2	12.6	13.9
B737-400	2.0 40	1.0	15.6	16.6	13.1	14.4	1.5	1.0	15.6	16.6	12.6	13.9
B737-500	2.3 40	1.0	15.0	16.0	13.0	14.2	1.8	1.0	15.0	16.0	12.6	13.9
B737-600 B737-600IGW	2.5 40	1.0	15.5	16.5	13.5	14.7	2.0	1.0	15.5	16.5	13.1	14.3
B737-600 w/Winglets	2.2 40	1.0	15.2	16.3	13.2	14.4	1.7	1.0	15.2	16.3	12.8	14.1
B737-700	2.5 40	1.0	15.8	16.9	13.7	14.9	2.0	1.0	15.9	16.9	13.2	14.4
B737-700 w/Winglets	2.1 40	1.0	15.5	16.5	13.3	14.5	1.6	1.0	15.5	16.5	12.9	14.1
B737-800	1.8 40	1.1	16.0	17.1	13.4	14.6	1.3	1.1	16.0	17.1	12.8	14.1
B737-800 w/Winglets	1.4 40	1.1	15.6	16.7	12.9	14.2	0.9	1.1	15.6	16.7	12.4	13.7
B737-900	1.3 40	1.1	15.8	16.9	12.9	14.2	0.8	1.1	15.8	16.9	12.4	13.7



Attachment 2

Table A6-2. Vertical distances between critical points on aircraft at minimum pitch attitude (VREF+5) (ILS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
B737-900 w/Winglets	1.0 40	1.1	15.5	16.6	12.6	13.9	0.5	1.1	15.5	16.6	12.0	13.4
B747-400 B747-400ER B747-400ERF	2.5 30	20.9	19.4	40.3	15.3	36.1	2.0	20.9	19.4	40.3	14.5	35.2
747-8I	2.6 30	20.9	20.9	41.8	16.2	36.9	2.1	20.9	20.9	41.8	15.3	36.0
747-8F	2.8 30	20.9	21.3	42.2	16.6	37.3	2.3	20.9	21.3	42.2	15.6	36.4
B757-200	2.5 30	6.4	18.0	24.4	14.6	21.2	2.0	6.4	18.0	24.4	14.0	20.6
B757-300	2.2 30	6.4	18.7	25.1	14.7	21.3	1.7	6.4	18.7	25.1	14.0	20.6
B767-200 B767-200ER	2.8 30	6.9	20.4	27.3	17.2	24.3	2.3	6.9	20.4	27.3	16.6	23.7
B767-300 B767-300ER	2.7 30	6.9	21.2	28.1	17.5	24.6	2.2	6.9	21.2	28.1	16.8	23.9
B767-400	2.5 30	6.9	23.2	30.1	19.1	26.2	2.0	6.9	23.3	30.2	18.3	25.4
B777-200 B777-200ER	2 30	12.7	20.1	32.9	16.0	28.5	1.6	12.8	20.3	33.1	15.4	27.8
B777-200LR	1.3 30	12.6	17.8	30.4	13.7	26.0	0.9	12.7	18.0	30.6	13.0	25.3



Attachment 2

Table A6-2. Vertical distances between critical points on aircraft at minimum pitch attitude (VREF+5) (ILS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
B777-300	1.5 30	12.7	20.8	33.5	15.9	28.4	1.0	12.7	20.8	33.5	15.0	27.3
B777-300ER	2.1 30	12.7	20.0	32.7	15.1	27.6	1.6	12.7	20.0	32.7	14.1	26.5
B777 Freighter	1.5 30	12.7	20.8	33.5	15.9	28.4	1.0	12.7	20.8	33.5	15.0	27.3
B787-8	1.4 30	8.4	18.9	27.3	14.9	23.6	0.9	8.4	18.9	27.3	14.1	22.8
B787-9	2.2 30	8.3	21.1	29.4	16.7	25.3	1.7	8.3	21.1	29.4	15.8	24.4
DC-8-63	-0.5 50	7.0	13.2	20.1	9.1	16.4	-1.0	7.0	13.2	20.1	8.3	15.6
DC-8-61/71	-2.5 50	7.2	9.9	17.1	5.9	13.4	-3.0	7.2	9.9	17.1	5.0	12.6
DC-8-72	0.5 50	6.8	13.9	20.7	10.6	17.7	0.0	6.8	13.9	20.7	9.9	17.1
DC-8-73	-0.3 50	6.9	13.5	20.4	9.4	16.7	-0.8	7.0	13.5	20.4	8.6	15.9
DC-9-10	-2.7 50	6.8	6.1	12.9	4.0	11.1	-3.2	6.8	6.1	12.9	3.5	10.7
DC-9-20	2.8 50	6.1	10.8	16.9	8.7	15.1	2.3	6.1	10.8	16.9	8.2	14.7



