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# RESEARCH MEMORANDUM

EVALUATION OF GUST AND DRAFT VELOCITIES FROM FLIGHTS OF P-61C AIRPLANES WITHIN THUNDERSTORMS AUGUST 21, 1947 TO AUGUST 25, 1947 AT CLINTON COUNTY ARMY AIR FIELD, OHIO

By

Jack Funk

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RESEARCH MEMORANDUM

# EVALUATION OF GUST AND DRAFT VELOCITIES FROM FLIGHTS OF P-61C AIRPLANES WITHIN THUNDERSTORMS AUGUST 21, 1947 TO AUGUST 25, 1947 AT CLINTON COUNTY ARMY AIR FIELD, OHIO

By Jack Funk

The results obtained from measurements of gust and draft velocities within thunderstorms at Clinton County Army Air Field, Ohio, for the period of August 21, 1947 to August 25, 1947 are presented herein. These data are summarized in tables I and II, respectively, and are of the type presented in reference 1 for previous flights.

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

Jack Funk

Jack Funk
Aeronautical Engineer

Approved: John R. Westfall
for Richard V. Rhode
Chief of Aircraft Loads Division

CJB

## REFERENCE

1. Funk, Jack: Evaluation of Gust and Draft Velocities from Flights of P-61C Airplanes within Thunderstorms August 16, 1947 to August 20, 1947 at Clinton County Army Air Field, Ohio. NACA RM No. L8B04, 1948.

