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NACA

RESEARCH MEMORANDUM

EVALUATION OF GUST AND DRAFT VELOCITIES FROM

FLIGHTS OF P-61C AIRPLANES WITHIN THUNDERSTORMS

AUGUST 23, 1946 TO SEPTEMBER 4, 1946

AT ORLANDO, FLORIDA

By

H. B. Tolefson

Langley Memorial Aeronautical Laboratory
Langley Field, Va.

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RESEARCH MEMORANDUM

EVALUATION OF GUST AND DRAFT VELOCITIES FROM FLIGHTS OF P-61C AIRPLANES WITHIN THUNDERSTORMS AUGUST 23, 1946 TO SEPTEMBER 4, 1946 AT ORLANDO, FLORIDA

By H. B. Tolefson

This report presents the results obtained from gust and draft velocity measurements within thunderstorms for the period August 23, 1946 to September 4, 1946 at Orlando, Florida. These data are summarized in tables I and II and are of the type presented in reference 1 for previous flights.

In several of the surveys, indications of ambient air temperature were obtained from photo-observer records. These data are summarized in table III.

Langley Memorial Aeronautical Laboratory
National Advisory Committee for Aeronautics
Langley Field, Va.

Harold B. Tolefson
Harold B. Tolefson
Aeronautical Engineer

Approved: Richard V. Rhode
Richard V. Rhode
Chief of Aircraft Loads Division

CJB

REFERENCE

1. Tolefson, H. B.: Evaluation of Gust and Draft Velocities from Flights of P-61C Airplanes within Thunderstorms August 21, 1946 to August 22, 1946 at Orlando, Florida. NACA RM No. L6L02a, 1946.

TABLE I.- SUMMARY OF GUST MEASUREMENTS FROM FLIGHTS

OF P-61C AIRPLANES WITHIN THUNDERSTORMS

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 347 Traverse 1	Time (EST) - (a) Length of traverse 194.0 sec, 71,888 ft Initial heading (deg) - (a)							
0 - 3	26,000	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		3.8	-5.1	----	-----	----	----	2
12 - 15		4.1	-5.1	----	-4.2	----	73	4
15 - 18		7.3	-2.5	----	-----	----	----	4
18 - 21		10.1	-10.1	----	-6.6	----	108	9
21 - 24		9.2	-8.9	21.4	-----	333	----	6
24 - 27		10.1	-11.4	----	-45.9	----	486	5
27 - 30		7.6	-4.7	6.4	-21.4	110	114	9
30 - 33		8.5	-8.5	15.9	-----	38	----	8
33 - 36		5.4	-5.1	----	-10.2	----	148	6
36 - 39		5.7	-3.2	----	-----	----	----	4
39 - 42	26,500	5.1	-6.0	10.5	-----	109	----	2
42 - 45		9.5	-6.3	18.0	-----	71	----	6
45 - 48		4.7	-11.1	----	-----	----	----	5
48 - 51		7.9	-3.2	----	-----	----	----	4
51 - 54		7.0	-3.8	----	-----	----	----	6
54 - 57		7.3	-----	----	-----	----	----	4
57 - 60		7.3	-5.1	10.2	-----	185	----	4
60 - 63		5.1	-4.7	----	-----	----	----	3
63 - 66		4.7	-5.1	11.9	-----	38	----	8
66 - 69		5.4	-2.5	8.9	-----	153	----	7
69 - 72		----	-1.6	----	-----	----	----	1
Airplane 347 Traverse 2	Time (EST) 155226 - (b) Length of traverse 276.6 sec, 102,264 ft Initial heading (deg) 250							
0 - 3	25,500	3.1	-----	6.3	-----	55	----	1
3 - 6		1.9	-----	----	-----	----	----	2

[a]No motion-picture records obtained.
[b]Film supply for motion-picture camera exhausted before end of traverse.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 347 Traverse 2		Time (EST) 155226 - (b) Length of traverse 276.6 sec, 102,264 ft Initial heading (deg) 250						
6 - 9	25,500	2.5	-----	----	-----	----	----	1
9 - 12		2.5	-2.2	6.4	-----	106	----	2
12 - 15		2.5	-2.2	----	-8.4	----	108	3
15 - 18		----	-4.7	----	-10.0	----	145	2
18 - 21		3.8	-----	8.2	-----	248	----	1
21 - 24		----	-3.1	----	-----	----	----	1
24 - 27		5.3	-2.5	7.7	-5.1	282	106	6
27 - 30		----	-3.8	----	-----	----	----	2
30 - 33		----	-----	----	-----	----	----	0
33 - 36		5.0	-4.7	9.4	-----	145	----	5
36 - 39		1.9	-3.5	----	-----	----	----	2
39 - 42		6.0	-3.8	11.9	-----	217	----	4
42 - 45		7.8	-3.5	----	-7.6	----	75	5
45 - 48		7.5	-2.5	8.8	-----	150	----	6
48 - 51		----	-3.8	----	-----	----	----	2
51 - 54		9.4	-4.7	19.9	-----	342	----	6
54 - 57		10.4	-4.7	10.8	-----	77	----	4
57 - 60		8.8	-4.7	----	-----	----	----	4
60 - 63		7.5	-5.0	----	-13.7	----	223	4
63 - 66	26,000	4.1	-8.5	----	-----	----	----	5
66 - 69		7.2	-6.0	----	-----	----	----	8
69 - 72		7.2	-7.2	----	-----	----	----	4
72 - 75		----	-3.8	----	-8.9	----	37	2
75 - 78		4.7	-----	----	-----	----	----	1
78 - 81		5.3	-5.6	----	-----	----	----	11
81 - 84		7.2	-8.8	----	-----	----	----	4
84 - 87		5.0	-7.2	----	-----	----	----	6
87 - 90		6.6	-6.6	16.9	-----	108	----	4
90 - 93		7.2	-6.9	10.3	-----	110	----	6
93 - 96	25,500	6.0	-5.0	----	-----	----	----	6
96 - 99		4.7	-3.5	8.2	-----	78	----	8
99 - 102		6.9	-4.4	----	-----	----	----	7
102 - 105		----	-----	----	-----	----	----	0

[b]Film supply for motion-picture camera exhausted before end of traverse.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 347 Traverse 3	Time (EST) - (a) Length of traverse 206.7 sec, 74,869 ft Initial heading (deg) - (a)							
0 - 3	26,000	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-----	----	-----	----	----	0
12 - 15		----	-----	----	-----	----	----	0
15 - 18		----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	0
21 - 24		----	-----	----	-----	----	----	0
24 - 27		----	-----	----	-----	----	----	0
27 - 30		----	-----	----	-----	----	----	0
30 - 33		5.0	-7.1	5.5	-----	71	----	6
33 - 36		9.6	-5.9	----	-----	----	----	7
36 - 39		5.9	-7.4	10.2	-----	36	----	11
39 - 42		3.1	-7.4	----	-----	----	----	4
42 - 45	25,500	6.2	-----	----	-----	----	----	1
45 - 48		2.8	-2.5	----	-----	----	----	2
48 - 51		----	-4.7	----	-12.8	----	196	1
51 - 54		3.4	-5.0	----	-----	----	----	3
54 - 57		5.3	-2.5	----	-----	----	----	3
57 - 60		2.5	-2.8	5.4	-7.4	76	153	3
60 - 63		5.0	-1.6	9.3	-----	75	----	2
63 - 66		2.5	-----	6.8	-----	148	----	1
66 - 69		----	-4.3	----	-7.9	----	185	3
69 - 72		4.3	-2.5	----	-----	----	----	3
72 - 75		----	-----	----	-----	----	----	0
Airplane 347 Traverse 4	Time (EST) 162404 - 162700 Length of traverse 205.2 sec, 76,339 ft Initial heading (deg) 10							
0 - 3	26,000	----	-----	----	-----	----	----	0
3 - 6		2.5	-----	----	-----	----	----	1
6 - 9		----	-2.5	----	-----	----	----	1

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 347 Traverse 4		Time (EST) 162404 - 162700 Length of traverse 205.2 sec, 76,339 ft Initial heading (deg) 10						
9 - 12	26,000	----	-5.2	----	-----	----	----	3
12 - 15		2.5	-3.7	----	-----	----	----	2
15 - 18		3.4	-4.9	----	-----	----	----	6
18 - 21		4.3	-2.5	11.8	-----	225	----	4
21 - 24	25,500	3.4	-4.9	----	-10.6	----	75	4
24 - 27		6.2	-9.5	----	-----	----	----	3
27 - 30		5.5	-3.7	----	-----	----	----	2
30 - 33		2.5	-----	----	-----	----	----	1
33 - 36		4.3	-2.8	4.4	-----	239	----	2
36 - 39		----	-3.7	----	-----	----	----	2
39 - 42		4.6	-4.9	8.1	-----	116	----	9
42 - 45		6.2	-2.2	13.4	-----	190	----	3
45 - 48		6.8	-5.2	9.9	-4.3	76	192	8
48 - 51		2.5	-3.7	----	-----	----	----	3
51 - 54		4.0	-----	----	-----	----	----	1
54 - 57		2.5	-5.2	----	-----	----	----	2
57 - 60		10.1	-6.8	12.6	-----	91	----	3
60 - 63		----	-5.2	----	-----	----	----	1
63 - 66		10.5	-2.5	----	-14.3	----	262	6
66 - 69		10.1	-9.8	----	-----	----	----	6
69 - 72		14.1	-10.1	19.5	-----	155	----	6
72 - 75		5.5	-12.9	----	-----	----	----	4
75 - 78		----	-----	----	-----	----	----	0
Airplane 345 Traverse 1		Time (EST) - (a) Length of traverse 304.2 sec, 101,735 ft Initial heading - (a)						
0 - 3	21,500	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-5.4	5.5	-----	129	----	4
9 - 12		----	-3.2	----	-6.1	----	129	5
12 - 15		2.9	-3.2	6.6	-----	157	----	6
15 - 18		3.5	-3.5	6.6	-6.1	189	94	4

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 345 Traverse 1		Time (EST) - (a) Length of traverse 304.2 sec, 101,735 ft Initial heading - (a)						
18 - 21	21,500	----	-5.4	----	-----	----	----	2
21 - 24		----	-----	----	-----	----	----	5
24 - 27		4.1	-7.3	----	-13.3	----	129	5
27 - 30		5.4	-5.1	13.8	-----	129	----	4
30 - 33		5.7	-6.7	----	-----	----	----	6
33 - 36		5.1	-----	----	-6.3	----	101	6
36 - 39		3.8	-7.3	----	-----	----	----	8
39 - 42		3.8	-3.2	----	-----	----	----	5
42 - 45		3.2	-4.8	----	-15.0	----	207	6
45 - 48		6.7	-4.8	8.5	-14.2	211	176	8
48 - 51		5.7	-4.8	----	-13.2	----	140	8
51 - 54		9.2	-10.8	13.6	-16.5	102	68	8
54 - 57		4.5	-5.7	----	-15.6	----	199	6
57 - 60		8.3	-8.3	----	-6.0	----	138	10
60 - 63		8.3	-9.2	34.9	-25.2	365	223	10
63 - 66		----	-3.5	----	-----	----	----	7
66 - 69		4.5	-3.5	----	-----	----	----	5
69 - 72		5.1	-7.3	----	-12.0	----	337	7
72 - 75		5.4	-4.8	12.6	-----	199	----	4
75 - 78		3.2	-6.1	----	-7.8	----	269	5
78 - 81		4.1	-----	----	-----	----	----	3
81 - 84		----	-2.5	6.6	-----	194	----	3
84 - 87		----	----	----	-----	----	----	3
87 - 90		----	-3.8	----	-----	----	----	3
90 - 93		3.2	-----	6.6	-3.6	68	133	3
93 - 96		----	-2.5	----	-----	----	----	3
96 - 99	21,000	3.5	-----	7.6	-----	215	----	3
99 - 102		----	-----	----	-----	----	----	1
Airplane 345 Traverse 2		Time (EST) - (a) Length of traverse 272.6 sec, 91,740 ft Initial heading - (a)						
0 - 3	20,500	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gust
August 23, 1946 - Flight 27								
Airplane 345 Traverse 2	Time (EST) - (a) Length of traverse 272.6 sec, 91,740 ft Initial heading - (a)							
6 - 9	20,500	----	-3.2	----	-----	----	----	2
9 - 12		----	-----	----	-----	----	----	3
12 - 15		----	-3.8	----	-----	----	----	1
15 - 18	21,000	----	-----	----	-----	----	----	1
18 - 21		----	-----	----	-----	----	----	3
21 - 24		----	-----	----	-----	----	----	0
24 - 27		----	-4.4	----	-----	----	----	2
27 - 30		----	-----	----	-----	----	----	0
30 - 33		2.8	-3.2	----	-4.7	----	131	5
33 - 36		----	-----	----	-----	----	----	1
36 - 39		3.2	-3.5	----	-----	----	----	8
39 - 42		3.2	-4.7	----	-9.0	----	105	8
42 - 45		6.6	-3.5	----	-----	----	----	8
45 - 48		6.9	-5.7	----	-----	----	----	7
48 - 51		4.7	-7.2	----	-----	----	----	8
51 - 54		8.8	-12.9	----	-8.3	----	87	8
54 - 57		8.8	-11.0	6.0	-----	133	----	9
57 - 60		5.0	-8.5	----	-----	----	----	7
60 - 63	21,500	6.0	-5.7	----	-----	----	----	7
63 - 66		6.0	-10.0	----	-----	----	----	9
66 - 69		7.2	-5.7	15.1	-9.4	264	233	9
69 - 72		3.8	-5.4	----	-6.7	----	105	10
72 - 75		6.0	-7.2	----	-----	----	----	9
75 - 78		5.7	-4.7	10.5	-10.8	35	244	9
78 - 81		7.9	-8.5	16.4	-----	105	----	9
81 - 84		5.4	-7.6	----	-----	----	----	9
84 - 87		9.1	-6.9	----	-9.6	----	111	6
87 - 90		----	-3.5	----	-----	----	----	1
90 - 93		----	-----	----	-----	----	----	0
Airplane 345 Traverse 3	Time (EST) - (a) Length of traverse 359.9 sec, 123,141 ft Initial heading - (a)							
0 - 3	21,000	----	-----	----	-----	----	----	0
3 - 6		----	-5.0	----	-10.4	----	193	1

[a]No motion-picture records obtained.