Attachment 2

Table A6-2. Vertical distances between critical points on aircraft at minimum pitch attitude (VREF+5) (ILS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to ILS beam (feet) H2	ILS beam to wheel path (feet) H	Eye path to wheel path (feet) H1	ILS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
DC-9-30	2.4 50	6.1	11.3	17.4	8.7	15.2	1.9	6.1	11.3	17.4	8.2	14.7
DC-9-33	1.4 50	6.3	10.5	16.8	8.0	14.5	0.9	6.3	10.5	16.8	7.4	14.1
DC-9-40	1.1 50	6.3	10.4	16.8	7.8	14.4	0.6	6.3	10.4	16.8	7.2	13.9
DC-9-50	2.7 50	6.1	12.6	18.7	9.7	16.1	2.2	6.1	12.6	18.7	9.1	15.6
DC-10-30	3.6 50	19.3	13.2	32.5	9.9	28.4	3.1	19.3	13.2	32.5	9.3	27.6
DC-10-40	4.0 50	19.4	13.7	33.2	10.5	29.0	3.5	19.4	13.7	33.2	9.8	28.2
MD-11	2.2 50	18.8	12.2	31.1	8.6	26.6	1.7	18.8	12.3	31.1	7.9	25.7
MD-80/81/ 82/83/88	2.6 40	6.1	14.4	20.5	11.0	17.5	2.1	6.1	14.4	20.5	10.4	16.9
MD-87	2.9 40	6.1	13.9	20.0	11.0	17.4	2.4	6.1	13.9	20.0	10.4	16.8
MD-90	2.2 40	6.2	14.3	20.4	10.7	17.2	1.7	6.2	14.3	20.4	10.0	16.5



Attachment 3

Table A6-3. Vertical distances between critical points on aircraft at maximum pitch attitude (approach at VREF) (MLS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
B717-200	Not Applicable											
B737-300	5.1 30	6.2	12.4	18.6	10.3	16.6	4.6	6.2	12.4	18.6	9.9	16.2
B737-400	4.9 30	6.2	13.0	19.2	10.6	17.0	4.4	6.2	13.0	19.2	10.1	16.5
B737-500	5.2 30	6.2	11.9	18.0	10.0	16.3	4.7	6.2	11.9	18.0	9.6	15.9
B737-600 B737-600IGW	5.5 30	6.1	12.4	18.6	10.5	16.8	5.0	6.2	12.4	18.6	10.1	16.4
B737-600 w/Winglets	5.2 30	6.2	12.2	18.4	10.3	16.6	4.7	6.2	12.2	18.4	9.9	16.2
B737-700	5.5 30	6.1	13.1	19.2	10.9	17.2	5.0	6.2	13.1	19.2	10.5	16.8
B737-700 w/Winglets	5.2 30	6.2	12.8	19.0	10.7	17.0	4.7	6.2	12.8	19.0	10.2	16.6
B737-800	3.9 30	6.3	12.8	19.1	10.2	16.6	3.4	6.3	12.8	19.1	9.7	16.2
B737-800 w/Winglets	3.7 30	6.3	12.6	18.9	10.0	16.4	3.2	6.3	12.6	18.9	9.5	16.0
B737-900	3.0 30	6.3	12.4	18.7	9.6	16.0	2.5	6.3	12.4	18.7	9.0	15.5