TABLE I.- SUMMARY OF GUST MEASUREMENTS FROM FLIGHTS

OF P-61C AIRPLANES WITHIN THUNDERSTORMS

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 353 - Traverse 1<br>Length of traverse 470.5 sec | | | | | | | | |
| 0 - 70 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 70 - 80 | | ---- | -5.0 | ---- | -5.0 | --- | 113 | 2 |
| 80 - 90 | | 7.9 | -4.4 | ---- | ----- | --- | --- | 2 |
| 90 - 100 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 100 - 110 | | ---- | -4.1 | ---- | ----- | --- | --- | 1 |
| 110 - 160 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]160 - 170 | | ---- | -4.1 | ---- | ----- | --- | --- | 1 |
| 170 - 180 | 23,500 | 4.1 | ----- | ---- | ----- | --- | --- | 1 |
| 180 - 200 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 200 - 210 | | ---- | -4.4 | ---- | ----- | --- | --- | 2 |
| 210 - 220 | | 4.1 | ----- | ---- | ----- | --- | --- | 1 |
| 220 - 250 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 250 - 260 | | ---- | -3.1 | ---- | ----- | --- | --- | 1 |
| 260 - 280 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]280 - 290 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 290 - 330 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 330 - 340 | 24,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]340 - 350 | 24,000 | ---- | -3.5 | ---- | ----- | --- | --- | 1 |
| 350 - 360 | 23,500 | 5.1 | -3.8 | ---- | ----- | --- | --- | 11 |
| 360 - 370 | 23,000 | 12.3 | -2.5 | ---- | -15.2 | --- | 190 | 6 |
| 370 - 380 | 23,500 | 12.0 | ----- | ---- | ----- | --- | --- | 5 |
| 380 - 390 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 390 - 400 | | 4.4 | -8.8 | ---- | ----- | --- | --- | 3 |
| 400 - 410 | 24,500 | 3.1 | -4.7 | ---- | ----- | --- | --- | 4 |
| [b]410 - 420 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 420 - 480 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 353 - Traverse 2<br>Length of traverse 288.7 sec | | | | | | | | |
| 0 - 40 | 23,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 40 - 110 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]110 - 120 | | 3.7 | -5.3 | 7.8 | ----- | 78 | --- | 3 |
| 120 - 130 | 23,500 | 3.4 | ----- | ---- | ----- | --- | --- | 1 |
| 130 - 140 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 140 - 150 | | 7.2 | -8.7 | ---- | ----- | --- | --- | 5 |
| 150 - 160 | | 6.9 | -7.8 | ---- | ----- | --- | --- | 5 |
| 160 - 170 | 24,000 | 3.1 | -5.9 | ---- | ----- | --- | --- | 2 |
| 170 - 180 | | 5.6 | -18.4 | 23.0 | ----- | 277 | --- | 7 |
| 180 - 190 | 23,500 | 18.1 | -8.1 | ---- | ----- | --- | --- | 8 |
| 190 - 200 | | 10.9 | ----- | ---- | ----- | --- | --- | 1 |
| 200 - 220 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]220 - 230 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 230 - 260 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]260 - 270 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 270 - 290 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 353 - Traverse 3<br>Length of traverse 776.3 sec | | | | | | | | |
| 0 - 240 | 23,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 240 - 260 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 260 - 270 | | 9.3 | -12.4 | 24.1 | ----- | 182 | --- | 2 |
| 270 - 280 | 23,500 | ---- | -13.4 | ---- | ----- | --- | --- | 1 |
| 280 - 290 | | 7.5 | -2.5 | 15.0 | ----- | 100 | --- | 3 |
| 290 - 300 | | 2.5 | ----- | ---- | ----- | --- | --- | 1 |
| 300 - 310 | | 3.4 | -4.3 | ---- | ----- | --- | --- | 3 |
| 310 - 320 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 320 - 330 | 24,000 | 3.1 | ----- | ---- | -7.8 | --- | 130 | 2 |
| 330 - 340 | 23,500 | 4.3 | -7.8 | ---- | ----- | --- | --- | 3 |
| 340 - 350 | | 6.8 | -6.8 | ---- | ----- | --- | --- | 6 |
| 350 - 360 | | 9.6 | ----- | ---- | ----- | --- | --- | 2 |
| 360 - 370 | 23,000 | 10.2 | -8.7 | ---- | -7.3 | --- | 114 | 3 |
| 370 - 380 | 23,500 | 4.0 | -7.1 | ---- | -9.3 | --- | 294 | 5 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 353 - Traverse 3<br>Length of traverse 776.3 sec | | | | | | | | |
| 380 - 390 | 23,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 390 - 400 | | ---- | -5.9 | ---- | ----- | --- | --- | 1 |
| 400 - 410 | | 8.4 | ----- | ---- | ----- | --- | --- | 1 |
| 410 - 420 | | ---- | -8.4 | ---- | ----- | --- | --- | 2 |
| 420 - 440 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]440 - 450 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 450 - 470 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]470 - 480 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 480 - 490 | | ---- | -3.1 | ---- | ----- | --- | --- | 1 |
| 490 - 500 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 500 - 510 | | ---- | -2.5 | ---- | ----- | --- | --- | 1 |
| 510 - 520 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 520 - 530 | | ---- | -4.0 | ---- | ----- | --- | --- | 3 |
| 530 - 540 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]540 - 550 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a-b]550 - 560 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 560 - 780 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 353 - Traverse 4<br>Length of traverse 1430.5 sec | | | | | | | | |
| 0 - 30 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]30 - 40 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 40 - 110 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 110 - 140 | 23,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]140 - 150 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 150 - 160 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 160 - 170 | | 3.1 | ----- | ---- | ----- | --- | --- | 1 |
| 170 - 180 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 180 - 290 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]290 - 300 | | 7.4 | -8.3 | 17.8 | ----- | 303 | --- | 3 |
| 300 - 310 | 23,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 310 - 320 | | ---- | -3.7 | ---- | ----- | --- | --- | 1 |
| 320 - 360 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 360 - 410 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 353 - Traverse 4<br>Length of traverse 1430.5 sec | | | | | | | | |
| [b]410 - 420 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 420 - 450 | " | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]450 - 460 | | 11.4 | -19.0 | ---- | ----- | --- | --- | 7 |
| 460 - 470 | 23,500 | 10.4 | -19.6 | ---- | -20.5 | --- | 47 | 8 |
| 470 - 480 | 23,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 480 - 490 | | 11.0 | -4.9 | ---- | ----- | --- | --- | 4 |
| 490 - 500 | 23,500 | 7.4 | -5.8 | ---- | ----- | --- | --- | 5 |
| 500 - 510 | 24,000 | 12.6 | -12.6 | ---- | ----- | --- | --- | 5 |