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TABLE I. - SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 345 Traverse 3	Time (EST) - (a) Length of traverse 359.9 sec, 123,141 ft Initial heading - (a)							
6 - 9	21,000	6.8	-----	12.8	-----	132	----	4
9 - 12		----	-----	----	-----	----	----	0
12 - 15		----	-----	----	-----	----	----	0
15 - 18		----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	0
21 - 24		3.1	-----	----	-----	----	----	4
24 - 27		3.7	-4.7	----	-9.9	----	136	7
27 - 30		----	-4.7	----	-----	----	----	5
30 - 33		3.1	-2.8	----	-----	----	----	7
33 - 36		4.4	-2.5	8.2	-----	168	----	2
36 - 39		----	-----	----	-----	----	----	4
39 - 42		3.7	-3.1	----	-----	----	----	7
42 - 45		2.2	-3.4	----	-----	----	----	5
45 - 48		4.4	-2.5	----	-----	----	----	3
48 - 51		4.4	-5.3	----	-----	----	----	8
51 - 54		4.0	-----	----	-----	----	----	6
54 - 57		3.7	-5.6	----	-----	----	----	8
57 - 60		5.6	-11.5	----	-6.5	----	103	8
60 - 63		9.3	-4.7	11.0	-17.2	211	283	8
63 - 66		4.4	-2.8	----	-6.4	----	142	7
66 - 69		4.4	-4.7	----	-12.6	----	70	11
69 - 72		3.1	-2.8	6.3	-----	69	----	5
72 - 75		2.5	-5.3	----	-----	----	----	5
75 - 78		----	-----	----	-----	----	----	6
78 - 81		5.0	-3.1	11.5	-----	168	----	5
81 - 84		----	-----	----	-----	----	----	3
84 - 87		----	-----	----	-----	----	----	3
87 - 90		3.7	-5.9	----	-----	----	----	5
90 - 93		6.5	-2.5	----	-----	----	----	5
93 - 96		8.1	-----	8.2	-----	139	----	4
96 - 99		3.1	-----	6.9	-----	169	----	1
99 - 102		3.7	-3.1	----	-----	----	----	10
102 - 105		5.9	-5.0	12.5	-----	99	----	4
105 - 108		----	-2.5	----	-----	----	----	3
108 - 111		----	-----	----	-----	----	----	2

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 345 Traverse 3	Time (EST) - (a) Length of traverse 359.9 sec, 123,141 ft Initial heading - (a)							
111 - 114	21,000	----	-2.5	5.1	-----	68	----	4
114 - 117		----	-----	----	-----	----	----	3
117 - 120	20,500	----	-----	----	-----	----	----	1
120 - 123		----	-----	----	-----	----	----	0
123 - 126		----	-----	----	-----	----	----	0
Airplane 345 Traverse 4	Time (EST) - (a) Length of traverse 318.6 sec, 102,930 ft Initial heading - (a)							
0 - 3	20,500	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-----	----	-----	----	----	0
12 - 15		----	-----	----	-----	----	----	0
15 - 18	21,000	----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	1
21 - 24		----	-----	----	-----	----	----	0
24 - 27		4.0	-5.2	8.6	-----	127	----	6
27 - 30		----	-3.1	----	-----	----	----	7
30 - 33		3.1	-4.0	----	-6.3	----	201	2
33 - 36		4.6	-3.7	----	-----	----	----	5
36 - 39		2.5	-2.5	----	-----	----	----	4
39 - 42		3.7	-8.3	----	-11.1	----	133	4
42 - 45		8.0	-3.1	----	-----	----	----	5
45 - 48		5.2	-3.7	3.9	-----	66	----	2
48 - 51		----	-----	----	-----	----	----	3
51 - 54		----	-----	----	-----	----	----	4
54 - 57		----	-----	----	-----	----	----	2
57 - 60		----	-----	----	-----	----	----	0
60 - 63		----	-----	----	-----	----	----	0
63 - 66	21,500	----	-----	----	-----	----	----	0
66 - 69		----	-----	----	-----	----	----	0
69 - 72		----	-----	----	-----	----	----	0

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 345 Traverse 4	Time (EST) - (a) Length of traverse 318.6 sec, 102,930 ft Initial heading - (a)							
72 - 75	21,500	----	-3.1	----	-----	----	----	2
75 - 78		3.4	-----	----	-9.5	----	293	4
78 - 81		4.6	-3.1	13.3	-----	164	----	6
81 - 84		3.4	-----	----	-----	----	----	4
84 - 87		8.0	-12.3	9.0	-----	94	----	9
87 - 90		5.6	-5.9	----	-----	----	----	8
90 - 93		4.0	-----	----	-----	----	----	6
93 - 96		----	-3.1	7.8	-----	97	----	4
96 - 99		5.9	-5.6	----	-10.5	----	162	7
99 - 102		3.1	-4.6	----	-10.0	----	105	7
102 - 105		----	-4.6	----	-----	----	----	3
Airplane 331 Traverse 1	Time (EST) 152745 - 153149 Length of traverse 258.8 sec, 83,010 ft Initial heading (deg) 40							
0 - 3	15,500	----	-----	----	-----	----	----	0
3 - 6		----	-6.7	----	-----	----	----	2
6 - 9		5.4	-5.4	----	-----	----	----	2
9 - 12		3.8	-3.2	----	-----	----	----	3
12 - 15		----	-----	----	-----	----	----	0
15 - 18		----	-----	----	-----	----	----	0
18 - 21		3.2	-2.6	----	-----	----	----	2
21 - 24		----	-----	----	-----	----	----	0
24 - 27		----	-2.6	----	-----	----	----	1
27 - 30		3.5	-7.7	----	-----	----	----	6
30 - 33		4.8	-4.5	----	-----	----	----	5
33 - 36	15,000	10.6	-4.5	----	-----	----	----	5
36 - 39	15,500	7.7	-8.6	----	-----	----	----	4
39 - 42		3.8	-5.4	----	-----	----	----	5
42 - 45		----	-----	----	-----	----	----	0
45 - 48		----	-5.4	----	-----	----	----	1
48 - 51		----	-3.2	----	-----	----	----	2
51 - 54		----	-----	----	-----	----	----	0
54 - 57		----	-7.7	----	-16.6	----	132	3

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 331 Traverse 1	Time (EST) 152745 - 153149; Length of traverse 258.8 sec, 83,010 ft; Initial heading (deg) 40							
57 - 60	15,500	7.0	-----	----	-----	----	----	1
60 - 63		----	-----	----	-----	----	----	0
63 - 66		----	-1.9	----	-4.6	----	98	1
66 - 69		----	-----	----	-----	----	----	0
69 - 72		----	-----	----	-----	----	----	0
72 - 75		----	-----	----	-----	----	----	0
75 - 78	15,000	----	-----	----	-----	----	----	0
78 - 81		----	-----	----	-----	----	----	0
81 - 84	15,500	----	-----	----	-6.7	----	263	1
Airplane 331 Traverse 2	Time (EST) 155136 - 155630; Length of traverse 311.1 sec, 92,418 ft; Initial heading (deg) 270							
0 - 3	15,500	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9	15,000	----	-----	----	-----	----	----	0
9 - 12		----	-----	----	-----	----	----	0
12 - 15		----	-----	----	-----	----	----	0
15 - 18		----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	0
21 - 24		2.8	-2.8	----	-----	----	----	2
24 - 27		----	-----	----	-----	----	----	0
27 - 30		6.6	-3.5	----	-----	----	----	3
30 - 33		4.4	-2.2	----	-----	----	----	2
33 - 36		5.4	-4.7	9.2	-----	150	----	7
36 - 39	15,500	9.8	-6.3	----	-----	----	----	6
39 - 42		8.2	-11.7	----	-----	----	----	2
42 - 45		6.6	-----	----	-----	----	----	3
45 - 48		6.6	-7.9	----	-----	----	----	3
48 - 51		10.1	-8.2	----	-----	----	----	3
51 - 54		9.2	-8.8	----	-----	----	----	5
54 - 57		11.0	-13.3	----	-----	----	----	4
57 - 60		8.2	-11.0	----	-----	----	----	6
60 - 63		11.4	-8.5	----	-----	----	----	7

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 331 Traverse 2	Time (EST) 155136 - 155630; Length of traverse, 311.1 sec, 92,418 ft; Initial heading (deg) 270							
63 - 66	15,500	12.3	-6.3	----	-----	----	----	9
66 - 69		12.3	-7.9	----	-----	----	----	3
69 - 72		3.5	-8.8	6.7	-----	62	----	4
72 - 75		6.6	-----	6.7	-----	120	----	2
75 - 78		4.1	-2.8	----	-----	----	----	4
78 - 81		3.2	-6.3	----	-----	----	----	8
81 - 84		6.6	-7.6	----	-----	----	----	6
84 - 87		9.5	-----	17.0	-----	93	----	4
87 - 90		2.2	-4.1	----	-----	----	----	3
90 - 93		3.5	-3.5	----	-----	----	----	4
Airplane 331 Traverse 3	Time (EST) 160225 - 160636; Length of traverse, 268.8 sec, 83,691 ft; Initial heading(deg) - 140							
0 - 3	15,500	5.6	-----	8.4	-----	89	----	2
3 - 6		6.3	-7.8	----	-----	----	----	7
6 - 9		29.2	-7.2	----	-14.8	----	87	6
9 - 12		23.5	-14.1	----	-----	----	----	9
12 - 15		11.0	-14.8	9.7	-10.4	126	33	6
15 - 18		7.8	-5.6	----	-9.9	----	31	5
18 - 21		6.3	-7.5	----	-----	----	----	6
21 - 24		11.3	-7.8	----	-----	----	----	4
24 - 27		4.7	-6.0	----	-----	----	----	3
27 - 30		3.5	-8.2	----	-----	----	----	6
30 - 33		10.4	-8.2	----	-----	----	----	9
33 - 36		10.0	-9.7	----	-10.0	----	108	7
36 - 39		7.2	-8.8	----	-----	----	----	6
39 - 42		10.4	-7.8	----	-----	----	----	6
42 - 45		11.9	-7.2	----	-----	----	----	6
45 - 48		7.2	-6.6	----	-----	----	----	6
48 - 51		3.8	-3.8	----	-----	----	----	3
51 - 54		6.3	-4.4	----	-----	----	----	4
54 - 57		3.8	-4.4	----	-----	----	----	3
57 - 60		4.4	-6.0	----	-----	----	----	4

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 331 Traverse 3	Time (EST) 160225 - 160636; Length of traverse 268.8 sec, 83,691 ft; Initial heading (deg) 140							
60 - 63	15,500	8.8	-6.3	----	-----	----	----	2
63 - 66		7.2	-5.6	----	-----	----	----	2
66 - 69		----	-----	----	-----	----	----	0
69 - 72		4.7	-----	----	-----	----	----	1
72 - 75		----	-----	----	-----	----	----	0
75 - 78		----	-----	----	-----	----	----	0
78 - 81		----	-----	----	-----	----	----	0
81 - 84		----	-----	----	-----	----	----	0
Airplane 331 Traverse 4	Time (EST) 161733 - 162540; Length of traverse 474.5 sec, 145,737 ft; Initial heading (deg) 360							
0 - 3	16,000	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-----	----	-----	----	----	0
12 - 15		4.7	-----	----	-----	----	----	1
15 - 18		3.4	-----	----	-----	----	----	2
18 - 21		----	-3.4	----	-----	----	----	1
21 - 24		----	-----	----	-----	----	----	0
24 - 27		----	-----	----	-----	----	----	0
27 - 30		2.8	-4.7	----	-----	----	----	2
30 - 33		----	-4.7	----	-----	----	----	1
33 - 36		----	-----	----	-----	----	----	0
36 - 39		----	-4.4	----	-----	----	----	2
39 - 42		----	-----	----	-----	----	----	1
42 - 45		----	-----	----	-----	----	----	0
45 - 48		----	-6.5	----	-----	----	----	1
48 - 51		4.4	-----	11.2	-----	315	----	1
51 - 54		----	-----	----	-----	----	----	0
54 - 57		14.0	-3.4	----	-5.4	----	62	5
57 - 60		----	-3.4	----	-6.1	----	92	1
60 - 63		----	-3.4	----	-----	----	----	1
63 - 66		----	-----	----	-----	----	----	0

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 331 Traverse 4	Time (EST) 161733 - 162540; Length of traverse 474.5 sec, 145,737 ft; Initial heading (deg) 360							
66 - 69	15,500	----	-----	----	-----	----	----	0
69 - 72		----	-----	----	-----	----	----	0
72 - 75		----	-----	----	-----	----	----	0
75 - 78		----	-----	----	-----	----	----	0
78 - 81		4.0	-4.0	----	-----	----	----	4
81 - 84		6.5	-3.4	----	-----	----	----	6
84 - 87		4.4	-7.2	----	-----	----	----	6
87 - 90		7.2	-5.6	----	-----	----	----	11
90 - 93		10.6	-8.4	----	-----	----	----	6
93 - 96		6.2	-11.2	----	-----	----	----	7
96 - 99		----	-4.0	----	-----	----	----	3
99 - 102		----	-----	----	-----	----	----	0
102 - 105		5.9	-5.6	----	-----	----	----	3
105 - 108		6.5	-8.4	----	-----	----	----	5
108 - 111		7.8	-7.5	----	-----	----	----	8
111 - 114		6.5	-10.6	----	-----	----	----	7
114 - 117		11.8	-7.2	----	-----	----	----	5
117 - 120		6.2	-5.3	----	-----	----	----	4
120 - 123		3.4	-6.8	----	-----	----	----	4
[c]123 - 126								0
Airplane 333 Traverse 1	Time (EST) 152645 - 153148; Length of traverse 315.5 sec, 85,171 ft; Initial heading (deg) 40							
0 - 3	11,000	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-----	----	-----	----	----	0
12 - 15		----	-----	----	-7.2	----	84	1
15 - 18		----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	0
21 - 24		----	-----	----	-----	----	----	0
24 - 27		----	-4.5	----	-----	----	----	1
27 - 30	11,500	----	-----	----	-----	----	----	0

[c]Film supply for accelerometer exhausted before end of traverse.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity U_{emax} (fps)		Maximum true gust velocity U_{tmax} (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 333 Traverse 1	Time (EST) 152645 - 153148 Length of traverse 315.5 sec, 85,171 ft Initial heading (deg) 40							
30 - 33	11,500	----	-----	----	-----	----	----	0
33 - 36		----	-5.1	----	-13.5	----	248	4
36 - 39		5.1	-5.1	----	-----	----	----	2
39 - 42	11,000	5.4	-----	----	-----	----	----	2
42 - 45		4.5	-3.5	----	-----	----	----	2
45 - 48		----	-----	----	-----	----	----	0
48 - 51		----	-----	----	-----	----	----	0
51 - 54		6.7	-----	----	-----	----	----	3
54 - 57		----	-5.8	----	-----	----	----	1
57 - 60		3.8	-----	----	-----	----	----	1
60 - 63		3.5	-----	7.7	-----	83	----	2
63 - 66		5.4	-----	----	-----	----	----	5
66 - 69		6.4	-----	----	-----	----	----	1
69 - 72		----	-----	----	-----	----	----	0
72 - 75		----	-----	----	-----	----	----	0
75 - 78		----	-----	----	-----	----	----	0
78 - 81		----	-----	----	-----	----	----	0
81 - 84		----	-----	----	-----	----	----	0
84 - 87		----	-----	----	-----	----	----	0
Airplane 333 Traverse 2	Time (EST) - (a) Length of traverse 336.3 sec, 92,798 ft Initial heading (deg) - (a)							
0 - 3	11,000	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-----	----	-----	----	----	1
12 - 15		----	-----	----	-----	----	----	0
15 - 18		----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	0
21 - 24		----	-----	----	-----	----	----	0
24 - 27		5.4	-----	9.5	-----	28	----	6
27 - 30		4.4	-----	----	-----	----	----	3
30 - 33		----	-----	----	-----	----	----	4

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 333 Traverse 2	Time (EST) - (a) Length of traverse 336.3 sec, 92,798 ft Initial heading (deg) - (a)							
33 - 36	11,000	3.8	-5.4	----	-9.9	----	53	3
36 - 39		6.3	-----	----	-----	----	----	5
39 - 42		9.5	-7.9	----	-----	----	----	4
42 - 45		9.8	-5.7	----	-----	----	----	7
45 - 48		7.3	-8.9	12.5	-17.8	83	109	6
48 - 51		13.3	-10.4	----	-----	----	----	5
51 - 54	11,500	6.3	-7.9	----	-----	----	----	4
54 - 57		3.5	-----	----	-----	----	----	1
57 - 60		----	-----	----	-----	----	----	1
60 - 63		11.1	-3.5	15.1	-----	162	----	4
63 - 66		8.9	-7.9	----	-----	----	----	3
66 - 69	11,000	13.3	-5.7	10.9	-----	119	----	6
69 - 72		9.2	-4.7	----	-----	----	----	8
72 - 75		10.8	-7.6	----	-----	----	----	8
75 - 78		12.0	-21.2	----	-----	----	----	8
78 - 81		5.4	-----	----	-----	----	----	2
81 - 84		----	-4.7	----	-----	----	----	2
84 - 87		8.4	-3.8	14.5	-----	26	----	3
87 - 90		10.8	-7.9	----	-----	----	----	9
90 - 93		18.3	-15.2	----	-----	----	----	2
Airplane 333 Traverse 3	Time (EST) 160005 - 160447 Length of traverse - (d) Initial heading (deg) 150							
0 - 3	11,000	11.3	-3.8	18.6	-----	121	----	3
3 - 6		11.0	-17.0	29.1	-----	155	----	7
6 - 9		6.6	-4.7	----	-----	----	----	4
9 - 12		13.2	-7.9	----	-----	----	----	2
12 - 15	11,500	8.8	-----	----	-----	----	----	2
15 - 18		5.0	-7.2	----	-----	----	----	8
18 - 21		5.0	-10.7	----	-14.0	----	154	6
21 - 24	11,000	4.7	-4.4	----	-16.0	----	187	4
24 - 27		8.8	-4.4	----	-14.3	----	170	5
27 - 30		----	-----	----	-----	----	----	0