Attachment 3

Table A6-3. Vertical distances between critical points on aircraft at maximum pitch attitude (approach at VREF) (MLS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
B737-900 w/Winglets	2.7 30	6.3	12.0	18.4	9.2	15.7	2.2	6.3	12.0	18.4	8.7	15.2
B747-400 B747-400ER B747-400ERF	5 25	20.6	23.8	44.4	19.8	40.3	4.5	20.6	23.8	44.4	19.0	39.4
747-8F 747-8I	Not Applicable											
B757-200	5.9 25	7.0	21.6	28.6	18.4	25.5	5.4	7.0	21.6	28.6	17.7	24.9
B757-300	4.2 25	7.1	21.0	28.1	17.1	24.3	3.7	7.1	21.0	28.1	16.4	23.6
B767-200 B767-200ER	5.6 25	7.3	23.3	30.6	20.2	27.6	5.1	7.3	23.3	30.6	19.5	27
B767-300 B767-300ER	3.7 25	7.4	22.0	29.4	18.4	26.0	3.2	7.4	22.0	29.4	17.7	25.3
B767-400	3.7 25	7.4	24.0	31.4	19.9	27.1	3.2	7.4	24.0	31.4	19.0	26.3
B777-200 B777-200ER	3.5 25	9.9	24.4	34.2	20.0	29.9	3.0	9.9	24.4	34.3	19.1	29.0
B777-200LR	3.7 25	9.8	24.7	34.6	20.3	30.2	3.2	9.9	24.8	34.6	19.4	29.4



Attachment 3

Table A6-3. Vertical distances between critical points on aircraft at maximum pitch attitude (approach at VREF) (MLS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
B777-300	3.2 25	9.9	25.1	35.0	19.9	29.8	2.8	9.9	25.3	35.2	19.1	29.0
B777-300ER	3.4 25	9.9	25.5	35.4	20.3	30.2	2.9	9.9	25.5	35.4	19.3	29.2
B777 Freighter	3.2 25	9.9	25.1	35.0	19.9	29.8	2.8	9.9	25.3	35.2	19.1	29.0
B787-8 B787-9	Not Applicable											
DC-8-62	Not Applicable											
DC-8-63	Not Applicable											
DC-8-61/71	Not Applicable											
DC-8-72	Not Applicable											
DC-8-73	Not Applicable											
DC-9-10	Not Applicable											
DC-9-20	Not Applicable											



Attachment 3

Table A6-3. Vertical distances between critical points on aircraft at maximum pitch attitude (approach at VREF) (MLS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
DC-9-30	Not Applicable											
DC-9-33	Not Applicable											
DC-9-40	Not Applicable											
DC-9-50	Not Applicable											
DC-10-30	6.7 35	20.3	17.3	37.6	14.0	33.5	6.2	20.3	17.3	37.6	13.4	32.7
DC-10-40	7.5 35	20.5	18.3	38.8	15.1	34.8	7.0	20.5	18.3	38.8	14.4	34.0
MD-11	6.1 35	20.1	17.9	38.0	14.3	33.6	5.6	20.1	17.9	38.0	13.6	32.7
MD-80/81/ 82/83/88	Not Applicable											
MD-87	Not Applicable											
MD-90	Not Applicable											



Attachment 4

Table A6-4. Vertical distances between critical points on aircraft at minimum pitch attitude (approach at VREF +5) (MLS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
B717-200	Not Applicable											
B737-300	2.1 40	6.4	9.9	16.2	7.7	14.3	1.6	6.4	9.9	16.2	7.3	13.9
B737-400	2.0 40	6.4	10.3	16.6	7.9	14.4	1.5	6.4	10.3	16.6	7.4	13.9
B737-500	2.3 40	6.4	9.7	16.0	7.7	14.2	1.8	6.4	9.7	16.0	7.3	13.9
B737-600 B737-600IGW	2.5 40	6.3	10.1	16.5	8.2	14.7	2.0	6.3	10.1	16.5	7.8	14.3
B737-600 w/Winglets	2.2 40	6.4	9.9	16.3	7.9	14.4	1.7	6.4	9.9	16.3	7.5	14.1
B737-700	2.5 40	6.3	10.5	16.9	8.4	14.9	2.0	6.3	10.5	16.9	7.9	14.4
B737-700 w/Winglets	2.1 40	6.4	10.2	16.5	8.0	14.5	1.7	6.4	10.3	16.6	7.7	14.2
B737-800	1.8 40	6.4	10.7	17.0	8.1	14.6	1.3	6.4	10.7	17.0	7.6	14.1
B737-800 w/Winglets	1.4 40	6.4	10.2	16.7	7.7	14.2	0.9	6.4	10.2	16.7	7.1	13.7
B737-900	1.3 40	6.4	10.5	16.9	7.7	14.2	0.8	6.4	10.5	16.9	7.1	13.7