| 510 - 520 | | ---- | -7.4 | ---- | ----- | --- | --- | 1 |
| 520 - 530 | 23,500 | ---- | -6.1 | ---- | ----- | --- | --- | 2 |
| 530 - 540 | | 4.0 | ----- | ---- | -9.7 | --- | 112 | 2 |
| 540 - 550 | | ---- | -7.1 | ---- | ----- | --- | --- | 2 |
| 550 - 560 | | 4.3 | -4.9 | 14.3 | -8.2 | 187 | 84 | 2 |
| 560 - 570 | | 4.0 | ----- | ---- | ----- | --- | --- | 3 |
| 570 - 580 | 23,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 580 - 590 | | 5.5 | -7.7 | 5.4 | ----- | 172 | --- | 4 |
| 590 - 600 | 23,500 | ---- | -12.3 | ---- | ----- | --- | --- | 1 |
| 600 - 610 | | 5.5 | ----- | ---- | ----- | --- | --- | 1 |
| 610 - 930 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 930 - 940 | | ---- | -4.9 | ---- | ----- | --- | --- | 1 |
| 940 - 950 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 950 - 960 | | 5.5 | ----- | ---- | ----- | --- | --- | 1 |
| 960 - 1000 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1000 - 1010 | | ---- | -4.6 | ---- | ----- | --- | --- | 3 |
| 1010 - 1020 | | 5.5 | ----- | 6.9 | ----- | 97 | --- | 1 |
| 1020 - 1070 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1070 - 1080 | | 6.4 | -4.9 | 12.5 | ----- | 233 | --- | 3 |
| 1080 - 1100 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1100 - 1110 | | 2.7 | ----- | ---- | ----- | --- | --- | 1 |
| 1110 - 1120 | | 2.7 | ----- | ---- | ----- | --- | --- | 1 |
| 1120 - 1130 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1130 - 1180 | 23,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1180 - 1190 | | 2.7 | -4.9 | ---- | ----- | --- | --- | 3 |
| 1190 - 1200 | | ---- | -5.5 | ---- | -11.2 | --- | 172 | 2 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 353 - Traverse 4<br>Length of traverse 1430.5 sec | | | | | | | | |
| 1200 - 1210 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1210 - 1220 | | 5.5 | -5.5 | ---- | ----- | --- | --- | 4 |
| 1220 - 1230 | | ---- | -5.5 | ---- | ----- | --- | --- | 1 |
| 1230 - 1240 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1240 - 1250 | | 4.0 | -4.0 | ---- | ----- | --- | --- | 2 |
| 1250 - 1260 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1260 - 1270 | | 6.1 | -9.8 | ---- | ----- | --- | --- | 2 |
| 1270 - 1280 | | 10.1 | -8.5 | 11.8 | ----- | 182 | --- | 9 |
| 1280 - 1290 | | 13.1 | -8.8 | ---- | ----- | --- | --- | 8 |
| 1290 - 1300 | | 7.3 | -2.7 | ---- | -5.5 | --- | 154 | 3 |
| 1300 - 1310 | | 7.3 | -4.6 | ---- | ----- | --- | --- | 4 |
| 1310 - 1320 | | 10.0 | -9.7 | ---- | ----- | --- | --- | 2 |
| 1320 - 1330 | 24,500 | 14.3 | ----- | 22.2 | ----- | 125 | --- | 1 |
| 1330 - 1340 | | 11.0 | -4.0 | 20.6 | ----- | 183 | --- | 4 |
| 1340 - 1350 | 24,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1350 - 1360 | | 16.1 | -12.8 | ---- | ----- | --- | --- | 6 |
| 1360 - 1370 | | 12.5 | -9.1 | ---- | -10.8 | --- | 134 | 8 |
| 1370 - 1390 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1390 - 1400 | 23,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1400 - 1410 | 22,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]1410 - 1420 | 20,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1420 - 1430 | 19,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 1<br>Length of traverse 51.8 sec | | | | | | | | |
| 0 - 10 | 20,000 | 8.5 | -19.2 | ---- | ----- | --- | --- | 9 |
| 10 - 20 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 20 - 30 | | 5.7 | -6.0 | ---- | ----- | --- | --- | 4 |
| 30 - 40 | | 13.8 | -8.9 | 13.3 | ----- | 98 | --- | 4 |
| 40 - 60 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 344 - Traverse 2<br>Length of traverse 538.3 sec | | | | | | | | |
| 0 - 20 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 20 - 30 | | 9.5 | -7.5 | ---- | ----- | --- | --- | 4 |
| [a]30 - 40 | | 5.9 | -8.3 | 12.2 | ----- | 49 | --- | 7 |
| 40 - 50 | | 3.4 | -8.4 | ---- | ----- | --- | --- | 2 |
| 50 - 60 | 19,500 | 8.1 | -4.5 | ---- | ----- | --- | --- | 5 |
| 60 - 70 | | 3.2 | ----- | 8.0 | ----- | 156 | --- | 1 |
| 70 - 80 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 80 - 90 | | 10.2 | ----- | ---- | ----- | --- | --- | 3 |
| 90 - 100 | | 6.2 | ----- | ---- | ----- | --- | --- | 3 |
| 100 - 110 | | ---- | -3.4 | ---- | ----- | --- | --- | 2 |
| 110 - 120 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 120 - 130 | | 3.3 | -4.8 | ---- | ----- | --- | --- | 2 |
| 130 - 140 | | 3.3 | ----- | 7.2 | ----- | 140 | --- | 4 |
| 140 - 150 | | ---- | -2.8 | ---- | ----- | --- | --- | 1 |
| 150 - 160 | | 5.1 | ----- | ---- | ----- | --- | --- | 1 |
| 160 - 170 | | 3.1 | ----- | ---- | ----- | --- | --- | 2 |
| 170 - 180 | | 3.1 | ----- | 7.7 | ----- | 28 | --- | 1 |
| 180 - 190 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 190 - 200 | | ---- | -5.9 | ---- | ----- | --- | --- | 1 |
| 200 - 250 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 250 - 340 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]340 - 350 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 350 - 370 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]370 - 380 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 380 - 390 | | 11.3 | -16.4 | ---- | ----- | --- | --- | 10 |
| 390 - 400 | | 13.3 | -10.0 | ---- | ----- | --- | --- | 7 |
| 400 - 410 | 20,500 | 7.6 | -10.6 | ---- | ----- | --- | --- | 8 |
| 410 - 420 | | 9.7 | -23.0 | ---- | ----- | --- | --- | 8 |
| 420 - 430 | | 17.4 | -13.4 | ---- | ----- | --- | --- | 9 |
| 430 - 440 | | 9.7 | -14.5 | ---- | ----- | --- | --- | 8 |
| 440 - 450 | | 2.5 | -6.2 | 7.1 | ----- | 131 | --- | 3 |
| 450 - 460 | 20,000 | 7.4 | -6.2 | 17.1 | ----- | 261 | --- | 5 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 344 - Traverse 2<br>Length of traverse 538.3 sec | | | | | | | | |
| 460 - 470 | 20,000 | 4.9 | -8.4 | ---- | ----- | --- | --- | 4 |
| 470 - 480 | | 4.5 | ----- | ---- | ----- | --- | --- | 1 |
| [b]480 - 490 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 490 - 540 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 3<br>Length of traverse 234.4 sec | | | | | | | | |
| 0 - 10 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 10 - 60 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]60 - 70 | | 17.1 | -11.1 | ---- | ----- | --- | --- | 6 |
| 70 - 80 | | ---- | -14.8 | ---- | ----- | --- | --- | 3 |
| [b]80 - 90 | | 19.8 | -6.7 | 42.1 | ----- | 240 | --- | 2 |
| 90 - 100 | 19,500 | 2.9 | -4.4 | ---- | ----- | --- | --- | 2 |
| 100 - 110 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]110 - 120 | | ---- | -10.6 | ---- | ----- | --- | --- | 1 |
| 120 - 130 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 130 - 140 | | ---- | -5.6 | ---- | -8.2 | --- | 168 | 1 |