[a]No motion-picture records obtained.
[d]Records for complete traverse not obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 333 Traverse 3	Time (EST) 160005 - 160447 Length of traverse - (d) Initial heading (deg) 150							
30 - 33	11,000	15.7	-----	21.6	-----	81	----	3
33 - 36		5.7	-3.5	----	-----	----	----	4
36 - 39		----	-----	----	-----	----	----	0
39 - 42		----	-----	----	-----	----	----	0
42 - 45		----	-----	----	-----	----	----	0
45 - 48		----	-----	----	-----	----	----	0
[d]48 - 51		----	-----	----	-----	----	----	0
Airplane 333 Traverse 4	Time (EST) - (a) Length of traverse - (d) Initial heading (deg) - (a)							
0 - 3	11,000	----	-4.7	----	-----	----	----	1
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		4.4	-6.9	----	-----	----	----	5
12 - 15		10.9	-5.0	----	-----	----	----	3
15 - 18		6.9	-----	----	-----	----	----	3
18 - 21		----	-----	----	-----	----	----	0
21 - 24		----	-----	----	-----	----	----	0
24 - 27		----	-----	----	-----	----	----	0
27 - 30		----	-----	----	-----	----	----	0
[d]30 - 33		----	-----	----	-----	----	----	0
Airplane 351 Traverse 1	Time (EST) 152419 - 152840 Length of traverse 271.1 sec, 73791 ft Initial heading (deg) 40							
0 - 3	6,000	----	-5.1	----	-7.9	----	128	1
3 - 6		4.2	-4.8	10.0	-7.3	188	51	3
6 - 9		----	-4.2	----	-10.4	----	160	3
9 - 12		4.2	-----	6.5	-----	163	----	2
12 - 15		----	-2.2	----	-5.5	----	54	1
15 - 18		5.8	-----	----	-----	----	----	3
18 - 21		5.4	-4.5	6.5	-----	57	----	3

[a]No motion-picture records obtained.
[d]Records for complete traverse not obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 351 Traverse 1		Time (EST) 152419 - 152840 Length of traverse 271.1 sec, 73791 ft Initial heading (deg) 40						
21 - 24	6,000	3.8	-----	5.9	-----	115	----	1
24 - 27		----	-----	----	-----	----	----	0
27 - 30		8.0	-6.1	20.2	-7.1	56	197	4
30 - 33	5,500	3.8	-6.1	----	-11.8	----	145	5
33 - 36		5.1	-3.5	----	-----	----	----	4
36 - 39		9.0	-7.7	----	-----	----	----	5
39 - 42		13.8	-14.7	----	-10.2	----	89	8
42 - 45		6.4	-5.4	----	-11.0	----	341	5
45 - 48		8.0	-15.7	----	-----	----	----	6
48 - 51		----	-6.4	----	-10.0	----	107	6
51 - 54		10.2	-7.0	16.6	-10.9	101	152	6
54 - 57		9.0	-6.7	----	-----	----	----	6
57 - 60		5.8	-----	----	-----	----	----	1
60 - 63	6,000	7.4	-7.4	----	-11.5	----	105	3
63 - 66		12.8	-7.4	----	-8.8	----	77	4
66 - 69		6.7	-10.2	12.4	-----	26	----	7
69 - 72		8.6	-12.5	----	-8.0	----	104	6
72 - 75		9.6	-7.4	20.4	-----	65	----	4
Airplane 351 Traverse 2		Time (EST) 154006 - 154550 Length of traverse 362.1 sec, 96289 ft Initial heading (deg) 270						
0 - 3	5,500	----	-----	----	-----	----	----	0
3 - 6		----	-4.4	----	-9.1	----	278	1
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-----	----	-----	----	----	0
12 - 15		----	-----	----	-----	----	----	0
15 - 18		----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	0
21 - 24		----	-----	----	-----	----	----	0
24 - 27		----	-----	----	-----	----	----	0
27 - 30		----	-----	----	-----	----	----	0
30 - 33		----	-----	----	-----	----	----	0
33 - 36		----	-3.8	----	-----	----	----	1

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 351 Traverse 2		Time (EST) 154006 - 154550 Length of traverse 362.1 sec, 96289 ft Initial heading (deg) 270						
36 - 39	5,500	2.2	-----	----	-----	----	----	1
39 - 42		----	-----	----	-----	----	----	0
42 - 45		----	-----	----	-----	----	----	0
45 - 48		----	-----	----	-----	----	----	2
48 - 51		5.4	-3.8	9.2	-----	141	----	3
51 - 54		3.2	-3.2	----	-----	----	----	2
54 - 57		----	-----	----	-----	----	----	3
57 - 60		9.8	-8.2	----	-----	----	----	6
60 - 63		5.4	-6.0	----	-9.3	----	113	4
63 - 66		6.3	-5.7	----	-6.6	----	80	4
66 - 69		3.2	-6.7	----	-10.5	----	104	2
69 - 72		4.4	-3.5	----	-----	----	----	2
72 - 75		6.0	-4.1	----	-7.1	----	78	3
75 - 78		10.5	-10.5	16.3	-----	175	----	8
78 - 81		11.1	-10.5	15.5	-----	71	----	5
81 - 84		10.1	-9.8	----	-15.1	----	135	7
84 - 87		6.7	-8.9	12.0	-----	90	----	5
87 - 90		12.4	-8.9	19.9	-----	70	----	8
90 - 93		8.6	-7.3	----	-----	----	----	5
93 - 96	6,000	----	-4.8	----	-----	----	----	1
96 - 99		----	-----	----	-----	----	----	0
Airplane 351 Traverse 3		Time (EST) 155432 - 155840 Length of traverse 271.0 sec, 75,180 ft Initial heading (deg) 150						
0 - 3	6,000	7.5	-12.9	----	-----	----	----	7
3 - 6		8.5	-16.4	11.6	-----	128	----	4
6 - 9		31.5	-10.7	----	-----	----	----	6
9 - 12		11.6	-10.4	25.4	-14.7	63	245	6
12 - 15		4.7	-18.6	----	-----	----	----	5
15 - 18		8.8	-13.8	----	-----	----	----	4
18 - 21		8.5	-6.0	----	-----	----	----	5
21 - 24		----	-6.3	----	-----	----	----	2
24 - 27		----	-6.3	----	-----	----	----	2

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 351 Traverse 3	Time (EST) 155432 - 155840; Length of traverse 271.0 sec, 75,180 ft; Initial heading (deg) 150							
27 - 30	6,000	----	-----	----	-----	----	----	0
30 - 33		4.4	-3.5	----	-----	----	----	2
33 - 36		----	-----	----	-----	----	----	0
36 - 39		6.3	-7.9	----	-8.0	----	89	6
39 - 42		5.0	-5.7	16.0	-9.8	60	120	5
42 - 45		7.5	-5.7	----	-8.9	----	122	9
45 - 48		5.0	-9.1	----	-9.8	----	153	7
48 - 51		10.7	-6.9	----	-----	----	----	7
51 - 54		8.5	-9.4	----	-14.4	----	187	5
54 - 57		12.6	-9.8	8.5	-----	60	----	8
57 - 60		12.3	-9.8	----	-----	----	----	7
60 - 63		8.5	-5.7	----	-----	----	----	4
63 - 66		8.8	-9.4	14.6	-----	225	----	8
66 - 69		7.9	-6.6	----	-11.1	----	59	9
69 - 72		7.9	-6.9	----	-----	----	----	5
72 - 75		9.4	-6.0	----	-7.0	----	85	6
75 - 78		----	-6.6	----	-----	----	----	2
Airplane 351 Traverse 4	Time (EST) 161241 - 161724; Length of traverse 325.0 sec, 93,458 ft; Initial heading (deg) 30							
0 - 3	6,000	----	-3.7	----	-----	----	----	1
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-3.7	----	-----	----	----	1
12 - 15		----	-5.6	----	-8.8	----	179	1
15 - 18		5.0	-7.5	----	-----	----	----	5
18 - 21		5.9	-3.7	----	-----	----	----	3
21 - 24		8.7	-5.6	----	-----	----	----	3
24 - 27		5.6	-5.9	8.0	-9.2	205	115	4
27 - 30		5.3	-9.3	9.1	-9.5	56	86	6
30 - 33		5.3	-5.9	----	-----	----	----	3
33 - 36		5.9	-5.9	----	-----	----	----	4
36 - 39		6.5	-9.6	----	-15.0	----	119	7

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 23, 1946 - Flight 27								
Airplane 351 Traverse 4		Time (EST) 161241 - 161724 Length of traverse 325.0 sec, 93,458 ft Initial heading (deg) 30						
39 - 42	6,000	6.5	-5.6	----	-----	----	----	6
42 - 45		3.7	-7.2	----	-----	----	----	4
45 - 48		4.7	-4.0	----	-----	----	----	2
48 - 51		5.0	-4.7	----	-----	----	----	3
51 - 54		----	-3.4	----	-----	----	----	1
54 - 57		----	-5.9	----	-----	----	----	1
57 - 60		6.5	-3.7	----	-----	----	----	3
60 - 63		5.3	-5.9	8.3	-----	116	----	4
63 - 66	5,500	12.1	-15.9	25.8	-----	274	----	9
66 - 69		12.8	-9.0	----	-----	----	----	12
69 - 72		18.4	-12.8	----	-20.4	----	89	7
72 - 75		7.2	-12.8	17.8	-----	213	----	11
75 - 78		----	-6.8	----	-10.2	----	103	5
78 - 81		10.0	-6.5	22.4	-10.5	104	78	7
81 - 84		7.2	-6.2	----	-----	----	----	9
84 - 87		9.0	-5.9	----	-13.5	----	116	7
87 - 90		6.5	-5.0	----	-----	----	----	5
90 - 93		7.2	-4.0	14.9	-----	133	----	4
93 - 96		----	-----	----	-----	----	----	0
August 26, 1946 - Flight 28								
Airplane 333 Traverse 1		Time (EST) 141832 - (b) Length of traverse 355.2 sec, 124,496 ft Initial heading (deg) 250						
0 - 3	26,500	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	1
6 - 9		----	-----	----	-----	----	----	1
9 - 12		4.8	-----	----	-----	----	----	3
12 - 15		5.7	-3.5	----	-----	----	----	2
15 - 18		5.4	-----	6.4	-----	69	----	3
18 - 21		6.3	-4.4	11.2	-----	105	----	7
21 - 24		8.3	-4.4	10.7	-11.3	68	103	7
24 - 27		5.4	-----	----	-----	----	----	3

[b]Film supply for motion-picture camera exhausted before end of traverse.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 333 Traverse 1	Time (EST) 141832 - (b) Length of traverse 355.2 sec, 124,496 ft Initial heading (deg) 250							
27 - 30	26,500	6.7	-4.4	----	-----	----	----	3
30 - 33		----	-----	----	-----	----	----	1
33 - 36		3.5	-----	----	-----	----	----	1
36 - 39		3.5	-----	----	-----	----	----	2
39 - 42		----	-----	----	-----	----	----	0
42 - 45		----	-----	----	-----	----	----	1
45 - 48		----	-----	----	-----	----	----	0
48 - 51		----	-----	----	-----	----	----	0
51 - 54		----	-----	----	-----	----	----	1
54 - 57		5.1	-----	----	-----	----	----	3
57 - 60		----	-----	----	-----	----	----	2
60 - 63		----	-----	----	-----	----	----	3
63 - 66		----	-----	----	-----	----	----	0
66 - 69		----	-----	----	-----	----	----	1
69 - 72		----	-----	----	-----	----	----	0
72 - 75		----	-----	----	-----	----	----	0
75 - 78		----	-----	----	-----	----	----	0
78 - 81		----	-----	----	-----	----	----	0
81 - 84		----	-----	----	-----	----	----	0
84 - 87		----	-----	----	-----	----	----	0
87 - 90		----	-----	----	-----	----	----	0
90 - 93		----	-----	----	-----	----	----	0
93 - 96		----	-----	----	-----	----	----	0
96 - 99		----	-----	----	-----	----	----	0
99 - 102		----	-----	----	-----	----	----	0
102 - 105		----	-----	----	-----	----	----	1
105 - 108		----	-----	----	-----	----	----	0
108 - 111		----	-----	----	-----	----	----	0
111 - 114		----	-----	----	-----	----	----	0
114 - 117		----	-----	----	-----	----	----	0
117 - 120		----	-----	----	-----	----	----	0
120 - 123		----	-----	----	-----	----	----	0
123 - 126		----	-----	----	-----	----	----	0

[b]Film supply for motion-picture camera exhausted before end of traverse.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 333 Traverse 2		Time (EST) 142845 - 143412 Length of traverse 356.4 sec, 126,368 ft Initial heading (deg) 70						
0 - 3	26,000	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-----	----	-----	----	----	0
12 - 15		----	-----	----	-----	----	----	0
15 - 18		----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	0
21 - 24		----	-----	----	-----	----	----	0
24 - 27		----	-----	----	-----	----	----	0
27 - 30		----	-----	----	-----	----	----	1
30 - 33		----	-----	----	-----	----	----	1
33 - 36		6.9	-5.0	----	-8.1	----	180	3
36 - 39		5.0	-----	8.8	-----	251	----	5
39 - 42		----	-----	----	-----	----	----	4
42 - 45		3.5	-----	----	-----	----	----	4
45 - 48		----	-3.2	----	-----	----	----	4
48 - 51		5.4	-4.1	----	-----	----	----	3
51 - 54		----	-----	----	-----	----	----	1
54 - 57		----	-----	----	-----	----	----	1
57 - 60		----	-----	----	-----	----	----	1
60 - 63		5.0	-5.0	----	-10.6	----	247	6
63 - 66		3.5	-4.1	----	-----	----	----	6
66 - 69		----	-3.2	----	-----	----	----	1
69 - 72		----	-5.0	----	-----	----	----	3
72 - 75		----	-----	----	-----	----	----	1
75 - 78		----	-----	----	-----	----	----	1
78 - 81		----	-----	----	-----	----	----	0
81 - 84		7.9	-----	10.7	-----	175	----	6
84 - 87		6.6	-----	10.4	-----	37	----	5
87 - 90		6.0	-5.0	----	-6.6	----	109	2
90 - 93		6.6	-6.3	10.0	-----	146	----	6
93 - 96		----	-----	----	-----	----	----	2
96 - 99		6.9	-----	----	-----	----	----	3
99 - 102		----	-----	----	-----	----	----	1
102 - 105		----	-----	----	-----	----	----	1

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 333 Traverse 2		Time (EST) 142845 - 143412 Length of traverse 356.4 sec, 126,368 ft Initial heading (deg) 70						
105 - 108	26,000	----	-----	----	-----	----	----	0
108 - 111		----	-----	----	-----	----	----	0
111 - 114		----	-----	----	-----	----	----	3
114 - 117		----	-----	----	-----	----	----	1
117 - 120		----	-----	----	-----	----	----	0
120 - 123		----	-----	----	-----	----	----	2
123 - 126		----	-----	----	-----	----	----	0
126 - 129		----	-----	----	-----	----	----	0
Airplane 333 Traverse 3		Time (EST) 143956 - 144532 Length of traverse 393.2, sec, 146,444 ft Initial heading (deg) 290						
0 - 3	26,000	----	-----	----	-----	----	----	1
3 - 6		12.5	-4.7	----	-----	----	----	5
6 - 9		11.6	-6.6	----	-----	----	----	10
9 - 12	26,500	10.0	-6.3	----	-9.3	----	186	4
12 - 15		12.2	-6.3	----	-9.7	----	114	9
15 - 18		9.4	-13.5	----	-----	----	----	7
18 - 21	27,000	----	-----	----	-----	----	----	0
21 - 24		----	-----	----	-----	----	----	2
24 - 27		----	-----	----	-----	----	----	1
27 - 30		4.1	-4.1	----	-6.9	----	73	4
30 - 33		----	-3.1	----	-----	----	----	2
33 - 36		----	-3.1	----	-----	----	----	3
36 - 39		----	-----	----	-----	----	----	1
39 - 42		----	-----	----	-----	----	----	1
42 - 45		----	-----	----	-6.8	----	95	5
45 - 48		----	-----	----	-----	----	----	2
48 - 51		----	-----	----	-----	----	----	2
51 - 54		----	-----	----	-----	----	----	2
54 - 57		----	-----	----	-----	----	----	2
57 - 60		----	-----	----	-----	----	----	1
60 - 63		----	-----	----	-----	----	----	2
63 - 66		4.1	-----	----	-----	----	----	3