Attachment 4

Table A6-4. Vertical distances between critical points on aircraft at minimum pitch attitude (approach at VREF +5) (MLS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
B737-900 w/Winglets	1.0 40	6.4	10.1	16.6	7.3	13.9	0.5	6.4	10.2	16.6	6.8	13.4
B747-400 B747-400ER B747-400ERF	2.5 30	20.5	19.8	40.3	15.7	36.1	2.0	20.5	19.8	40.3	14.9	35.2
B747-8F B747-8I	Not Applicable											
B757-200	2.5 30	7.2	17.2	24.4	13.9	21.2	2.0	7.2	17.2	24.4	13.3	20.6
B757-300	2.2 30	7.2	17.9	25.1	14.0	21.3	1.7	7.2	17.9	25.1	13.3	20.6
B767-200 B767-200ER	2.8 30	7.5	19.8	27.3	16.6	24.3	2.3	7.5	19.8	27.3	16	23.7
B767-300 B767-300ER	2.5 30	7.5	20.3	27.8	16.7	24.3	2.0	7.5	20.3	27.8	15.9	23.6
B767-400	2.5 30	7.5	22.0	29.5	17.9	25.2	2.0	7.5	22.0	29.5	17.1	24.4
B777-200 B777-200ER	2 30	9.8	23.1	32.9	19.0	28.5	1.6	9.9	21.9	31.8	16.6	26.5
B777-200LR	1.3 30	9.9	20.5	30.4	16.0	26.0	0.9	9.9	20.7	30.6	15.3	25.3



Attachment 4

Table A6-4. Vertical distances between critical points on aircraft at minimum pitch attitude (approach at VREF +5) (MLS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
B777-300	1.5 30	9.9	21.6	31.5	16.4	26.3	1.0	9.9	21.6	31.5	15.3	25.3
B777-300ER	2.1 30	9.9	23.9	33.8	17.6	27.6	1.6	9.9	22.8	32.7	16.6	26.5
B777 Freighter	1.5 30	9.9	21.6	31.5	16.4	26.3	1.0	9.9	21.6	31.5	15.3	25.3
B787-8 B787-9	Not Applicable											
DC-8-62	Not Applicable											
DC-8-63	Not Applicable											
DC-8-61/71	Not Applicable											
DC-8-72	Not Applicable											
DC-8-73	Not Applicable											
DC-9-10	Not Applicable											
DC-9-20	Not Applicable											



Attachment 4

Table A6-4. Vertical distances between critical points on aircraft at minimum pitch attitude (approach at VREF +5) (MLS)

Aircraft Model	2.5 degree glide slope						3.0 degree glide slope					
	FD Pitch (deg) Flap Setting	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4	FD Pitch (degree)	Eye path to "ILS" path (feet) H2	"ILS" path to wheel path (feet) H	Eye path to wheel path (feet) H1	MLS antenna above wheels (feet) H3	Pilots Eye above wheels (feet) H4
DC-9-30	Not Applicable											
DC-9-33	Not Applicable											
DC-9-40	Not Applicable											
DC-9-50	Not Applicable											
DC-10-30	3.6 50	19.3	13.3	32.6	10.0	28.4	3.1	19.3	13.3	32.6	9.3	27.6
DC-10-40	4.0 50	19.4	13.8	33.2	10.5	29.1	3.5	19.4	13.8	33.2	9.9	28.3
MD-11	2.2 50	18.8	12.3	31.1	8.6	26.6	1.7	18.8	12.3	31.1	7.9	25.7
MD-80/81/ 82/83/88	Not Applicable											
MD-87	Not Applicable											
MD-90	Not Applicable											