| 140 - 150 | | 5.3 | ----- | ---- | ----- | --- | --- | 1 |
| 150 - 160 | | 6.6 | -3.2 | ---- | ----- | --- | --- | 3 |
| 160 - 170 | | 9.3 | -6.9 | ---- | ----- | --- | --- | 6 |
| 170 - 180 | | 4.8 | -14.5 | ---- | ----- | --- | --- | 8 |
| 180 - 190 | | 7.8 | ----- | 12.2 | ----- | 237 | --- | 1 |
| 190 - 200 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]200 - 210 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 210 - 240 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 4<br>Length of traverse 399.0 sec | | | | | | | | |
| 0 - 80 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 80 - 90 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]90 - 100 | | 19.2 | -7.0 | ---- | ----- | --- | --- | 7 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 344 - Traverse 4<br>Length of traverse 399.0 sec | | | | | | | | |
| 100 - 110 | 20,500 | 11.8 | -20.0 | ---- | ----- | --- | --- | 11 |
| 110 - 120 | 20,000 | 17.0 | -20.8 | ---- | ----- | --- | --- | 9 |
| 120 - 130 | | 6.9 | -3.6 | ---- | ----- | --- | --- | 4 |
| 130 - 140 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 140 - 150 | | ---- | -4.1 | ---- | ----- | --- | --- | 1 |
| 150 - 160 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 160 - 170 | | 8.4 | -3.9 | ---- | ----- | --- | --- | 6 |
| 170 - 180 | | 5.1 | -5.2 | ---- | ----- | --- | --- | 4 |
| 180 - 190 | | 3.1 | ----- | ---- | ----- | --- | --- | 1 |
| 190 - 200 | | ---- | -4.7 | ---- | ----- | --- | --- | 1 |
| 200 - 210 | | 6.5 | -4.8 | ---- | ----- | --- | --- | 6 |
| 210 - 220 | | 8.4 | -4.7 | ---- | ----- | --- | --- | 8 |
| 220 - 230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 230 - 240 | | 7.1 | -4.6 | ---- | -11.1 | --- | 115 | 5 |
| 240 - 250 | | 10.7 | -5.2 | 15.0 | ----- | 101 | --- | 5 |
| 250 - 260 | | 8.1 | -4.7 | ---- | ----- | --- | --- | 5 |
| 260 - 270 | | 5.2 | ----- | ---- | ----- | --- | --- | 2 |
| 270 - 280 | | ---- | -9.4 | ---- | ----- | --- | --- | 1 |
| 280 - 290 | | 7.0 | ----- | ---- | ----- | --- | --- | 1 |
| 290 - 300 | | 6.1 | ----- | ---- | ----- | --- | --- | 3 |
| 300 - 310 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 310 - 320 | | ---- | -3.3 | ---- | -16.2 | --- | 118 | 1 |
| 320 - 330 | | 5.0 | ----- | ---- | ----- | --- | --- | 2 |
| [b]330 - 340 | | 1.6 | ----- | 5.7 | ----- | 150 | --- | 1 |
| 340 - 350 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 350 - 360 | | 3.1 | ----- | ---- | ----- | --- | --- | 1 |
| 360 - 370 | | ---- | -9.3 | ---- | ----- | --- | --- | 1 |
| 370 - 380 | | 6.5 | -4.8 | ---- | ----- | --- | --- | 3 |
| 380 - 400 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 344 - Traverse 5<br>Length of traverse 1005.2 sec | | | | | | | | |
| 0 - 20 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 20 - 30 | | ---- | -7.5 | ---- | ----- | --- | --- | 1 |
| 30 - 40 | | 1.2 | -5.2 | ---- | ----- | --- | --- | 3 |
| 40 - 50 | | ---- | -3.8 | ---- | ----- | --- | --- | 1 |
| 50 - 80 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 80 - 90 | | 4.6 | -4.4 | ---- | ----- | --- | --- | 2 |
| [a]90 - 100 | | 3.5 | ----- | 8.7 | ----- | 59 | --- | 1 |
| 100 - 110 | | 5.4 | -5.5 | ---- | ----- | --- | --- | 6 |
| 110 - 120 | | 7.3 | -4.4 | 13.5 | ----- | 153 | --- | 3 |
| 120 - 130 | | 6.1 | ----- | ---- | ----- | --- | --- | 3 |
| 130 - 140 | | 3.2 | -4.6 | ---- | -13.4 | --- | 133 | 5 |
| 140 - 150 | | 5.3 | -6.6 | ---- | ----- | --- | --- | 5 |
| 150 - 160 | | 5.0 | -4.5 | 5.9 | ----- | 102 | --- | 3 |
| 160 - 170 | | ---- | -9.6 | ---- | ----- | --- | --- | 1 |
| 170 - 180 | | 4.9 | ----- | 7.5 | ----- | 31 | --- | 3 |
| 180 - 190 | | 3.2 | -9.2 | ---- | ----- | --- | --- | 5 |
| [b]190 - 200 | | 6.4 | -6.8 | ---- | ----- | --- | --- | 2 |
| 200 - 340 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]340 - 350 | | 1.8 | -13.0 | ---- | ----- | --- | --- | 4 |
| 350 - 360 | | 3.3 | -4.8 | ---- | ----- | --- | --- | 2 |
| 360 - 370 | | 3.8 | ----- | ---- | ----- | --- | --- | 2 |
| 370 - 380 | | 8.9 | -13.5 | ---- | -19.7 | --- | 139 | 7 |
| 380 - 390 | | 5.0 | -18.3 | 13.0 | ----- | 392 | --- | 5 |
| 390 - 400 | | 10.8 | -7.4 | ---- | ----- | --- | --- | 5 |
| 400 - 410 | | 10.3 | ----- | ---- | ----- | --- | --- | 5 |
| 410 - 420 | | 5.2 | ----- | 5.0 | ----- | 69 | --- | 3 |
| 420 - 430 | | 14.8 | -23.8 | ---- | ----- | --- | --- | 4 |
| 430 - 440 | | 4.0 | -4.1 | ---- | ----- | --- | --- | 5 |
| 440 - 450 | | 3.4 | -5.9 | 6.3 | ----- | 137 | --- | 4 |
| 450 - 460 | | 5.1 | -5.8 | ---- | -7.6 | --- | 93 | 6 |
| 460 - 470 | | 6.1 | -5.7 | ---- | ----- | --- | --- | 5 |
| 470 - 480 | | 9.4 | -7.4 | ---- | ----- | --- | --- | 7 |
| 480 - 490 | | 8.0 | -9.2 | ---- | ----- | --- | --- | 7 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 344 - Traverse 5<br>Length of traverse 1005.2 sec | | | | | | | | |
| 490 - 500 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 500 - 510 | | 3.2 | -2.7 | 6.1 | ----- | 97 | --- | 2 |
| 510 - 520 | | 3.2 | ----- | ---- | ----- | --- | --- | 1 |
| 520 - 530 | | 3.4 | ----- | ---- | ----- | --- | --- | 2 |
| 530 - 560 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]560 - 570 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 570 - 580 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]580 - 590 | | ---- | -10.3 | ---- | ----- | --- | --- | 1 |
| 590 - 600 | | 7.4 | -8.8 | ---- | ----- | --- | --- | 4 |
| 600 - 610 | | 9.8 | -8.4 | 11.4 | ----- | 258 | --- | 6 |
| 610 - 620 | | 7.9 | -7.4 | ---- | ----- | --- | --- | 6 |
| 620 - 630 | | 3.5 | -9.2 | ---- | ----- | --- | --- | 4 |
| 630 - 640 | | 8.2 | -6.3 | ---- | ----- | --- | --- | 5 |
| 640 - 650 | | 5.1 | -5.8 | ---- | ----- | --- | --- | 4 |
| 650 - 660 | | 6.5 | -5.8 | ---- | ----- | --- | --- | 9 |
| 660 - 670 | | 3.6 | ----- | ---- | ----- | --- | --- | 1 |
| 670 - 680 | | 5.1 | ----- | 8.1 | ----- | 127 | --- | 2 |
| 680 - 690 | | ---- | -4.6 | ---- | ----- | --- | --- | 1 |
| 690 - 710 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 710 - 720 | | 2.9 | ----- | ---- | ----- | --- | --- | 1 |
| 720 - 740 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 740 - 750 | | 6.7 | ----- | ---- | ----- | --- | --- | 1 |
| 750 - 770 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 770 - 780 | | 3.0 | ----- | ---- | ----- | --- | --- | 1 |
| 780 - 800 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]800 - 810 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 810 - 1010 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 356 - Traverse 1<br>Length of traverse 1113.9 sec | | | | | | | | |
| 0 - 30 | 14,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 30 - 40 | | 4.9 | -5.5 | ---- | ----- | --- | --- | 2 |