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft x 10^3	Pressure altitude (ft)	Maximum effective gust velocity U_{emax} (fps)		Maximum true gust velocity U_{tmax} (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 333 Traverse 3		Time (EST) 143956 - 144532 Length of traverse 393.2, sec, 146,444 ft Initial heading (deg) 290						
66 - 69	27,000	6.0	-----	----	-----	----	----	5
69 - 72		6.0	-----	----	-----	----	----	2
72 - 75		6.9	-4.1	----	-----	----	----	3
75 - 78		----	-----	----	-----	----	----	0
78 - 81		4.1	-----	----	-----	----	----	1
81 - 84		3.4	-----	----	-----	----	----	2
84 - 87		4.1	-3.1	----	-----	----	----	3
87 - 90		----	-----	----	-----	----	----	4
90 - 93		----	-----	----	-----	----	----	4
93 - 96		----	-----	----	-----	----	----	3
96 - 99		----	-----	----	-----	----	----	2
99 - 102		----	-----	----	-----	----	----	0
102 - 105		3.1	-----	----	-----	----	----	3
105 - 108		6.0	-----	6.5	-----	54	----	2
108 - 111		----	-----	----	-----	----	----	0
111 - 114	26,500	----	-----	----	-----	----	----	0
114 - 117		----	-----	----	-----	----	----	0
117 - 120		----	-----	----	-----	----	----	3
120 - 123	26,000	----	-----	----	-----	----	----	1
123 - 126		4.7	-3.8	----	-----	----	----	6
126 - 129		6.0	-----	----	-----	----	----	2
129 - 132		----	-2.8	----	-----	----	----	2
132 - 135	26,500	----	-----	----	-----	----	----	2
135 - 138		4.1	-----	----	-----	----	----	4
138 - 141		3.1	-3.1	----	-----	----	----	5
141 - 144		3.1	-3.1	----	-----	----	----	6
144 - 147		5.6	-----	----	-----	----	----	3
Airplane 333 Traverse 4		Time (EST) 145316 - 145621 Length of traverse 215.4, sec, 79,454 ft Initial heading (deg) 120						
0 - 3	26,000	----	-4.0	----	-16.5	----	287	2
3 - 6		----	-----	----	-----	----	----	1
6 - 9		19.3	-3.7	----	-----	----	----	6

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 333 Traverse 4		Time (EST) 145316 - 145621 Length of traverse 215.4 sec, 79,454 ft Initial heading (deg) 120						
9 - 12	26,000	18.6	-12.4	----	-----	----	----	6
12 - 15		16.8	-14.0	----	-----	----	----	7
15 - 18		8.1	-5.0	----	-----	----	----	5
18 - 21		7.5	-10.2	----	-----	----	----	7
21 - 24		6.8	-12.7	----	-----	----	----	4
24 - 27		8.7	-7.5	----	-14.3	----	107	5
[c]27 - 30		6.2	-6.8	13.9	-----	36	----	2
Airplane 351 Traverse 1		Time (EST) 141520 - 142100 Length of traverse 358.2 sec, 110518 ft Initial heading (deg) 250						
0 - 3	21,500	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-----	----	-----	----	----	0
12 - 15		----	-----	----	-----	----	----	0
15 - 18		----	-6.4	----	-----	----	----	1
18 - 21		6.4	-7.3	17.2	-----	122	----	3
21 - 24		5.7	-7.3	18.5	-----	175	----	4
24 - 27		12.7	-7.0	----	-----	----	----	5
27 - 30		9.9	-12.7	----	-21.3	----	87	4
30 - 33		11.1	-7.3	----	-----	----	----	3
33 - 36		4.5	-6.4	----	-----	----	----	2
36 - 39		----	-7.3	----	-----	----	----	1
39 - 42		----	-----	----	-----	----	----	0
42 - 45		12.1	-----	22.7	-----	192	----	1
45 - 48		----	-6.7	----	-----	----	----	4
48 - 51		8.6	-6.7	16.1	-----	165	----	7
51 - 54		10.2	-15.3	----	-25.2	----	34	7
54 - 57	22,000	5.7	-6.7	----	-----	----	----	3
57 - 60		----	-7.3	----	-----	----	----	1
60 - 63		----	-----	----	-----	----	----	0
63 - 66		4.8	-7.3	----	-----	----	----	6
66 - 69		----	-6.7	----	-----	----	----	1

[c]Film supply for accelerometer exhausted before end of traverse.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 351 Traverse 1		Time (EST) 141520 - 142100 Length of traverse 358.2 sec, 110518 ft Initial heading (deg) 250						
69 - 72	22,000	----	-----	----	-----	----	----	0
72 - 75		----	-----	----	-----	----	----	0
75 - 78		----	-----	----	-----	----	----	0
78 - 81	21,500	3.5	-----	12.6	-----	63	----	1
81 - 84		----	-----	----	-----	----	----	0
84 - 87		----	-----	----	-----	----	----	0
87 - 90		----	-6.7	----	-11.8	----	329	1
90 - 93		----	-----	----	-----	----	----	1
93 - 96		----	-----	----	-----	----	----	0
96 - 99	22,000	----	-4.5	----	-----	----	----	1
99 - 102		----	-4.5	----	-----	----	----	1
102 - 105		----	-5.7	----	-----	----	----	1
105 - 108		----	-----	----	-----	----	----	0
108 - 111		----	-----	----	-----	----	----	0
Airplane 351 Traverse 2		Time (EST) - (a) Length of traverse 398.2 sec, 121,305 ft Initial heading (deg) - (a)						
0 - 3	21,500	----	-----	----	-----	----	----	0
3 - 6		----	-5.1	----	-----	----	----	1
6 - 9		----	-6.3	----	-----	----	----	1
9 - 12	22,000	----	-----	----	-----	----	----	0
12 - 15		----	-----	----	-----	----	----	0
15 - 18		----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	0
21 - 24		----	-----	----	-----	----	----	0
24 - 27		----	-----	----	-----	----	----	0
27 - 30		----	-----	----	-----	----	----	0
30 - 33		----	-7.0	----	-----	----	----	1
33 - 36		----	-7.3	----	-9.1	----	115	2
36 - 39		6.3	-7.3	----	-15.4	----	62	3
39 - 42		6.3	-7.3	17.4	-----	153	----	4
42 - 45		6.3	-----	15.9	-----	30	----	2
45 - 48		5.7	-9.5	----	-23.5	----	236	2

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft x 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 351 Traverse 2	Time (EST) - (a) Length of traverse 398.2 sec, 121,305 ft Initial heading (deg) - (a)							
48 - 51	22,000	7.0	-12.7	17.9	-11.5	29	140	4
51 - 54		6.6	-13.3	----	-25.5	----	222	7
54 - 57		5.7	-7.6	----	-----	----	----	3
57 - 60		10.8	-6.0	----	-----	----	----	5
60 - 63		----	-6.3	----	-14.1	----	60	3
63 - 66		6.3	-7.3	----	-----	----	----	6
66 - 69		9.8	-12.3	----	-----	----	----	4
69 - 72		15.5	-9.2	----	-----	----	----	5
72 - 75		13.3	-10.1	20.4	-----	95	----	5
75 - 78		6.0	-7.6	----	-----	----	----	3
78 - 81		----	-7.0	----	-----	----	----	1
81 - 84		12.3	-13.9	----	-----	----	----	2
84 - 87		----	-5.7	----	-----	----	----	1
87 - 90		7.3	-7.9	----	-----	----	----	3
90 - 93		----	-7.6	----	-----	----	----	1
93 - 96		----	-----	----	-----	----	----	0
96 - 99		4.4	-----	----	-----	----	----	1
99 - 102		----	-4.4	----	-----	----	----	1
102 - 105		----	-3.5	----	-----	----	----	1
105 - 108		----	-----	----	-----	----	----	0
108 - 111		----	-5.4	----	-----	----	----	1
111 - 114		----	-----	----	-----	----	----	0
114 - 117		----	-4.4	----	-----	----	----	1
117 - 120		----	-----	----	-----	----	----	0
120 - 123		----	-----	----	-----	----	----	0
Airplane 351 Traverse 3	Time (EST) 143712 - 144050 Length of traverse 303.7 sec, 95,205 ft Initial heading (deg) 280							
0 - 3	22,000	----	-----	----	-----	----	----	0
3 - 6		----	-6.9	----	-----	----	----	2
6 - 9		----	-7.8	----	-----	----	----	1
9 - 12	21,500	----	-7.2	----	-----	----	----	3
12 - 15		18.8	-10.7	----	21.1	----	95	5

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 351 Traverse 3	Time (EST) 143712 - 144050; Length of traverse 303.7 sec, 95,205 ft; Initial heading (deg) 280							
15 - 18	21,500	14.8	-18.8	36.1	-----	335	----	8
18 - 21		13.5	-14.8	----	-----	----	----	6
21 - 24	22,000	7.2	-10.7	----	-----	----	----	4
24 - 27		6.0	-7.8	----	-----	----	----	3
27 - 30		5.3	-6.9	----	-----	----	----	4
30 - 33		----	-----	----	-----	----	----	0
33 - 36		----	-5.0	----	-----	----	----	1
36 - 39		----	-----	----	-----	----	----	0
39 - 42	22,500	----	-----	----	-----	----	----	0
42 - 45		----	-----	----	-----	----	----	0
45 - 48		----	-----	----	-----	----	----	0
48 - 51		----	-----	----	-----	----	----	0
51 - 54		----	-----	----	-----	----	----	0
54 - 57		----	-----	----	-----	----	----	0
57 - 60		----	-----	----	-----	----	----	0
60 - 63		----	-----	----	-----	----	----	0
63 - 66		3.5	-----	----	-----	----	----	1
66 - 69		----	-----	----	-----	----	----	0
69 - 72		----	-----	----	-----	----	----	0
72 - 75		----	-----	----	-----	----	----	0
75 - 78		----	-----	----	-----	----	----	0
78 - 81		----	-----	----	-----	----	----	0
81 - 84		----	-----	----	-----	----	----	0
84 - 87		----	-----	----	-----	----	----	0
87 - 90		----	-----	----	-----	----	----	0
90 - 93		----	-----	----	-----	----	----	0
93 - 96		----	-----	----	-----	----	----	0
Airplane 351 Traverse 4	Time (EST) - (a); Length of traverse 285.5 sec, 89,453 ft; Initial heading (deg) - (a)							
0 - 3	21,500	----	-----	----	-----	----	----	0
3 - 6		5.9	-----	----	-----	----	----	1
6 - 9		----	-----	----	-----	----	----	0

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 351 Traverse 4		Time (EST) - (a) Length of traverse 285.5 sec, 89,453 ft Initial heading (deg) - (a)						
9 - 12	21,000	8.1	-3.7	11.1	-----	340	----	2
12 - 15		----	-----	----	-----	----	----	0
15 - 18		----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	0
21 - 24		----	-----	----	-----	----	----	0
24 - 27		----	-----	----	-----	----	----	0
27 - 30		----	-----	----	-----	----	----	0
30 - 33		----	-----	----	-----	----	----	0
33 - 36		----	-----	----	-----	----	----	0
36 - 39	21,500	----	-----	----	-----	----	----	0
39 - 42		----	-----	----	-----	----	----	0
42 - 45		----	-----	----	-----	----	----	0
45 - 48	21,000	----	-----	----	-----	----	----	0
48 - 51		----	-----	----	-----	----	----	0
51 - 54		----	-----	----	-----	----	----	0
54 - 57	21,500	----	-5.9	----	-----	----	----	1
57 - 60		----	-----	----	-----	----	----	0
60 - 63		6.2	-6.6	----	-----	----	----	3
63 - 66		----	-----	----	-----	----	----	0
66 - 69		----	-----	----	-----	----	----	0
69 - 72		----	-----	----	-----	----	----	0
72 - 75		----	-----	----	-----	----	----	0
75 - 78		----	-----	----	-----	----	----	0
78 - 81		----	-----	----	-----	----	----	0
81 - 84		----	-----	----	-----	----	----	0
84 - 87	21,000	----	-----	----	-----	----	----	0
87 - 90		----	-----	----	-----	----	----	0
Airplane 345 Traverse 1		Time (EST) - (a) Length of traverse 329.2 sec, 98,276 ft Initial heading - (a)						
0 - 3	16,000	----	-----	----	-----	----	----	0
3 - 6		----	-3.8	3.7	-----	59	----	2

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 345 Traverse 1		Time (EST) - (a) Length of traverse, 329.2 sec, 98,276 ft Initial heading - (a)						
6 - 9	16,000	6.1	-----	----	-----	----	----	2
9 - 12		4.2	-5.1	----	-----	----	----	9
12 - 15	15,500	12.2	-12.5	----	-----	----	----	11
15 - 18		15.7	-14.7	----	-----	----	----	8
18 - 21	16,000	7.4	-6.7	----	-----	----	----	7
21 - 24		----	-6.1	----	-----	----	----	1
24 - 27		15.0	-9.9	12.2	-9.4	145	57	11
27 - 30		6.1	-3.8	----	-----	----	----	6
30 - 33		6.1	-9.2	----	-----	----	----	7
33 - 36		6.4	-6.1	----	-----	----	----	7
36 - 39		4.8	-4.5	----	-----	----	----	8
39 - 42		7.0	-3.2	10.2	-----	124	----	10
42 - 45		5.4	-8.3	----	-10.3	----	246	4
45 - 48		3.5	-5.4	----	-----	----	----	3
48 - 51		2.9	-3.5	----	-----	----	----	11
51 - 54		5.4	-3.2	8.7	-----	90	----	4
54 - 57		----	-3.8	----	-----	----	----	2
57 - 60		2.9	-6.1	----	-----	----	----	5
60 - 63		3.5	-4.2	8.0	-----	29	----	6
63 - 66	15,500	----	-2.6	----	-----	----	----	8
66 - 69		3.2	-4.5	----	-5.6	----	123	7
69 - 72		----	-3.2	----	-----	----	----	5
72 - 75		----	-----	----	-----	----	----	0
75 - 78		----	-----	----	-----	----	----	1
78 - 81		----	-----	----	-----	----	----	2
81 - 84		----	-----	----	-----	----	----	0
84 - 87		----	-----	----	-----	----	----	0
87 - 90		2.6	-----	----	-----	----	----	4
90 - 93	15,000	----	-----	----	-----	----	----	1
93 - 96	15,500	----	-----	----	-----	----	----	2
96 - 99		----	-----	----	-----	----	----	1

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 345 Traverse 2	Time (EST) - (a) Length of traverse 323.4 sec, 92,617 ft Initial heading - (a)							
0 - 3	16,000	----	-----	----	-----	----	----	4
3 - 6	15,500	----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	5
9 - 12		----	-----	----	-----	----	----	5
12 - 15		----	-----	----	-----	----	----	3
15 - 18		----	-----	----	-----	----	----	1
18 - 21		----	-----	----	-----	----	----	1
21 - 24		----	-6.4	----	-----	----	----	1
24 - 27		----	-----	----	-----	----	----	0
27 - 30		----	-----	----	-----	----	----	0
30 - 33		----	-3.8	----	-----	----	----	6
33 - 36		----	-----	----	-----	----	----	3
36 - 39		2.9	-3.5	----	-----	----	----	3
39 - 42		5.1	-----	6.7	-----	42	----	1
42 - 45		4.1	-9.5	5.3	-----	84	----	8
45 - 48		4.1	-7.6	----	-11.6	----	167	5
48 - 51		7.0	-4.5	----	-8.9	----	119	4
51 - 54		----	-----	----	-----	----	----	0
54 - 57		3.5	-3.5	----	-----	----	----	7
57 - 60		4.8	-5.4	----	-11.6	----	88	12
60 - 63		6.4	-7.3	14.7	-6.7	56	42	10
63 - 66		6.4	-6.7	----	-----	----	----	9
66 - 69		6.0	-6.0	----	-----	----	----	10
69 - 72		7.0	-5.7	----	-5.5	----	151	12
72 - 75		4.1	-3.8	----	-----	----	----	8
75 - 78		2.5	-3.2	----	-----	----	----	6
78 - 81		4.1	-----	----	-----	----	----	3
81 - 84		----	-2.5	----	-----	----	----	4
84 - 87		8.3	-8.3	----	-9.2	----	131	8
87 - 90		6.7	-3.5	----	-----	----	----	12
90 - 93		3.5	-3.2	----	-4.8	----	62	8

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 345 Traverse 3	Time (EST) - (a) Length of traverse 277.4 sec, 81,290 ft Initial heading - (a)							
0 - 3	16,000	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9	15,500	3.8	-2.5	----	-5.5	----	151	7
9 - 12		----	-----	----	-----	----	----	1
12 - 15		----	-5.0	----	-3.3	----	122	3
15 - 18		4.1	-2.8	----	-----	----	----	7
18 - 21		11.7	-----	7.7	-----	122	----	7
21 - 24	16,000	5.4	-10.4	15.0	-----	253	----	8
24 - 27		5.7	-6.0	----	-----	----	----	10
27 - 30		7.3	-5.7	12.1	-----	154	----	7
30 - 33		7.9	-4.4	----	-22.8	----	479	6
33 - 36		6.9	-6.9	6.8	-----	59	----	5
36 - 39		3.5	-3.5	----	-----	----	----	6
39 - 42		4.1	-7.3	----	-11.7	----	117	10
42 - 45		2.8	-3.8	----	-----	----	----	4
45 - 48		----	-2.8	8.0	-----	29	----	5
48 - 51		5.0	-3.2	12.1	-----	94	----	6
51 - 54		3.8	-----	----	-----	----	----	2
54 - 57		----	-----	----	-----	----	----	0
57 - 60		----	-----	----	-----	----	----	0
60 - 63		----	-----	----	-----	----	----	0
63 - 66		4.1	-7.3	----	-----	----	----	3
66 - 69	15,500	5.7	-5.0	----	-----	----	----	8
69 - 72		5.7	-7.6	----	-----	----	----	10
72 - 75		8.2	-3.2	----	-----	----	----	14
75 - 78		----	-5.7	----	-----	----	----	1
78 - 81		----	-----	----	-----	----	----	0
81 - 84		----	-----	----	-----	----	----	0
Airplane 345 Traverse 4	Time (EST) - (a) Length of traverse 296.9 sec, 87,619 ft Initial heading - (a)							
0 - 3	15,500	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	1

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 345 Traverse 4	Time (EST) - (a) Length of traverse 296.9 sec, 87,619 ft Initial heading - (a)							
6 - 9	15,500	----	-----	----	-----	----	----	1
9 - 12	16,000	----	-----	----	-----	----	----	1
12 - 15		----	-----	----	-----	----	----	1
15 - 18	15,500	----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	2
21 - 24		10.3	-4.4	9.3	-----	58	----	5
24 - 27		10.6	-2.8	----	-----	----	----	14
27 - 30	16,000	8.8	-10.6	29.0	-----	162	----	7
30 - 33		7.8	-12.5	----	-16.6	----	115	11
33 - 36		6.9	-3.8	----	-9.3	----	174	9
36 - 39	16,500	9.7	-6.3	----	-----	----	----	17
39 - 42	16,000	7.5	-18.8	----	-11.4	----	60	9
42 - 45		7.5	-6.3	5.6	-----	31	----	4
45 - 48		----	-----	----	-----	----	----	0
48 - 51	16,500	5.9	-5.3	----	-----	----	----	7
51 - 54		18.1	-10.6	----	-----	----	----	12
54 - 57		13.4	-13.4	----	-----	----	----	10
57 - 60	16,000	12.2	-8.8	----	-----	----	----	7
60 - 63		----	-----	----	-----	----	----	2
63 - 66		----	-----	----	-----	----	----	1
66 - 69		----	-----	----	-----	----	----	0
69 - 72		3.1	-2.8	8.8	-----	193	----	5
72 - 75		----	-----	----	-----	----	----	0
75 - 78		----	-----	----	-----	----	----	2
78 - 81		----	-----	----	-----	----	----	3
81 - 84		----	-5.0	----	-----	----	----	1
84 - 87		----	-----	----	-----	----	----	4
87 - 90		----	-----	----	-----	----	----	0
Airplane 347 Traverse 1	Time (EST) - (a) Length of traverse 218.2 sec, 54,551 ft Initial heading (deg) - (a)							
0 - 3	11,000	6.1	-----	10.7	-----	99	----	3
3 - 6		4.2	-2.9	7.1	-----	102	----	5

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 347 Traverse 1		Time (EST) - (a) Length of traverse 218.2 sec, 54,551 ft Initial heading (deg) - (a)						
6 - 9	11,000	2.9	-----	4.8	-----	151	----	1
9 - 12		----	-3.2	----	-----	----	----	3
12 - 15		4.8	-----	----	-----	----	----	4
15 - 18		----	-----	----	-----	----	----	0
18 - 21		3.2	-----	5.3	-----	149	----	1
21 - 24		3.2	-----	----	-----	----	----	1
24 - 27		----	-2.9	----	-----	----	----	1
27 - 30		----	-2.9	----	-----	----	----	1
30 - 33		3.5	-----	----	-----	----	----	1
33 - 36		----	-----	----	-----	----	----	0
36 - 39		----	-----	----	-----	----	----	0
39 - 42		2.9	-----	----	-----	----	----	2
42 - 45		----	-----	----	-----	----	----	0
45 - 48		3.2	-----	----	-----	----	----	1
48 - 51		2.9	-----	----	-----	----	----	1
51 - 54		3.2	-----	----	-----	----	----	1
54 - 57		----	-----	----	-----	----	----	0
Airplane 347 Traverse 2		Time (EST) 142226 - 142618 Length of traverse 236.6 sec, 59,420 ft Initial heading (deg) 60						
0 - 3	11,000	4.8	-2.9	----	-----	----	----	3
3 - 6		3.2	-6.7	8.4	-----	75	----	6
6 - 9		4.1	-4.1	11.8	-----	102	----	7
9 - 12		4.5	-2.9	----	-----	----	----	3
12 - 15		4.8	-4.8	----	-10.5	----	37	4
15 - 18		3.2	-3.2	10.1	-----	123	----	4
18 - 21		5.1	-2.5	8.9	-----	74	----	4
21 - 24		7.3	-3.2	12.7	-----	69	----	7
24 - 27		3.2	-6.4	----	-----	----	----	3
27 - 30		6.1	-----	13.4	-----	227	----	2
30 - 33		4.1	-7.6	----	-----	----	----	5
33 - 36		7.3	-9.2	----	-----	----	----	6
36 - 39		2.9	-6.1	----	-----	----	----	6
39 - 42		6.1	-5.7	5.4	-10.6	50	78	7

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 347 Traverse 2	Time (EST) 142226 - 142618; Length of traverse 236.6 sec, 59,420 ft; Initial heading (deg) 60							
42 - 45	11,000	6.1	-2.9	----	-4.8	----	153	6
45 - 48		----	-6.4	----	-10.5	----	145	1
48 - 51		8.3	-7.6	15.8	-----	145	----	10
51 - 54		8.9	-8.9	----	-21.8	----	204	9
54 - 57		12.7	-7.3	21.1	-----	127	----	12
57 - 60		3.2	-4.8	7.2	-----	48	----	4
Airplane 347 Traverse 3	Time (EST) 143614 - 143900; Length of traverse 293.1 sec, 78,950 ft; Initial heading (deg) 280							
0 - 3	11,000	4.8	-2.2	6.5	-6.7	52	132	7
3 - 6		2.9	-4.1	----	-----	----	----	5
6 - 9		3.5	-2.9	----	-----	----	----	3
9 - 12		2.9	-3.5	----	-----	----	----	5
12 - 15		7.3	-12.1	----	-----	----	----	12
15 - 18		9.8	-7.9	----	-----	----	----	10
18 - 21	11,500	8.6	-5.4	----	-8.9	----	193	9
21 - 24		2.9	-8.3	----	-----	----	----	7
24 - 27		5.7	-3.5	----	-----	----	----	4
27 - 30		5.7	-5.7	9.6	-----	27	----	5
30 - 33		2.9	-5.1	----	-----	----	----	3
33 - 36		2.9	-2.2	----	-----	----	----	4
36 - 39		2.2	-4.1	----	-----	----	----	4
39 - 42	11,000	2.9	-3.8	----	-9.0	----	110	4
42 - 45		2.9	-2.5	----	-----	----	----	2
45 - 48		2.5	-----	----	-----	----	----	1
48 - 51		----	-2.9	----	-----	----	----	2
51 - 54		4.4	-2.5	6.3	-----	111	----	2
54 - 57		7.0	-3.2	5.3	-----	55	----	4
57 - 60		5.1	-6.7	----	-8.1	----	221	5
60 - 63		8.3	-5.7	8.9	-----	193	----	3
63 - 66		7.3	-11.4	----	-----	----	----	6
66 - 69		6.0	-5.7	9.5	-----	52	----	7
69 - 72		8.9	-11.1	11.2	-----	107	----	12

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 347 Traverse 3		Time (EST) 143614 - 143900 Length of traverse 293.1, sec, 78,950 ft Initial heading (deg) 280						
72 - 75	11,000	14.6	-8.3	----	-----	----	----	9
75 - 78		6.0	-9.2	----	-----	----	----	8
78 - 81		2.2	-----	----	-----	----	----	1
Airplane 347 Traverse 4		Time (EST) - (a) Length of traverse 304.3, sec, 83,701 ft Initial heading (deg) - (a)						
0 - 3	11,000	5.0	-----	----	-----	----	----	3
3 - 6		6.0	-3.1	----	-5.4	----	287	4
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-----	----	-----	----	----	0
12 - 15		----	-2.5	----	-----	----	----	2
15 - 18		3.8	-----	8.1	-----	28	----	3
18 - 21		2.5	-----	3.6	-----	114	----	2
21 - 24		4.4	-----	----	-----	----	----	1
24 - 27		----	-2.8	----	-----	----	----	1
27 - 30		3.5	-7.2	4.8	-16.5	80	135	5
30 - 33		----	-2.8	----	-----	----	----	2
33 - 36		3.8	-----	----	-----	----	----	2
36 - 39		----	-8.2	----	-12.1	----	81	2
39 - 42		2.8	-----	----	-----	----	----	3
42 - 45		2.2	-2.8	----	-----	----	----	2
45 - 48		4.4	-2.8	----	-----	----	----	4
48 - 51		6.0	-6.3	----	-9.7	----	78	6
51 - 54		8.5	-11.0	----	-----	----	----	7
54 - 57		5.6	-2.8	----	-----	----	----	6
57 - 60		2.8	-----	----	-----	----	----	1
60 - 63		5.6	-4.4	11.0	-----	52	----	5
63 - 66		2.8	-3.5	5.2	-----	51	----	5
66 - 69		2.8	-----	4.9	-----	77	----	5
69 - 72		2.8	-2.8	----	-----	----	----	4
72 - 75		2.8	-2.8	----	-----	----	----	2
75 - 78		----	-2.2	----	-----	----	----	1

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 347 Traverse 4		Time (EST) - (a) Length of traverse 304.3 sec, 83,701 ft Initial heading (deg) - (a)						
78 - 81	11,000	2.8	-----	5.2	-----	52	----	2
81 - 84		2.8	-----	6.1	-----	78	----	1
Airplane 331 Traverse 1		Time (EST) 140746 - 141102 Length of traverse 215.7 sec, 56,895 ft Initial heading (deg) 240						
0 - 3	7,000	19.3	-10.3	----	-----	----	----	8
3 - 6		10.3	-11.9	----	-----	----	----	5
6 - 9		18.9	-12.8	----	-----	----	----	9
9 - 12		8.7	-6.7	----	-----	----	----	7
12 - 15		9.0	-4.5	----	-7.1	----	125	5
15 - 18		8.7	-5.1	----	-12.2	----	277	5
18 - 21		9.3	-9.6	14.5	-----	71	----	3
21 - 24		5.1	-1.6	----	-----	----	----	2
24 - 27		----	-----	----	-----	----	----	0
27 - 30		6.4	-2.9	6.7	-2.6	103	79	2
30 - 33		----	-2.9	----	-----	----	----	1
33 - 36		----	-2.2	----	-----	----	----	1
36 - 39		----	-----	----	-----	----	----	0
39 - 42		----	-1.6	----	-----	----	----	1
42 - 45	6,500	1.6	-----	----	-----	----	----	1
45 - 48		2.2	-3.2	----	-4.1	----	198	3
48 - 51		----	-1.6	----	-----	----	----	1
51 - 54		7.4	-3.9	----	-----	----	----	2
54 - 57		----	-2.6	----	-----	----	----	1
Airplane 331 Traverse 2		Time (EST) 142103 - 142435 Length of traverse, 244.7 sec, 63,098 ft Initial heading (deg) 70						
0 - 3	6,500	8.9	-1.9	----	-----	----	----	3
3 - 6		----	-1.0	----	-----	----	----	2
6 - 9	7,000	----	-2.2	----	-----	----	----	1
9 - 12	6,500	4.8	-1.6	----	-----	----	----	2

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 331 Traverse 2	Time (EST) 142103 - 142435; Length of traverse 244.7 sec, 63,098 ft; Initial heading (deg) 70							
12 - 15	6,500	4.8	-1.6	----	-----	----	----	2
15 - 18		4.8	-1.6	----	-----	----	----	3
18 - 21		4.2	-3.5	----	-----	----	----	7
21 - 24		4.2	-----	----	-----	----	----	2
24 - 27		----	-1.6	----	-----	----	----	2
27 - 30		5.8	-----	----	-----	----	----	2
30 - 33		----	-.9	----	-1.6	----	52	2
33 - 36		6.1	-.9	----	-----	----	----	3
36 - 39		7.1	-1.6	----	-----	----	----	3
39 - 42		5.4	-2.2	----	-----	----	----	3
42 - 45		4.8	-----	----	-----	----	----	1
45 - 48		8.3	-2.9	9.1	-----	104	----	5
48 - 51		6.7	-2.9	----	-----	----	----	9
51 - 54		----	-3.2	----	-----	----	----	3
54 - 57		7.0	-----	----	-----	----	----	1
57 - 60		----	-----	----	-----	----	----	0
60 - 63		6.4	-1.6	----	-----	----	----	3
Airplane 331 Traverse 3	Time (EST) - (a); Length of traverse 302.5 sec, 81,714 ft; Initial heading (deg) - (a)							
0 - 3	7,000	7.9	-5.1	----	-----	----	----	6
3 - 6		9.8	-2.5	----	-----	----	----	4
6 - 9		9.2	-10.1	----	-2.1	----	90	7
9 - 12		11.4	-7.9	----	-----	----	----	10
12 - 15	7,500	10.1	-8.5	----	-----	----	----	6
15 - 18		15.8	-27.8	----	-----	----	----	7
18 - 21		18.0	-7.6	----	-----	----	----	7
21 - 24		12.7	-4.4	----	-----	----	----	10
24 - 27		10.1	-7.3	----	-----	----	----	5
27 - 30		6.3	-1.6	10.5	-----	76	----	4
30 - 33		----	-----	----	-----	----	----	0
33 - 36		----	-----	2.7	-----	75	----	1
36 - 39		4.1	-----	----	-----	----	----	1