| 40 - 50 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 356 - Traverse 1<br>Length of traverse 1113.9 sec | | | | | | | | |
| 50 - 60 | 14,500 | 4.8 | -10.8 | 11.0 | ----- | 94 | --- | 7 |
| 60 - 70 | | 8.5 | -10.8 | 9.4 | ----- | 55 | --- | 6 |
| 70 - 80 | | 7.4 | -5.9 | 13.9 | ----- | 138 | --- | 5 |
| [a]80 - 90 | | 6.3 | -10.4 | ---- | ----- | --- | --- | 3 |
| 90 - 100 | | 6.4 | -8.5 | ---- | ----- | --- | --- | 9 |
| 100 - 110 | | 6.3 | -7.5 | ---- | ----- | --- | --- | 5 |
| 110 - 120 | | 15.4 | -8.9 | ---- | ----- | --- | --- | 10 |
| 120 - 130 | | 11.5 | -7.2 | ---- | ----- | --- | --- | 7 |
| 130 - 140 | | 11.9 | -13.8 | ---- | ----- | --- | --- | 6 |
| 140 - 150 | | 9.8 | -9.3 | ---- | ----- | --- | --- | 7 |
| 150 - 160 | | 13.5 | -10.7 | ---- | ----- | --- | --- | 5 |
| 160 - 180 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]180 - 190 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 190 - 220 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 220 - 230 | | 4.7 | -3.9 | ---- | ----- | --- | --- | 2 |
| 230 - 240 | | ---- | -2.9 | ---- | -5.9 | --- | 120 | 1 |
| 240 - 250 | | 6.0 | -6.0 | ---- | -11.1 | --- | 69 | 2 |
| 250 - 260 | | 2.7 | -4.0 | 4.9 | ----- | 82 | --- | 2 |
| 260 - 280 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 280 - 290 | | ---- | -3.5 | ---- | ----- | --- | --- | 1 |
| 290 - 300 | | 4.8 | -4.7 | ---- | ----- | --- | --- | 3 |
| 300 - 310 | | 3.4 | ----- | ---- | ----- | --- | --- | 3 |
| 310 - 320 | | 4.9 | ----- | ---- | ----- | --- | --- | 1 |
| 320 - 350 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 350 - 360 | | ---- | -3.4 | ---- | -6.5 | --- | 60 | 1 |
| 360 - 370 | | 4.1 | ----- | ---- | ----- | --- | --- | 1 |
| 370 - 380 | | 7.6 | -3.5 | ---- | ----- | --- | --- | 2 |
| 380 - 390 | | 7.9 | ----- | ---- | -8.7 | --- | 147 | 2 |
| 390 - 510 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 510 - 520 | | 3.4 | -3.3 | ---- | ----- | --- | --- | 5 |
| 520 - 530 | | 3.2 | ----- | -4.4 | ----- | 31 | --- | 2 |
| [a]530 - 540 | | 11.5 | -7.2 | ---- | ----- | --- | --- | 7 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 356 - Traverse 1<br>Length of traverse 1113.9 sec | | | | | | | | |
| 540 - 550 | 14,500 | 10.9 | -15.0 | ---- | ----- | --- | --- | 10 |
| 550 - 560 | | 16.1 | -7.4 | ---- | ----- | --- | --- | 9 |
| 560 - 570 | 15,000 | 10.2 | -13.0 | ---- | ----- | --- | --- | 11 |
| 570 - 580 | 15,500 | 12.8 | -13.8 | ---- | ----- | --- | --- | 11 |
| 580 - 590 | 16,000 | 26.4 | -22.6 | ---- | ----- | --- | --- | 7 |
| 590 - 600 | | 8.4 | -13.3 | ---- | ----- | --- | --- | 7 |
| 600 - 610 | | 8.5 | -15.1 | 16.8 | ----- | 75 | --- | 5 |
| 610 - 620 | | 12.1 | ----- | 17.1 | ----- | 145 | --- | 3 |
| 620 - 630 | | 6.5 | ----- | 15.2 | ----- | 175 | --- | 4 |
| [b]630 - 640 | | 5.1 | ----- | ---- | ----- | --- | --- | 1 |
| 640 - 660 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 660 - 700 | 16,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 700 - 710 | | 4.3 | ----- | ---- | -6.2 | --- | 111 | 2 |
| 710 - 720 | | ---- | -3.4 | ---- | ----- | --- | --- | 1 |
| 720 - 880 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]880 - 890 | | 7.4 | -11.1 | ---- | ----- | --- | --- | 4 |
| 890 - 900 | | 13.4 | -10.2 | ---- | ----- | --- | --- | 8 |
| 900 - 910 | | 17.3 | -12.6 | ---- | ----- | --- | --- | 11 |
| 910 - 920 | | 5.9 | -9.3 | ---- | ----- | --- | --- | 5 |
| 920 - 930 | | 28.5 | -37.2 | ---- | ----- | --- | --- | 11 |
| 930 - 940 | | 15.8 | -22.4 | ---- | ----- | --- | --- | 8 |
| 940 - 950 | | 7.1 | -12.3 | ---- | ----- | --- | --- | 5 |
| 950 - 960 | | ---- | -7.0 | ---- | -12.3 | --- | 191 | 2 |
| 960 - 970 | | ---- | -7.3 | ---- | ----- | --- | --- | 2 |
| 970 - 980 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 980 - 990 | | 5.1 | -6.4 | ---- | -11.4 | --- | 112 | 5 |
| 990 - 1000 | | 6.4 | -4.2 | ---- | ----- | --- | --- | 4 |
| 1000 - 1010 | | 8.6 | -7.3 | 15.1 | ----- | 160 | --- | 5 |
| 1010 - 1020 | | 6.4 | ----- | ---- | ----- | --- | --- | 2 |
| 1020 - 1030 | | 6.3 | -7.6 | 6.5 | ----- | 83 | --- | 7 |
| 1030 - 1040 | | 7.2 | -4.1 | ---- | -7.1 | --- | 58 | 2 |
| 1040 - 1050 | | ---- | -5.0 | ---- | ----- | --- | --- | 1 |
| [b]1050 - 1060 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1060 - 1120 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 356 - Traverse 2<br>Length of traverse 1928.1 sec | | | | | | | | |
| 0 - 40 | 14,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]40 - 50 | | ---- | -7.8 | ---- | ----- | --- | --- | 1 |
| 50 - 60 | | 4.5 | -5.7 | ---- | ----- | --- | --- | 8 |
| 60 - 70 | | 14.3 | -7.5 | ---- | ----- | --- | --- | 9 |
| 70 - 80 | | 5.3 | ----- | ---- | ----- | --- | --- | 2 |
| 80 - 90 | | 15.1 | -11.9 | ---- | ----- | --- | --- | 15 |
| 90 - 100 | 14,000 | 13.3 | -7.8 | ---- | ----- | --- | --- | 10 |
| 100 - 110 | | 8.6 | -4.9 | 10.3 | 10.8 | 52 | 31 | 4 |
| [b]110 - 120 | 14,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 120 - 150 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 150 - 160 | | 12.8 | ----- | ---- | ----- | --- | --- | 1 |
| [a]160 - 170 | | 6.1 | -7.2 | 16.4 | ----- | 79 | --- | 8 |
| 170 - 180 | | 9.9 | -9.4 | ---- | ----- | --- | --- | 8 |
| 180 - 190 | | 3.3 | -7.1 | ---- | ----- | --- | --- | 3 |
| 190 - 200 | 14,000 | ---- | -4.8 | ---- | -6.6 | --- | 41 | 3 |
| 200 - 210 | | 4.5 | ----- | ---- | ----- | --- | --- | 1 |
| 210 - 220 | | ---- | -3.8 | ---- | ----- | --- | --- | 1 |
| 220 - 240 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 240 - 250 | 14,500 | 4.2 | ----- | ---- | ----- | --- | --- | 1 |
| 250 - 270 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 270 - 280 | | ---- | -3.7 | 5.1 | ----- | 80 | --- | 2 |
| 280 - 290 | | 1.4 | ----- | ---- | ----- | --- | --- | 1 |
| 290 - 300 | | 6.1 | -6.7 | ---- | ----- | --- | --- | 3 |
| 300 - 310 | | 6.6 | -8.5 | ---- | ----- | --- | --- | 3 |
| 310 - 320 | | 9.0 | -3.6 | 10.1 | ----- | 94 | --- | 5 |
| 320 - 330 | | 5.7 | -5.8 | 8.2 | ----- | 41 | --- | 3 |
| 330 - 340 | | 4.5 | -3.7 | ---- | ----- | --- | --- | 3 |
| 340 - 350 | | ---- | -4.9 | ---- | ----- | --- | --- | 1 |
| 350 - 360 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]360 - 370 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 370 - 450 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 450 - 460 | | 4.8 | -7.1 | ---- | ----- | --- | --- | 2 |
| 460 - 480 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 480 - 490 | | 5.9 | ----- | ---- | ----- | --- | --- | 3 |
| [a]490 - 500 | | ---- | -6.4 | ---- | ----- | --- | --- | 1 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued.