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)	Maximum true gust velocity $U_{t_{max}}$ (fps)	Gust gradient distance (ft)	No. of gusts
August 26, 1946 - Flight 28					
Airplane 331 Traverse 3		Time (EST) - (a) Length of traverse 302.5 sec, 81,714 ft Initial heading (deg) - (a)			
39 - 42	7,500	---- -----	---- -----	---- ----	0
42 - 45		---- -2.2	---- -----	---- ----	3
45 - 48		6.3 -----	---- -----	---- ----	2
48 - 51		3.8 -1.6	---- -2.8	---- 55	3
51 - 54		6.0 -----	---- -----	---- ----	1
54 - 57		4.1 -----	---- -----	---- ----	1
57 - 60		---- -----	---- -----	---- ----	0
60 - 63		---- -----	---- -----	---- ----	0
63 - 66		---- -1.6	---- -----	---- ----	1
66 - 69		12.7 -6.3	---- -----	---- ----	7
69 - 72		11.4 -3.2	---- -----	---- ----	6
72 - 75		9.5 -13.6	---- -----	---- ----	5
75 - 78		5.7 -1.9	---- -----	---- ----	4
78 - 81		5.1 -4.4	---- -----	---- ----	5
Airplane 331 Traverse 4		Time (EST) 144432 - (b) Length of traverse 333.5 sec, 91,002 ft Initial heading (deg) 150			
0 - 3	7,000	6.6 -5.3	---- -4.6	---- 80	4
3 - 6		8.2 -3.8	---- -----	---- ----	6
6 - 9		---- -3.1	---- -2.1	---- 91	3
9 - 12		---- -1.3	---- -----	---- ----	3
12 - 15		6.0 -4.1	---- -----	---- ----	7
15 - 18		7.5 -3.1	---- -----	---- ----	5
18 - 21		10.7 -5.0	---- -----	---- ----	8
21 - 24		9.4 -3.8	---- -----	---- ----	9
24 - 27		7.5 -7.9	---- -----	---- ----	3
27 - 30		9.4 -2.5	---- -----	---- ----	8
30 - 33		9.4 -5.0	---- -----	---- ----	6
33 - 36		13.2 -4.4	---- -----	---- ----	8
36 - 39		9.7 -5.0	---- -----	---- ----	6
39 - 42		4.1 -3.5	---- -----	---- ----	4
42 - 45		---- -----	---- -----	---- ----	0
45 - 48	6,500	---- -----	---- -----	---- ----	0

[a]No motion-picture records obtained.
[b]Film supply for motion-picture camera exhausted before end of traverse.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 26, 1946 - Flight 28								
Airplane 331 Traverse 4		Time (EST) 144432 - (b) Length of traverse 333.5 sec, 91,002 ft Initial heading (deg) 150						
48 - 51	7,000	6.9	-2.8	----	-----	----	----	4
51 - 54		13.5	-3.8	----	-----	----	----	8
54 - 57		14.5	-4.7	----	-----	----	----	5
57 - 60	6,500	6.9	-4.4	----	-----	----	----	5
60 - 63		8.2	-3.1	----	-----	----	----	4
63 - 66		----	-----	7.5	-----	107	----	1
66 - 69		6.0	-2.8	----	-----	----	----	2
69 - 72		----	-7.9	----	-----	----	----	3
72 - 75		9.4	-8.5	----	-----	----	----	4
75 - 78		4.4	-1.9	----	-----	----	----	3
78 - 81		4.7	-2.6	----	-----	----	----	3
81 - 84		5.4	-2.6	----	-----	----	----	3
[c]84 - 87		7.5	-4.1	----	-----	----	----	3
August 27, 1946 - Flight 29								
Airplane 333 Traverse 1		Time (EST) 141549 - 141956 Length of traverse. 277.6 sec, 88,247 ft Initial heading (deg) 360						
0 - 3	16,000	3.2	-----	----	-----	----	----	1
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-----	----	-----	----	----	0
12 - 15		----	-4.1	----	-----	----	----	1
15 - 18		----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	0
21 - 24		4.4	-----	----	-----	----	----	3
24 - 27		6.3	-----	8.0	-----	30	----	2
27 - 30		4.4	-----	----	-----	----	----	2
30 - 33		----	-----	----	-----	----	----	0
33 - 36		----	-----	----	-----	----	----	0
36 - 39		3.5	-3.5	----	-----	----	----	2
39 - 42		4.1	-----	----	-----	----	----	1
42 - 45		9.2	-----	----	-----	----	----	2

[b]Film supply for motion-picture camera exhausted before end of traverse.
[c]Film supply for accelerometer exhausted before end of traverse.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 27, 1946 - Flight 29								
Airplane 333 Traverse 1	Time (EST) 141549 - 141956; Length of traverse 277.6 sec, 88,247 ft; Initial heading (deg) 360							
45 - 48	16,000	6.3	-7.6	----	-----	----	----	5
48 - 51		15.2	-7.6	15.5	-10.7	34	100	6
51 - 54		6.3	-3.8	----	-----	----	----	2
54 - 57		9.2	-6.0	----	-----	----	----	5
57 - 60		6.3	-6.0	----	-----	----	----	5
60 - 63		----	-6.0	----	-----	----	----	1
63 - 66	16,500	----	-----	----	-----	----	----	0
66 - 69		----	-----	----	-----	----	----	0
69 - 72		----	-----	----	-----	----	----	0
72 - 75		----	-----	----	-----	----	----	0
75 - 78	16,000	----	-----	----	-----	----	----	0
78 - 81		----	-----	----	-----	----	----	0
81 - 84		----	-----	----	-----	----	----	0
84 - 87		4.8	-2.9	----	-----	----	----	3
87 - 90		----	-----	----	-----	----	----	0
Airplane 333 Traverse 2	Time (EST) 143143 - 143630; Length of traverse 306.6 sec, 97,813 ft; Initial heading (deg) 250							
0 - 3	16,000	----	-----	----	-----	----	----	0
3 - 6		6.6	-4.1	9.6	-----	63	----	6
6 - 9		4.1	-5.0	----	-----	----	----	5
9 - 12		4.7	-2.2	----	-----	----	----	3
12 - 15		----	-2.2	----	-5.9	----	65	1
15 - 18		----	-4.1	----	-----	----	----	1
18 - 21		----	-----	----	-----	----	----	0
21 - 24		4.4	-----	----	-----	----	----	1
24 - 27		6.3	-3.1	----	-----	----	----	5
27 - 30		8.2	-----	----	-----	----	----	2
30 - 33		10.0	-----	----	-----	----	----	1
33 - 36		----	-----	----	-----	----	----	0
36 - 39		----	-----	----	-----	----	----	0
39 - 42		----	-----	----	-----	----	----	0
42 - 45		----	-----	----	-----	----	----	0
45 - 48		----	-----	----	-----	----	----	0

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 27, 1946 - Flight 29								
Airplane 333 Traverse 2	Time (EST) 143143 - 143630; Length of traverse 306.6 sec, 97,813 ft; Initial heading (deg) 250							
48 - 51	16,000	----	-----	----	-----	----	----	0
51 - 54		4.1	-2.5	----	-----	----	----	2
54 - 57		5.0	-6.6	----	-7.0	----	31	4
57 - 60		12.2	-4.1	7.9	-----	63	----	5
60 - 63		6.0	-10.0	----	-----	----	----	5
63 - 66		8.2	-----	----	-----	----	----	2
66 - 69		----	-----	----	-----	----	----	0
69 - 72		6.6	-3.1	----	-----	----	----	2
72 - 75		8.5	-4.7	----	-----	----	----	4
75 - 78		4.7	-6.0	----	-----	----	----	3
78 - 81		----	-5.6	----	-12.5	----	139	3
81 - 84	16,500	7.8	-8.8	----	-15.4	----	194	5
84 - 87		6.0	-4.1	----	-----	----	----	7
87 - 90	16,000	6.9	-----	----	-----	----	----	1
90 - 93		----	-----	----	-----	----	----	0
93 - 96		----	-----	----	-----	----	----	0
96 - 99		----	-----	----	-----	----	----	0
Airplane 351 Traverse 1	Time (EST) 141337 - 141803; Length of traverse 271.4 sec, 71,864 ft; Initial heading (deg) 360							
0 - 3	9,000	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		9.6	-----	20.9	-----	148	----	2
12 - 15		13.4	-10.5	----	-----	----	----	4
15 - 18		----	-----	----	-----	----	----	0
18 - 21		----	-----	----	-----	----	----	0
21 - 24		----	-----	----	-----	----	----	0
24 - 27		----	-----	----	-----	----	----	0
27 - 30		4.5	-5.1	----	-----	----	----	3
30 - 33		----	-6.1	----	-----	----	----	1
33 - 36		----	-----	----	-----	----	----	0
36 - 39		----	-5.1	----	-8.6	----	81	1

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
August 27, 1946 - Flight 29								
Airplane 351 Traverse 1		Time (EST) 141337 - 141803 Length of traverse 271.4 sec, 71,864 ft Initial heading (deg) 360						
39 - 42	9,000	12.4	-14.0	----	-27.5	----	168	5
42 - 45		17.5	-13.4	----	-----	----	----	7
45 - 48		14.4	-9.3	----	-----	----	----	3
48 - 51		8.6	-8.3	----	-----	----	----	4
51 - 54		9.6	-8.6	11.8	-----	80	----	5
54 - 57		9.6	-8.6	----	-----	----	----	6
57 - 60		4.5	-9.6	17.9	-----	125	----	6
60 - 63		9.3	-8.6	----	-----	----	----	4
63 - 66		----	-----	----	-----	----	----	0
66 - 69		----	-----	----	-----	----	----	0
69 - 72		----	-----	----	-----	----	----	0
September 4, 1946 - Flight 30								
Airplane 348 Traverse 1		Time (EST) - (e) Length of traverse 264.0 sec, 83,265 ft Initial heading (deg) - (e)						
0 - 3	21,000	3.1	-4.1	11.0	-----	62	----	4
3 - 6		6.3	-----	----	-----	----	----	2
6 - 9		----	-----	----	-----	----	----	1
9 - 12		----	-----	----	-----	----	----	0
12 - 15	21,500	----	-----	----	-----	----	----	0
15 - 18		----	-----	----	-----	----	----	0
18 - 21		10.1	-5.3	14.8	-----	210	----	3
21 - 24		12.6	-17.0	----	-25.9	----	194	5
24 - 27		6.0	-6.6	----	-13.6	----	67	9
27 - 30		2.8	-9.8	14.3	-14.9	100	228	5
30 - 33		13.2	-13.2	----	-----	----	----	5
33 - 36		5.3	-5.3	----	-----	----	----	7
36 - 39		4.4	-7.5	----	-----	----	----	3
39 - 42		9.1	-7.5	----	-13.3	----	90	7
42 - 45		6.9	-7.5	14.8	-----	177	----	6
45 - 48		----	-6.3	13.1	-----	62	----	4
48 - 51		6.9	-3.8	----	-----	----	----	3

[e]Clock not installed in airplane.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 348 Traverse 1		Time (EST) - (e) Length of traverse 264.0 sec, 83,265 ft Initial heading (deg) - (e)						
51 - 54	21,500	6.9	-6.9	----	-----	----	----	6
54 - 57		----	-----	----	-----	----	----	4
57 - 60		----	-----	----	-----	----	----	2
60 - 63		----	-----	----	-----	----	----	2
63 - 66		----	-5.3	----	-8.0	----	93	2
66 - 69		----	-----	----	-----	----	----	1
69 - 72		3.1	-6.3	----	-----	----	----	6
72 - 75		7.5	-8.2	13.1	-----	46	----	8
75 - 78		----	-----	----	-----	----	----	0
78 - 81		----	-----	----	-----	----	----	1
81 - 84		----	-----	----	-----	----	----	0
Airplane 348 Traverse 2		Time (EST) - (e) Length of traverse 244.0 sec, 84,392 ft Initial heading (deg) - (e)						
0 - 3	21,000	----	-----	----	-----	----	----	1
3 - 6		4.1	-----	----	-----	----	----	3
6 - 9		----	-7.2	----	-15.8	----	248	8
9 - 12		7.8	-----	----	-----	----	----	7
12 - 15	21,500	6.2	-9.7	15.5	-----	261	----	4
15 - 18		9.4	-8.4	----	-----	----	----	6
18 - 21		8.1	-5.6	----	-----	----	----	3
21 - 24		7.2	-5.9	----	-----	----	----	5
24 - 27		10.3	-6.9	14.1	-----	219	----	6
27 - 30		9.4	-6.9	11.1	-----	195	----	5
30 - 33	21,000	5.6	-6.2	11.1	-----	70	----	7
33 - 36		8.7	-6.9	----	-----	----	----	8
36 - 39		7.8	-----	----	-----	----	----	2
39 - 42		10.9	-4.1	----	-----	----	----	5
42 - 45	21,500	9.7	-18.7	----	-----	----	----	3
45 - 48	21,000	7.8	-8.7	22.2	-15.9	141	112	7
48 - 51	21,500	11.2	-----	----	-----	----	----	4
51 - 54		15.9	-21.5	----	-----	----	----	6
54 - 57		6.6	-15.9	----	-----	----	----	7

[e]Clock not installed in airplane.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS- Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 348 Traverse 2		Time (EST) - (e) Length of traverse 244.0 sec, 84,392 ft Initial heading (deg) - (e)						
57 - 60	21,500	----	-----	----	-----	----	----	0
60 - 63		----	-8.7	----	-----	----	----	2
63 - 66		4.7	-4.4	----	-----	----	----	3
66 - 69		6.2	-15.0	8.9	-----	75	----	2
69 - 72		11.2	-8.4	----	-21.2	----	111	2
72 - 75		----	-----	----	-----	----	----	0
75 - 78	22,000	16.5	-----	----	-----	----	----	1
78 - 81		20.6	-15.3	----	-----	----	----	2
81 - 84		----	-----	----	-----	----	----	0
84 - 87		----	-----	----	-----	----	----	0
Airplane 348 Traverse 3		Time (EST) - (e) Length of traverse 342.2. sec, 117,425 ft Initial heading (deg) - (e)						
0 - 3	21,000	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9		13.3	-6.5	----	-----	----	----	2
9 - 12		14.0	-8.7	----	-6.9	----	164	8
12 - 15		6.8	-12.1	----	-----	----	----	5
15 - 18		9.9	-9.9	----	-----	----	----	7
18 - 21		18.6	-9.9	----	-----	----	----	4
21 - 24	21,500	6.5	-9.0	----	-----	----	----	6
24 - 27		----	-10.2	----	-15.8	----	135	4
27 - 30		----	-9.6	----	-----	----	----	4
30 - 33		----	-7.8	----	-----	----	----	4
33 - 36	22,000	13.6	-----	38.6	-----	49	----	10
36 - 39		7.1	-21.7	----	-8.9	----	136	7
39 - 42		12.7	-13.3	----	-----	----	----	10
42 - 45		8.4	-4.7	23.4	-----	359	----	6
45 - 48		4.0	-5.0	17.0	-----	193	----	6
48 - 51		5.6	-8.4	----	-----	----	----	6
51 - 54	22,500	8.4	-5.6	----	-----	----	----	5
54 - 57		----	-9.0	----	-----	----	----	4
57 - 60		7.4	-6.5	19.3	-----	175	----	5

[e]Clock not installed in airplane.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 348 Traverse 3		Time (EST) - (e) Length of traverse 342.2 sec, 117,425 ft Initial heading (deg) - (e)						
60 - 63	22,500	----	-3.7	----	-9.9	----	100	4
63 - 66	23,000	----	-9.3	----	-----	----	----	2
66 - 69		----	-8.4	----	-----	----	----	4
69 - 72		14.3	-----	----	-----	----	----	1
72 - 75		4.0	-----	12.3	-----	98	----	2
75 - 78		7.4	-8.1	12.5	-----	67	----	6
78 - 81	22,500	----	-9.6	----	-----	----	----	4
81 - 84		7.1	-5.0	----	-----	----	----	11
84 - 87		4.7	-5.0	----	-7.1	----	71	7
87 - 90		7.8	-4.7	14.6	-----	33	----	11
90 - 93		7.4	-11.5	----	-14.8	----	169	7
93 - 96		7.8	-5.0	----	-----	----	----	6
96 - 99		3.7	-5.6	----	-11.5	----	34	13
99 - 102		----	-5.6	----	-----	----	----	2
102 - 105		10.2	-3.4	9.8	-----	71	----	3
105 - 108	22,000	3.7	-4.3	----	-5.1	----	108	5
108 - 111		4.7	-6.2	9.0	-----	70	----	10
111 - 114		4.7	-5.6	----	-10.5	----	204	10
114 - 117		3.7	-6.5	----	-14.2	----	102	3
117 - 120		----	-----	----	-----	----	----	0
Airplane 348 Traverse 4		Time (EST) - (e) Length of traverse - (d) Initial heading (deg) - (e)						
0 - 3	21,000	----	-6.5	----	-----	----	----	4
3 - 6		4.6	-3.4	----	-----	----	----	4
6 - 9		3.7	-5.6	11.4	-----	69	----	6
9 - 12		3.7	-11.4	----	-----	----	----	5
12 - 15		12.3	-6.5	----	-----	----	----	3
15 - 18		----	-4.9	----	-----	----	----	1
18 - 21		6.2	-----	11.5	-----	161	----	5
21 - 24		4.9	-6.8	----	-8.9	----	66	11
24 - 27		8.6	-6.5	----	-----	----	----	5
27 - 30		----	-5.9	----	-----	----	----	4