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 356 - Traverse 2<br>Length of traverse 1928.1 sec | | | | | | | | |
| 500 - 510 | 14,500 | 5.3 | -5.2 | 10.1 | ----- | 107 | --- | 4 |
| 510 - 520 | | 2.6 | -7.4 | ---- | ----- | --- | --- | 5 |
| 520 - 530 | 14,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 530 - 540 | | 2.1 | ----- | 10.1 | ----- | 70 | --- | 1 |
| 540 - 550 | | ---- | -5.2 | ---- | ----- | --- | --- | 2 |
| 550 - 560 | | 3.4 | ----- | ---- | ----- | --- | --- | 3 |
| 560 - 570 | | 11.7 | -6.9 | 10.7 | ----- | 77 | --- | 5 |
| 570 - 580 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 580 - 590 | | 3.3 | ----- | ---- | ----- | --- | --- | 1 |
| 590 - 600 | | 6.8 | -8.5 | ---- | ----- | --- | --- | 7 |
| 600 - 610 | | 14.6 | -17.5 | ---- | ----- | --- | --- | 8 |
| 610 - 620 | | ---- | -8.3 | ---- | -22.7 | --- | 62 | 5 |
| 620 - 630 | | 8.3 | -7.5 | 11.5 | ----- | 43 | --- | 6 |
| 630 - 640 | | 9.5 | -10.9 | ---- | -19.6 | --- | 162 | 8 |
| 640 - 650 | | 5.4 | -9.7 | ---- | ----- | --- | --- | 8 |
| 650 - 660 | | 5.5 | -6.7 | ---- | -9.6 | --- | 78 | 5 |
| 660 - 670 | | 14.6 | -7.5 | 10.4 | ----- | 93 | --- | 6 |
| 670 - 680 | | 8.9 | -13.3 | ---- | ----- | --- | --- | 6 |
| 680 - 690 | | 16.3 | -13.3 | ---- | ----- | --- | --- | 8 |
| 690 - 700 | | 14.4 | -7.4 | ---- | ----- | --- | --- | 9 |
| 700 - 710 | | 10.2 | -10.2 | 9.8 | ----- | 122 | --- | 5 |
| 710 - 720 | | 9.4 | -5.5 | ---- | ----- | --- | --- | 3 |
| 720 - 730 | | 7.9 | -7.6 | ---- | ----- | --- | --- | 6 |
| 730 - 740 | | 8.5 | -8.8 | ---- | ----- | --- | --- | 3 |
| 740 - 750 | | 8.2 | -8.9 | ---- | ----- | --- | --- | 5 |
| 750 - 760 | | ---- | -9.6 | ---- | ----- | --- | --- | 2 |
| 760 - 770 | 14,500 | ---- | -7.6 | ---- | ----- | --- | --- | 1 |
| 770 - 780 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]780 - 790 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 790 - 800 | | 2.9 | -5.7 | ---- | ----- | --- | --- | 2 |
| 800 - 810 | | 3.8 | -5.7 | ---- | ----- | --- | --- | 6 |
| 810 - 820 | | 9.1 | -8.9 | ---- | ----- | --- | --- | 11 |
| 820 - 830 | | 5.3 | -13.2 | ---- | -26.8 | --- | 228 | 4 |
| 830 - 960 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]960 - 970 | | 14.0 | -8.7 | ---- | ----- | --- | --- | 4 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 356 - Traverse 2<br>Length of traverse 1928.1 sec | | | | | | | | |
| 970 - 980 | 15,000 | 17.1 | -18.2 | ---- | ----- | --- | --- | 8 |
| 980 - 990 | | 16.3 | -13.8 | ---- | ----- | --- | --- | 5 |
| 990 - 1000 | | 10.0 | -14.4 | ---- | ----- | --- | --- | 5 |
| 1000 - 1010 | | 5.4 | -10.1 | ---- | ----- | --- | --- | 4 |
| 1010 - 1020 | | 3.7 | -6.9 | ---- | ----- | --- | --- | 3 |
| 1020 - 1030 | | 8.0 | -10.7 | ---- | ----- | --- | --- | 5 |
| 1030 - 1040 | | 12.3 | -13.9 | ---- | ----- | --- | --- | 10 |
| 1040 - 1050 | | 20.1 | -10.7 | ---- | ----- | --- | --- | 10 |
| 1050 - 1060 | | 11.8 | -11.3 | ---- | ----- | --- | --- | 6 |
| 1060 - 1070 | | 30.8 | -10.8 | ---- | ----- | --- | --- | 15 |
| 1070 - 1080 | | 13.6 | -27.8 | ---- | ----- | --- | --- | 6 |
| 1080 - 1090 | | ---- | -8.3 | ---- | -19.6 | --- | 253 | 1 |
| 1090 - 1100 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1100 - 1110 | 15,500 | 15.5 | -13.9 | ---- | ----- | --- | --- | 8 |
| 1110 - 1120 | | 15.0 | -11.0 | ---- | ----- | --- | --- | 8 |
| 1120 - 1130 | 16,000 | 12.4 | -6.3 | ---- | ----- | --- | --- | 5 |
| 1130 - 1140 | | 10.6 | -11.3 | ---- | ----- | --- | --- | 3 |
| 1140 - 1150 | | 9.9 | -11.2 | 9.7 | ----- | 67 | --- | 6 |
| 1150 - 1160 | 15,500 | 6.5 | -5.4 | ---- | ----- | --- | --- | 6 |
| 1160 - 1170 | | 4.9 | -5.4 | ---- | ----- | --- | --- | 5 |
| 1170 - 1190 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]1190 - 1200 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1200 - 1220 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1220 - 1230 | | 6.2 | -3.9 | ---- | ----- | --- | --- | 4 |
| 1230 - 1240 | | ---- | -3.9 | ---- | ----- | --- | --- | 1 |
| 1240 - 1250 | | 3.3 | ----- | 7.8 | ----- | 70 | --- | 2 |
| 1250 - 1260 | | 4.8 | ----- | 8.4 | ----- | 207 | --- | 4 |
| 1260 - 1270 | | 6.6 | ----- | ---- | ----- | --- | --- | 2 |
| 1270 - 1280 | | 6.4 | ----- | ---- | ----- | --- | --- | 2 |
| 1280 - 1300 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1300 - 1310 | | ---- | -7.4 | ---- | ----- | --- | --- | 2 |
| 1310 - 1320 | | 6.9 | -5.4 | ---- | ----- | --- | --- | 5 |
| 1320 - 1360 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 356 - Traverse 2<br>Length of traverse 1928.1 sec | | | | | | | | |
| 1360 - 1370 | 15,500 | 4.6 | -3.3 | ---- | ----- | --- | --- | 2 |
| 1370 - 1500 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1500 - 1510 | | 1.3 | ----- | ---- | ----- | --- | --- | 1 |
| [a]1510 - 1520 | | 3.3 | -3.8 | 7.2 | ----- | 119 | --- | 2 |
| 1520 - 1540 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1540 - 1550 | | 2.5 | ----- | ---- | ----- | --- | --- | 1 |
| 1550 - 1560 | | 4.2 | -5.3 | ---- | ----- | --- | --- | 4 |
| 1560 - 1570 | | 5.4 | -8.8 | ---- | ----- | --- | --- | 3 |