[d]Records for complete traverse not obtained.
[e]Clock not installed in airplane.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft x 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 348 Traverse 4		Time (EST) - (e) Length of traverse - (d) Initial heading (deg) - (e)						
30 - 33	21,000	8.9	-----	----	-----	----	----	3
33 - 36		5.2	-8.6	----	-----	----	----	3
36 - 39		----	-5.2	----	-----	----	----	4
39 - 42		----	-----	----	-----	----	----	3
42 - 45		5.2	-5.2	12.8	-----	31	----	6
45 - 48		5.9	-----	----	-----	----	----	3
48 - 51		4.9	-3.7	----	-15.1	----	258	3
51 - 54		6.2	-4.9	10.1	-----	96	----	5
54 - 57		----	-5.9	----	-----	----	----	3
57 - 60		----	-4.0	----	-----	----	----	1
60 - 63		5.2	-5.2	----	-----	----	----	2
63 - 66		5.6	-----	9.8	-----	121	----	6
66 - 69		6.2	-9.9	13.8	-----	155	----	8
69 - 72		5.2	-----	32.6	-----	252	----	3
72 - 75		8.0	-8.6	23.8	-20.9	95	128	4
75 - 78		4.6	-2.5	----	-----	----	----	5
78 - 81		5.6	-7.7	----	-----	----	----	2
[c]81 - 84		----	-----	----	-----	----	----	0
Airplane 344 Traverse 1		Time (EST) - (a) Length of traverse 249.6 sec, 75,320 ft Initial heading (deg) - (a)						
0 - 3	16,000	----	-----	----	-----	----	----	0
3 - 6		----	-3.8	----	-6.7	----	231	1
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-----	6.6	-----	28	----	1
12 - 15		3.5	-----	----	-----	----	----	1
15 - 18		4.4	-2.5	----	-----	----	----	2
18 - 21		3.8	-----	----	-----	----	----	1
21 - 24		7.9	-5.4	----	-3.4	----	91	7
24 - 27		9.5	-9.5	----	-----	----	----	5
27 - 30		7.6	-6.6	----	-----	----	----	4
30 - 33		----	-7.9	----	-----	----	----	1

[a]No motion-picture records obtained.
[c]Film supply for accelerometer exhausted before end of traverse.
[d]Records for complete traverse not obtained.
[e]Clock not installed in airplane.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 344 Traverse 1		Time (EST) - (a) Length of traverse 249.6 sec, 75,320 ft Initial heading (deg) - (a)						
33 - 36	16,000	4.1	-7.9	----	-----	----	----	6
36 - 39	15,500	11.4	-5.1	----	-----	----	----	6
39 - 42	16,000	7.6	-3.5	----	-----	----	----	5
42 - 45		----	-5.4	----	-----	----	----	1
45 - 48		3.5	-6.0	----	-----	----	----	4
48 - 51		10.4	-7.3	----	-----	----	----	7
51 - 54		12.0	-13.9	----	-----	----	----	9
54 - 57	16,500	5.7	-8.8	----	-----	----	----	9
57 - 60		9.5	-7.0	----	-----	----	----	6
60 - 63		10.4	-5.4	13.8	-----	144	----	4
63 - 66	17,000	4.7	-16.1	----	-12.1	----	29	6
66 - 69	16,500	9.8	-5.7	----	-11.3	----	77	5
69 - 72		4.4	-7.0	----	-----	----	----	4
72 - 75		----	-----	----	-----	----	----	0
75 - 78		----	-----	----	-----	----	----	0
Airplane 344 Traverse 2		Time (EST) 130914 - 131228 Length of traverse 216.0 sec, 60,583 ft Initial heading (deg) 260						
0 - 3	16,000	5.3	-----	----	-----	----	----	1
3 - 6		----	-4.1	----	-----	----	----	2
6 - 9		6.0	-8.5	----	-----	----	----	4
9 - 12		4.7	-4.1	9.2	-----	57	----	4
12 - 15		----	-6.9	----	-----	----	----	3
15 - 18		5.3	-3.8	----	-6.6	----	145	4
18 - 21		5.3	-6.9	----	-----	----	----	2
21 - 24		5.6	-4.1	10.4	-----	27	----	5
24 - 27		4.7	-6.0	12.4	-----	55	----	8
27 - 30		8.5	-6.6	----	-----	----	----	6
30 - 33		6.6	-6.6	----	-----	----	----	7
33 - 36		3.4	-3.8	----	-----	----	----	4
36 - 39		5.0	-4.1	----	-6.0	----	113	4
39 - 42		4.1	-5.0	----	-----	----	----	3

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 344 Traverse 2	Time (EST) 130914 - 131228; Length of traverse 216.0 sec, 60,583 ft; Initial heading (deg) 260							
42 - 45	16,000	8.1	-4.1	----	-16.9	----	69	10
45 - 48	16,500	4.4	-7.8	----	-----	----	----	7
48 - 51	16,000	4.4	-4.1	----	-----	----	----	5
51 - 54		----	-----	----	-----	----	----	0
54 - 57		6.9	-6.9	8.0	-----	57	----	6
57 - 60	16,500	4.1	-3.4	----	-----	----	----	4
60 - 63		----	-3.4	----	-----	----	----	1
Airplane 344 Traverse 3	Time (EST) 131848 - 132308; Length of traverse 341.4 sec, 98,450 ft; Initial heading (deg) 50							
0 - 3	16,000	----	-3.4	----	-5.1	----	81	2
3 - 6		4.7	-----	----	-----	----	----	1
6 - 9		5.6	-7.8	----	-----	----	----	2
9 - 12		9.0	-6.5	----	-----	----	----	6
12 - 15		7.2	-3.7	----	-----	----	----	4
15 - 18		5.3	-6.2	6.6	-----	56	----	6
18 - 21		7.5	-7.5	----	-----	----	----	7
21 - 24		8.1	-7.8	----	-----	----	----	9
24 - 27	16,500	5.6	-10.9	----	-12.0	----	151	4
27 - 30		9.3	-5.6	----	-----	----	----	5
30 - 33		11.2	-8.1	----	-----	----	----	7
33 - 36		13.4	-4.7	----	-----	----	----	7
36 - 39		8.7	-12.2	----	-----	----	----	4
39 - 42		5.6	-9.0	----	-7.4	----	93	8
42 - 45	17,000	6.2	-7.8	----	-----	----	----	3
45 - 48		4.1	-3.7	----	-----	----	----	4
48 - 51		2.8	-4.1	----	-----	----	----	2
51 - 54		2.8	-2.5	----	-8.6	----	30	3
54 - 57		6.5	-3.4	6.7	-----	28	----	5
57 - 60		2.8	-----	7.6	-----	35	----	1
60 - 63		2.8	-6.9	----	-----	----	----	5
63 - 66		----	-3.7	----	-5.1	----	45	2
66 - 69		4.1	-6.9	----	-12.1	----	173	4

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 344 Traverse 3	Time (EST) 131848 - 132308; Length of traverse 341.4 sec, 98,450 ft; Initial heading (deg) 50							
69 - 72	17,000	----	-5.6	----	-----	----	----	3
72 - 75		3.4	-3.7	----	-----	----	----	3
75 - 78		3.4	-1.9	----	-8.9	----	119	2
78 - 81		----	-3.1	----	-5.5	----	120	2
81 - 84		4.1	-3.4	9.8	-----	60	----	3
84 - 87		5.3	-3.1	----	-----	----	----	2
87 - 90		----	-5.9	----	-----	----	----	3
90 - 93		4.7	-4.1	----	-----	----	----	4
93 - 96		5.6	-4.1	5.6	-----	55	----	6
96 - 99		----	-5.3	----	-6.9	----	80	3
Airplane 344 Traverse 4	Time (EST) 133039 - 133637; Length of traverse 381.0 sec, 109,485 ft; Initial heading (deg) 260							
0 - 3	16,500	----	-----	----	-----	----	----	0
3 - 6		----	-----	----	-----	----	----	0
6 - 9		----	-----	----	-----	----	----	0
9 - 12		----	-----	----	-----	----	----	0
12 - 15		----	-----	----	-----	----	----	0
15 - 18		----	-----	----	-----	----	----	0
18 - 21		----	-4.0	----	-4.1	----	139	3
21 - 24		7.1	-----	----	-----	----	----	4
24 - 27		----	-4.6	----	-----	----	----	4
27 - 30		----	-4.3	----	-----	----	----	1
30 - 33		----	-6.8	----	-----	----	----	2
33 - 36		----	-3.4	----	-----	----	----	1
36 - 39		3.7	-8.7	----	-----	----	----	5
39 - 42		5.3	-3.7	----	-----	----	----	4
42 - 45		6.5	-5.3	8.1	-----	175	----	3
45 - 48		5.6	-8.0	----	-----	----	----	6
48 - 51		5.6	-5.9	----	-----	----	----	6
51 - 54		6.5	-4.0	----	-----	----	----	6
54 - 57		7.1	-6.2	----	-----	----	----	5
57 - 60		4.6	-6.8	----	-----	----	----	6

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 344 Traverse 4		Time (EST) 133039 - 133637 Length of traverse 381.0 sec, 109,485 ft Initial heading (deg) 260						
60 - 63	16,500	----	-2.8	----	-----	----	----	1
63 - 66		3.4	-2.5	----	-----	----	----	3
66 - 69		----	-4.9	----	-----	----	----	2
69 - 72		5.3	-4.9	9.8	-----	85	----	6
72 - 75		5.3	-7.7	----	-----	----	----	7
75 - 78		6.2	-9.0	----	-17.5	----	122	10
78 - 81		----	-3.4	----	-----	----	----	1
81 - 84		----	-4.6	----	-----	----	----	2
84 - 87		4.9	-5.9	----	-----	----	----	7
87 - 90		11.4	-2.2	----	-----	----	----	5
90 - 93		7.1	-9.6	----	-----	----	----	7
93 - 96		2.5	-5.9	11.7	-----	41	----	5
96 - 99		10.2	-9.9	7.9	-----	56	----	9
99 - 102		10.2	-9.6	----	-----	----	----	8
102 - 105		6.2	-3.7	----	-----	----	----	4
105 - 108		3.4	-8.0	----	-----	----	----	6
108 - 111		6.8	-3.1	----	-7.0	----	152	5
Airplane 345 Traverse 1		Time (EST) - (a) Length of traverse 301.8 sec, 84,713 ft Initial heading (deg) - (a)						
0 - 3	10,500	----	-3.2	----	-----	----	----	3
3 - 6		----	-2.9	----	-4.1	----	213	1
6 - 9		----	-2.9	----	-----	----	----	1
9 - 12		5.1	-----	----	-----	----	----	1
12 - 15		----	-6.3	----	-8.1	----	256	4
15 - 18		9.8	-9.5	----	-----	----	----	6
18 - 21		7.9	-5.4	----	-----	----	----	6
21 - 24		14.3	-21.2	----	-----	----	----	8
24 - 27		3.2	-6.0	----	-----	----	----	5
27 - 30		13.6	-15.8	----	-----	----	----	6
30 - 33		8.9	-----	----	-----	----	----	4
33 - 36		5.1	-5.1	----	-----	----	----	5

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 345 Traverse 1	Time (EST) - (a) Length of traverse 301.8 sec, 84,713 ft Initial heading (deg) - (a)							
36 - 39	10,500	3.5	-----	----	-----	----	----	2
39 - 42		2.9	-6.3	----	-----	----	----	2
42 - 45		6.3	-3.5	----	-----	----	----	4
45 - 48		----	-3.5	----	-6.7	----	183	1
48 - 51		7.9	-----	----	-----	----	----	3
51 - 54		13.6	-9.5	----	-----	----	----	8
54 - 57		18.4	-13.6	----	-----	----	----	8
57 - 60		13.9	-9.5	----	-----	----	----	7
60 - 63		16.8	-7.9	----	-----	----	----	4
63 - 66		13.3	-6.0	----	-----	----	----	6
66 - 69		9.2	-10.8	----	-----	----	----	4
69 - 72		5.1	-3.8	----	-----	----	----	3
72 - 75		6.0	-3.5	----	-----	----	----	4
75 - 78		3.5	-4.4	----	-7.2	----	138	3
78 - 81		3.5	-3.2	----	-----	----	----	3
81 - 84		6.0	-4.4	----	-6.2	----	137	2
84 - 87		----	-----	----	-----	----	----	0
Airplane 345 Traverse 2	Time (EST) - (a) Length of traverse 356.1 sec, 94,285 ft Initial heading (deg) - (a)							
0 - 3	10,500	3.5	-3.5	----	-----	----	----	3
3 - 6		2.8	-----	----	-----	----	----	1
6 - 9		5.0	-----	8.1	-----	52	----	3
9 - 12		----	-----	----	-----	----	----	0
12 - 15		----	-3.5	----	-6.2	----	153	3
15 - 18		----	-2.8	----	-----	----	----	1
18 - 21		5.7	-3.2	7.5	-----	54	----	7
21 - 24		4.7	-4.7	7.5	-6.4	27	54	6
24 - 27		6.3	-3.5	----	-----	----	----	5
27 - 30		5.4	-6.3	----	-----	----	----	8
30 - 33	11,000	5.7	-8.5	----	-----	----	----	9
33 - 36		5.0	-5.4	----	-----	----	----	5

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 345 Traverse 2		Time (EST) - (a) Length of traverse 356.1 sec, 94,285 ft Initial heading (deg) - (a)						
36 - 39	11,000	4.7	-5.4	8.3	-----	26	----	5
39 - 42	10,500	6.0	-6.6	----	-----	----	----	2
42 - 45		3.5	-4.1	----	-10.0	----	51	4
45 - 48		9.5	-6.0	7.9	-----	89	----	6
48 - 51		13.2	-4.4	----	-----	----	----	6
51 - 54		7.9	-9.8	----	-----	----	----	7
54 - 57		9.8	-9.5	16.0	-----	134	----	9
57 - 60		7.2	-6.0	----	-----	----	----	4
60 - 63		9.1	-5.0	----	-----	----	----	7
63 - 66		3.8	-6.6	----	-----	----	----	6
66 - 69		7.6	-5.7	----	-----	----	----	5
69 - 72		7.9	-8.8	----	-12.1	----	96	3
72 - 75		7.6	-5.0	----	-----	----	----	7
75 - 78		12.9	-7.2	----	-----	----	----	6
78 - 81		7.6	-6.6	----	-----	----	----	3
81 - 84		6.9	-9.1	----	-8.2	----	149	6
84 - 87		7.2	-5.0	----	-----	----	----	5
87 - 90		8.2	-4.7	----	-----	----	----	6
90 - 93		7.6	-3.8	----	-----	----	----	7
93 - 96		----	-----	----	-----	----	----	0
Airplane 345 Traverse 3		Time (EST) - (a) Length of traverse 429.6 sec, 115,846 ft Initial heading (deg) - (a)						
0 - 3	10,500	12.5	-5.6	11.3	-----	84	----	5
3 - 6		7.2	-6.6	----	-----	----	----	11
6 - 9		19.7	-10.0	32.4	-----	189	----	8
9 - 12		6.3	-7.5	12.3	-----	160	----	4
12 - 15		7.8	-6.6	----	-----	----	----	4
15 - 18		17.2	-6.0	----	-----	----	----	6
18 - 21		14.1	-5.0	----	-----	----	----	4
21 - 24	11,000	7.5	-9.1	----	-----	----	----	8
24 - 27		9.7	-5.3	12.3	-----	132	----	4
27 - 30		6.9	-2.8	23.6	-----	211	----	4