| 1570 - 1580 | | 4.6 | -3.8 | ---- | ----- | --- | --- | 2 |
| 1580 - 1590 | | 6.6 | -8.6 | ---- | ----- | --- | --- | 6 |
| 1590 - 1600 | | 10.0 | -7.1 | 10.3 | ----- | 173 | --- | 6 |
| 1600 - 1610 | | 8.4 | -13.1 | ---- | ----- | --- | --- | 9 |
| 1610 - 1620 | | 10.5 | -6.8 | 11.7 | ----- | 268 | --- | 7 |
| 1620 - 1630 | | 5.9 | -9.8 | ---- | ----- | --- | --- | 7 |
| 1630 - 1640 | 16,000 | 7.7 | -6.3 | ---- | ----- | --- | --- | 6 |
| 1640 - 1650 | | 14.3 | -9.7 | ---- | ----- | --- | --- | 3 |
| 1650 - 1660 | | 13.5 | -13.5 | ---- | ----- | --- | --- | 6 |
| 1660 - 1670 | | ---- | -5.9 | ---- | ----- | --- | --- | 1 |
| 1670 - 1680 | | 4.4 | ----- | ---- | ----- | --- | --- | 1 |
| 1680 - 1690 | | ---- | -3.7 | ---- | ----- | --- | --- | 1 |
| 1690 - 1700 | | 5.6 | -7.7 | ---- | -11.9 | --- | 72 | 5 |
| 1700 - 1710 | | 7.9 | -3.7 | 15.6 | ----- | 234 | --- | 4 |
| 1710 - 1720 | | 6.7 | -5.1 | 20.0 | ----- | 172 | --- | 7 |
| 1720 - 1750 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1750 - 1760 | | 12.1 | ----- | ---- | ----- | --- | --- | 1 |
| 1760 - 1770 | | 7.4 | -5.9 | ---- | ----- | --- | --- | 4 |
| 1770 - 1780 | | 9.1 | -5.3 | 12.8 | ----- | 80 | --- | 7 |
| 1780 - 1790 | | 14.3 | -9.8 | ---- | ----- | --- | --- | 6 |
| 1790 - 1800 | | 10.0 | -3.8 | ---- | ----- | --- | --- | 5 |
| 1800 - 1810 | | 4.5 | -5.1 | ---- | -8.3 | --- | 95 | 3 |
| [b]1810 - 1820 | | ---- | -5.1 | ---- | ----- | --- | --- | 3 |
| 1820 - 1840 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 356 - Traverse 2<br>Length of traverse 1928.1 sec | | | | | | | | |
| 1840 - 1850 | 16,000 | ---- | -2.9 | ---- | ----- | --- | --- | 1 |
| 1850 - 1910 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1910 - 1920 | | 8.0 | ----- | 9.9 | ----- | 85 | --- | 1 |
| 1920 - 1930 | | ---- | -5.2 | ---- | ----- | --- | --- | 1 |
| Airplane 351 - Traverse 1<br>Length of traverse 322.0 sec | | | | | | | | |
| 0 - 30 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 30 - 40 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 40 - 50 | | 1.3 | -3.2 | ---- | ----- | --- | --- | 2 |
| 50 - 60 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]60 - 70 | | 9.8 | -9.8 | 3.7 | ----- | 87 | --- | 5 |
| [b]70 - 80 | 10,000 | 4.7 | -6.3 | ---- | ----- | --- | --- | 3 |
| 80 - 90 | | 1.9 | -7.9 | ---- | ----- | --- | --- | 4 |
| 90 - 100 | | 2.2 | ----- | ---- | ----- | --- | --- | 4 |
| 100 - 110 | 9,500 | 10.1 | -8.2 | ---- | ----- | --- | --- | 5 |
| 110 - 120 | | 4.4 | -8.2 | ---- | ----- | --- | --- | 9 |
| 120 - 130 | | 3.2 | -6.3 | ---- | ----- | --- | --- | 8 |
| 130 - 140 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 140 - 150 | | ---- | -4.1 | ---- | ----- | --- | --- | 1 |
| 150 - 160 | | 2.2 | -3.2 | ---- | -4.5 | --- | 124 | 5 |
| 160 - 170 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 170 - 180 | | 2.2 | ----- | ---- | ----- | --- | --- | 2 |
| 180 - 200 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 200 - 210 | | ---- | -2.8 | ---- | -3.6 | --- | 109 | 1 |
| 210 - 230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 230 - 240 | | ---- | -3.2 | ---- | ----- | --- | --- | 1 |
| 240 - 250 | | ---- | -3.2 | ---- | ----- | --- | --- | 1 |
| 250 - 260 | 10,000 | 3.8 | -3.2 | ---- | ----- | --- | --- | 4 |
| 260 - 270 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 270 - 280 | | 2.2 | -4.1 | 3.6 | ----- | 151 | --- | 2 |
| 280 - 290 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 290 - 300 | | ---- | -3.8 | ---- | -5.2 | --- | 148 | 2 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 351 - Traverse 1<br>Length of traverse 322.0 sec | | | | | | | | |
| 300 - 310 | 9,500 | 2.2 | ----- | ---- | ----- | --- | --- | 1 |
| 310 - 320 | | 4.1 | -3.2 | 4.2 | ----- | 90 | --- | 4 |
| 320 - 330 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 351 - Traverse 2<br>Length of traverse 225.0 sec | | | | | | | | |
| 0 - 90 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]90 - 100 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 100 - 110 | | 3.8 | ----- | ---- | ----- | --- | --- | 1 |
| 110 - 120 | | ---- | -5.3 | ---- | ----- | --- | --- | 4 |
| 120 - 130 | 10,000 | 1.9 | ----- | ---- | ----- | --- | --- | 1 |
| 130 - 140 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 140 - 150 | | ---- | -7.5 | ---- | ----- | --- | --- | 1 |
| 150 - 160 | | 3.1 | -3.4 | 7.2 | ----- | 124 | --- | 4 |
| 160 - 200 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]200 - 210 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 210 - 220 | | 3.1 | -4.1 | ---- | ----- | --- | --- | 3 |
| 220 - 230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 351 - Traverse 3<br>Length of traverse 21.2 sec | | | | | | | | |
| [a]0 - 10 | 10,000 | 28.1 | -9.7 | 57.2 | ----- | 378 | --- | 8 |
| [b]10 - 20 | | 5.3 | -10.6 | ---- | ----- | --- | --- | 2 |
| 20 - 30 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 351 - Traverse 4<br>Length of traverse 404.7 sec | | | | | | | | |
| 0 - 10 | 9,500 | 1.6 | -2.2 | ---- | ----- | --- | --- | 2 |
| 10 - 20 | | 2.2 | -3.7 | ---- | ----- | --- | --- | 4 |