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 345 Traverse 3	Time (EST) - (a) Length of traverse 429.6 sec, 115,846 ft Initial heading (deg) - (a)							
30 - 33	11,000	5.6	-5.0	7.1	-6.3	79	53	7
33 - 36		7.5	-6.3	11.5	-----	76	----	4
36 - 39		5.0	-8.8	----	-----	----	----	6
39 - 42		6.3	-3.8	----	-----	----	----	6
42 - 45		7.5	-7.8	----	-15.0	----	254	6
45 - 48		5.3	-3.4	----	-----	----	----	6
48 - 51		9.1	-8.5	----	-----	----	----	5
51 - 54		8.5	-7.8	----	-----	----	----	7
54 - 57		6.3	-5.6	----	-----	----	----	3
57 - 60		4.1	-7.8	----	-11.0	----	57	4
60 - 63		7.5	-9.4	----	-----	----	----	5
63 - 66		6.6	-3.1	----	-----	----	----	4
66 - 69		----	-3.1	----	-----	----	----	1
69 - 72		----	-----	----	-----	----	----	0
72 - 75		----	-----	----	-----	----	----	0
75 - 78		----	-3.1	----	-----	----	----	2
78 - 81		----	-----	----	-----	----	----	0
81 - 84		2.8	-----	4.6	-----	131	----	1
84 - 87		----	-----	----	-----	----	----	0
87 - 90		----	-4.7	----	-----	----	----	3
90 - 93		13.2	-4.4	----	-----	----	----	3
93 - 96		5.3	-----	----	-----	----	----	1
96 - 99		----	-5.0	----	-12.4	----	405	2
99 - 102		----	-3.4	----	-----	----	----	1
102 - 105		----	-----	----	-----	----	----	0
105 - 108		----	-5.3	----	-----	----	----	1
108 - 111		3.4	-3.4	----	-----	----	----	2
111 - 114		3.4	-----	----	-----	----	----	2
114 - 117		4.7	-----	----	-----	----	----	1

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 345 Traverse 4		Time (EST) - (a) Length of traverse 409.5 sec, 105,612 ft Initial heading (deg) - (a)						
0 - 3	10,500	----	-3.1	----	-----	----	----	1
3 - 6		----	-3.4	----	-----	----	----	1
6 - 9		3.4	-3.4	----	-----	----	----	2
9 - 12		----	-3.4	----	-5.6	----	153	1
12 - 15		----	-4.0	----	-----	----	----	1
15 - 18		----	-3.4	----	-----	----	----	1
18 - 21		5.6	-----	----	-----	----	----	2
21 - 24		4.0	-3.7	----	-----	----	----	2
24 - 27		----	-4.7	----	-----	----	----	1
27 - 30		----	-4.7	----	-----	----	----	1
30 - 33		3.4	-3.4	----	-8.6	----	80	2
33 - 36		----	-----	----	-----	----	----	0
36 - 39		----	-----	----	-----	----	----	0
39 - 42		5.3	-5.0	----	-----	----	----	4
42 - 45		5.3	-3.7	9.7	-----	123	----	2
45 - 48		----	-3.4	----	-6.9	----	277	1
48 - 51		3.7	-----	----	-----	----	----	1
51 - 54		3.7	-6.9	----	-----	----	----	5
54 - 57		7.5	-3.7	----	-----	----	----	3
57 - 60		11.2	-5.3	13.1	-----	74	----	6
60 - 63		6.5	-----	----	-----	----	----	3
63 - 66		5.6	-6.9	----	-----	----	----	3
66 - 69		5.9	-7.2	----	-----	----	----	9
69 - 72		10.9	-9.0	----	-----	----	----	4
72 - 75		3.7	-5.3	----	-----	----	----	3
75 - 78		10.9	-6.9	----	-13.8	----	160	9
78 - 81		3.4	-6.5	----	-----	----	----	8
81 - 84		7.5	-3.4	----	-----	----	----	4
84 - 87		9.7	-4.4	----	-----	----	----	4
87 - 90		11.2	-2.5	16.4	-----	166	----	4
90 - 93	11,000	7.2	-5.9	8.1	-----	81	----	9
93 - 96		7.5	-----	----	-----	----	----	4
96 - 99	11,500	8.4	-4.7	----	-----	----	----	6
99 - 102		8.1	-7.2	----	-----	----	----	8

[a]No motion-picture records obtained.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Concluded

Space interval ft × 10^3	Pressure altitude (ft)	Maximum effective gust velocity $U_{e_{max}}$ (fps)		Maximum true gust velocity $U_{t_{max}}$ (fps)		Gust gradient distance (ft)		No. of gusts
September 4, 1946 - Flight 30								
Airplane 345 Traverse 4		Time (EST) - (a) Length of traverse 409.5 sec, 105,612 ft Initial heading (deg) - (a)						
102 - 105	11,500	7.5	-10.3	----	-----	----	----	3
105 - 108		----	-----	----	-----	----	----	0
Airplane 345 Traverse 5		Time (EST) - (a) Length of traverse 20.1 sec, 6,402 ft Initial heading (deg) - (a)						
0 - 3	9,000	7.4	-7.7	----	-----	----	----	9
3 - 6		5.6	-5.0	----	-----	----	----	5
6 - 9		----	-2.8	----	-----	----	----	1
Airplane 351 Traverse 1		Time (EST) 125223 - 125752 Length of traverse - (f) Initial heading (deg) 350						
Airplane 351 Traverse 2		Time (EST) 130324 - 130712 Length of traverse - (f) Initial heading (deg) 270						
Airplane 351 Traverse 3		Time (EST) 131334 - 131907 Length of traverse - (f) Initial heading (deg) 40						
Airplane 351 Traverse 4		Time (EST) 132424 - 133003 Length of traverse - (f) Initial heading (deg) 270						

[a]No motion-picture records obtained.
[f]Failure in operation of recording instruments prevented computations for gust velocities and length of traverses.

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TABLE II.- SUMMARY OF DRAFT MEASUREMENTS FROM FLIGHTS

OF P-61c AIRPLANES WITHIN THUNDERSTORMS

Date	Flight no.	Airplane no.	Assigned altitude (ft)	Traverse no.	Draft location from cloud entry (ft)		Draft extent (ft)	Average draft velocity (fps)
					Start	End		
8-23-46	27	347	26,000	1	35,705	47,467	11,762	13.7
					47,467	51,073	3,606	-24.2
					53,519	58,014	4,495	16.8
				2	1,482	29,682	28,700	5.4
					29,682	45,872	16,190	-6.3
					54,530	73,665	19,135	12.9
					86,261	95,141	8,880	-20.0
				3	51,614	60,039	8,425	-8.0
				4	9,934	30,956	21,022	-13.0
		345	21,000	1	5,924	18,374	12,450	10.9
				2	49,183	62,100	12,917	16.2
				3	64,258	67,109	2,851	17.3
					93,296	95,836	2,540	-27.0
				4	18,792	24,484	5,692	12.4
		331	16,000	1	48,857	54,692	5,835	-9.9
				2	42,690	47,730	5,040	23.8
				3	8,700	13,300	4,600	20.0
				4	114,857	120,659	6,000	15.7
					129,824	132,659	2,835	-20.3
		333	11,000	[a]1				
				2	44,550	53,000	8,450	13.8
					63,667	67,398	3,731	-27.3
					73,321	76,710	3,389	14.3
				3	15,900	24,300	8,400	-9.4
					31,541	35,432	3,891	21.0
				[a]4				

[a]No draft velocities indicated by records.

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TABLE II.- SUMMARY OF DRAFT MEASUREMENTS - Continued

Date	Flight no.	Airplane no.	Assigned altitude (ft)	Traverse no.	Draft location from cloud entry (ft)		Draft extent (ft)	Average draft velocity (fps)
					Start	End		
8-23-46	27	351	6,000	1	27,907	41,359	13,452	-6.3
					58,596	65,087	6,491	14.4
				[a]2				
				3	17,855	24,450	6,595	15.8
					51,508	59,807	8,299	-10.6
				4	23,265	29,183	5,918	16.8
					65,433	69,571	4,138	-32.4
					69,571	72,945	3,374	25.0
8-26-46	28	333	26,000	[a]1				
				[a]2				
				3	5,300	17,550	12,250	16.1
					36,888	43,450	6,562	12.6
					58,421	63,210	4,789	-17.2
				4	7,900	24,850	16,950	33.6
					41,896	46,867	4,971	-19.3
					52,408	56,279	3,871	-25.2
		351	21,000	1	13,465	20,735	7,270	-7.5
				2	41,001	50,922	9,921	10.7
					61,868	71,412	9,544	-15.6
				[a]3				
				[a]4				
		345	16,000	1	38,375	40,997	2,622	-17.9
					41,601	43,232	1,631	28.9
				2	28,147	31,907	3,760	13.1
					44,900	47,700	2,800	-9.0
				3	14,000	18,600	4,600	-18.5
					18,725	21,112	2,387	40.5
					28,000	34,900	6,900	20.5
					43,234	49,425	6,191	-17.4

[a]No draft velocities indicated by records.

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TABLE II.- SUMMARY OF DRAFT MEASUREMENTS - Continued

Date	Flight no.	Airplane no.	Assigned altitude (ft)	Traverse no.	Draft location from cloud entry (ft)		Draft extent (ft)	Average draft velocity (fps)
					Start	End		
8-26-46	28	345	16,000	4	24,753	29,083	4,330	36.3
					36,600	39,650	3,050	19.2
		347	11,000	[a]1				
				2	4,746	9,568	4,822	-15.5
				3	17,722	29,643	11,921	11.1
				4	12,274	20,088	7,814	-9.2
					56,392	58,685	2,293	-22.3
		331	6,000	[a]1				
				[a]2				
				3	8,525	17,853	9,328	-19.7
					23,000	25,800	2,800	21.0
				4	53,629	58,214	4,585	-12.4
8-27-46	29	333	16,000	1	55,551	58,247	2,696	22.9
					59,225	60,567	1,342	33.3
				2	76,750	83,400	6,650	11.6
		351	9,000	[a]1				
9-4-46	30	348	21,000	1	20,450	22,950	2,500	21.8
					23,400	27,850	4,450	26.9
				2	47,750	53,900	6,150	48.1
				3	18,800	22,300	3,500	51.8
					27,500	30,400	2,900	26.1
					33,300	36,850	3,550	46.9
					50,700	55,000	4,300	30.8
					58,850	63,900	5,050	44.4
				4	60,800	66,250	5,450	19.8

[a]No draft velocities indicated by records.

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TABLE II.- SUMMARY OF DRAFT MEASUREMENTS - Concluded

Date	Flight no.	Airplane no.	Assigned altitude (ft)	Traverse no.	Draft location from cloud entry (ft)		Draft extent (ft)	Average draft velocity (fps)
					Start	End		
9-4-46	30	344	16,000	1	35,340	38,800	3,460	-39.1
					50,400	64,600	14,200	19.4
				[a]2				
				3	34,594	43,800	9,206	35.3
				4	87,000	94,500	7,500	20.0
		345	11,000	1	22,216	28,940	6,724	-13.7
					51,540	55,205	3,665	20.6
					60,839	68,189	7,350	15.3
				[a]2				
				3	4,524	10,685	6,161	20.9
				4	81,635	97,038	15,403	15.5
				[a]5				
		351	6,000	[b]1				
				[b]2				
				[b]3				
				[b]4				

[a]No draft velocities indicated by records.
[b]Failure in operation of recording instruments prevented computations for draft velocities.

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TABLE III.- SUMMARY OF INDICATIONS OF AMBIENT

AIR TEMPERATURE WITHIN THUNDERSTORMS

Date	Flight no.	Airplane no.	Traverse no.	Time (EST)	Distance from cloud entry (ft)	Milliammeter reading
8-23-46	27	331	3	160225	0	220
				160245	5,900	215
				160300	10,400	220
				160315	15,100	220
				160330	19,700	230
				160400	28,700	230
				160415	33,200	220
				160430	38,000	215
				160445	42,900	220
				160500	47,700	220
				160515	52,900	215
				160530	57,600	225
				160545	62,400	225
				160600	67,000	230
				160615	71,600	235
		351	1	152419	0	700
				152445	6,600	700
				152500	10,700	750
				152515	14,800	800
				152545	23,100	800
				152600	27,300	750
				152615	31,700	700
				152630	36,000	700
				152645	40,700	800
				152700	44,900	850
				152715	49,000	900
				152800	60,500	900
				152815	64,500	800
				152830	68,400	800
			2	154006	0	700
				154030	6,700	700
				154045	10,700	750
				154100	15,000	800
				154115	19,000	750
				154215	35,800	750
				154230	40,000	700
				154245	44,200	750

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TABLE III.- SUMMARY OF INDICATIONS - Continued

Date	Flight no.	Airplane no.	Traverse no.	Time (EST)	Distance from cloud entry (ft)	Milliammeter reading
8-23-46	27	351	2	154300	48,600	800
				154315	52,800	850
				154330	56,900	850
				154345	61,100	900
				154430	73,000	900
				154445	76,800	950
				154515	84,000	950
				154530	87,600	850
				154545	91,000	850
			3	155432	0	750
				155500	7,300	750
				155515	12,000	800
				155745	53,800	800
				155800	58,000	850
				155815	62,100	900
				155830	66,600	900
			4	161241	0	700
				161315	9,900	700
				161330	14,300	750
				161345	18,700	800
				161430	31,700	800
				161445	36,000	750
				161500	40,400	750
				161515	44,900	800
				161530	49,600	850
				161545	54,000	850
				161600	58,400	900
				161630	67,200	900
				161645	71,500	850
				161715	79,500	850
8-26-46	28	351	3	143712	0	1150
				143745	9,100	1150
				143800	13,900	1100
				143845	28,800	1100
				143900	33,600	1150
				143945	48,100	1150
				144000	52,800	1200
				144045	67,000	1200

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TABLE III.- SUMMARY OF INDICATIONS - Continued

Date	Flight no.	Airplane no.	Traverse no.	Time (EST)	Distance from cloud entry (ft)	Milliammeter reading
8-26-46	28	331	1	140746	0	180
				140815	7,600	180
				140830	11,600	200
				140845	15,400	220
				140900	19,100	230
				140915	22,900	220
				141030	42,400	220
				141045	46,700	210
				141100	50,900	215
			2	142103	0	200
				142130	7,200	220
				142330	38,000	220
				142345	41,800	230
				142400	45,600	230
				142415	49,600	215
				142430	53,500	220
			4	144432	0	220
				144445	3,500	210
				144515	12,000	210
				144530	16,300	220
				144545	20,600	220
				144600	24,900	210
				144615	29,200	210
				144630	33,600	220
				144645	37,700	230
				144700	41,800	240
				144745	53,300	240
				144800	57,000	220
				144830	65,000	220
				144845	68,300	210
				144900	72,700	220
				144930	80,900	220
				144945	85,100	200
9-4-46	30	351	1	125223	(a)	850
				125315		850
				125330		875
				125345		950
				125400		975
				125415		1000
				125430		975

[a]Failure in operation of recording instruments prevented computations for distances.

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TABLE III.- SUMMARY OF INDICATIONS - Concluded

Date	Flight no.	Airplane no.	Traverse no.	Time (EST)	Distance from cloud entry (ft)	Milliammeter reading
9-4-46	30	351	1	125500		975
				125515		1000
				125530		1000
				125545		1025
				125600		1050
				125615		1075
				125645		1075
				125700		1050
				125715		1025
				125730		1025
				125745		1050
			3	131334	(a)	900
				131400		900
				131415		925
				131430		925
				131445		950
				131500		950
				131515		975
				131530		1025
				131545		1050
				131615		1050
				131630		1075
				131645		1050
				131700		1075
				131715		1075
				131730		1100
				131745		1075
				131800		1050
				131815		1075
				131830		1150
				131845		1150
				131900		1100
				131915		1100

[a]Failure in operation of recording instruments prevented computations for distances.

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