| 20 - 30 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 351 - Traverse 4<br>Length of traverse 404.7 sec | | | | | | | | |
| 30 - 40 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 40 - 50 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]50 - 60 | | 11.8 | -5.6 | ---- | ----- | --- | --- | 4 |
| 60 - 70 | | 4.7 | -22.1 | ---- | ----- | --- | --- | 4 |
| [b]70 - 80 | | 11.5 | ----- | 18.9 | ----- | 176 | --- | 1 |
| 80 - 90 | | ---- | -8.4 | ---- | ----- | --- | --- | 1 |
| 90 - 100 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 100 - 130 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]130 - 140 | 10,000 | 6.2 | -6.2 | ---- | ----- | --- | --- | 6 |
| 140 - 150 | | 29.2 | -9.6 | ---- | ----- | --- | --- | 9 |
| 150 - 160 | | 13.7 | -14.6 | ---- | ----- | --- | --- | 7 |
| 160 - 170 | | 13.1 | -10.6 | ---- | ----- | --- | --- | 8 |
| 170 - 180 | | 4.0 | -8.4 | ---- | ----- | --- | --- | 10 |
| [b]180 - 190 | | 8.1 | -5.3 | ---- | ----- | --- | --- | 2 |
| 190 - 240 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 240 - 250 | | ---- | -2.5 | ---- | -5.6 | --- | 177 | 1 |
| 250 - 260 | | 2.2 | ----- | 5.2 | ----- | 100 | --- | 1 |
| 260 - 270 | | 4.0 | -6.2 | ---- | ----- | --- | --- | 5 |
| 270 - 280 | | 5.0 | -10.9 | ---- | ----- | --- | --- | 7 |
| 280 - 290 | | 2.2 | -4.0 | 4.2 | ----- | 41 | --- | 6 |
| 290 - 300 | 9,500 | 2.2 | -4.4 | ---- | ----- | --- | --- | 7 |
| 300 - 310 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]310 - 320 | | 10.6 | -8.7 | ---- | ----- | --- | --- | 3 |
| 320 - 330 | | 7.2 | -13.1 | ---- | ----- | --- | --- | 5 |
| 330 - 340 | 10,000 | 5.0 | -4.4 | ---- | ----- | --- | --- | 4 |
| 340 - 350 | | 12.8 | -11.2 | ---- | ----- | --- | --- | 7 |
| 350 - 360 | | 19.9 | -18.4 | ---- | ----- | --- | --- | 4 |
| [b]360 - 370 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 370 - 410 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 351 - Traverse 5<br>Length of traverse 1211.0 sec | | | | | | | | |
| 0 - 10 | 9,500 | 7.1 | -6.5 | ---- | ----- | --- | --- | 6 |
| 10 - 60 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 60 - 70 | | 2.2 | ----- | ---- | ----- | --- | --- | 1 |
| 70 - 80 | | ---- | -3.7 | ---- | ----- | --- | --- | 2 |
| 80 - 110 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 110 - 120 | | 1.9 | -3.7 | ---- | ----- | --- | --- | 3 |
| 120 - 220 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 220 - 230 | | ---- | -3.1 | ---- | ----- | --- | --- | 2 |
| 230 - 240 | | 1.9 | -4.0 | ---- | ----- | --- | --- | 2 |
| 240 - 250 | 10,000 | 1.9 | ----- | ---- | ----- | --- | --- | 2 |
| [a]250 - 260 | | ---- | -3.1 | ---- | ----- | --- | --- | 2 |
| 260 - 270 | | ---- | -4.3 | ---- | ----- | --- | --- | 1 |
| 270 - 280 | | 1.9 | -4.6 | ---- | ----- | --- | --- | 3 |
| 280 - 290 | | 4.3 | -8.4 | ---- | ----- | --- | --- | 3 |
| 290 - 300 | | 1.5 | -5.0 | ---- | ----- | --- | --- | 6 |
| 300 - 310 | | 6.5 | ----- | 5.8 | ----- | 259 | --- | 1 |
| 310 - 320 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 320 - 330 | | 1.5 | -2.5 | ---- | ----- | --- | --- | 3 |
| 330 - 340 | | 2.2 | -6.8 | ---- | ----- | --- | --- | 3 |
| 340 - 350 | | 5.0 | ----- | ---- | ----- | --- | --- | 1 |
| 350 - 360 | | 1.5 | -4.6 | ---- | ----- | --- | --- | 2 |
| 360 - 370 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 370 - 380 | 9,500 | 1.5 | -2.5 | 3.6 | ----- | 109 | --- | 3 |
| 380 - 390 | | 2.2 | ----- | ---- | ----- | --- | --- | 1 |
| 390 - 400 | | 1.5 | -2.5 | ---- | ----- | --- | --- | 2 |
| 400 - 410 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 410 - 420 | | ---- | -2.2 | ---- | ----- | --- | --- | 1 |
| 420 - 430 | | 3.4 | -2.5 | ---- | ----- | --- | --- | 7 |
| 430 - 440 | | 3.7 | ----- | ---- | ----- | --- | --- | 2 |
| 440 - 450 | | ---- | -2.5 | ---- | ----- | --- | --- | 1 |
| 450 - 460 | | 1.5 | -2.5 | ---- | ----- | --- | --- | 3 |
| 460 - 470 | | 2.2 | -3.4 | ---- | ----- | --- | --- | 3 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 351 - Traverse 5<br>Length of traverse 1211.0 sec | | | | | | | | |
| 470 - 480 | 9,500 | 4.6 | -3.1 | ---- | ----- | --- | --- | 4 |
| 480 - 490 | 10,000 | ---- | -3.4 | ---- | ----- | --- | --- | 1 |
| 490 - 500 | | 1.2 | ----- | ---- | ----- | --- | --- | 2 |
| 500 - 510 | | 4.3 | -3.1 | ---- | ----- | --- | --- | 3 |
| 510 - 520 | | ---- | -6.5 | ---- | ----- | --- | --- | 3 |
| 520 - 530 | | ---- | -3.7 | ---- | ----- | --- | --- | 1 |
| 530 - 560 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 560 - 580 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]580 - 590 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 590 - 660 | 9,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 660 - 720 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 720 - 730 | | ---- | -2.5 | ---- | ----- | --- | --- | 1 |
| 730 - 740 | | 1.9 | -3.4 | 5.8 | ----- | 82 | --- | 3 |
| 740 - 750 | | ---- | -3.4 | ---- | ----- | --- | --- | 2 |
| 750 - 760 | | 1.2 | -2.8 | ---- | ----- | --- | --- | 2 |
| 760 - 770 | | 1.9 | -3.4 | ---- | ----- | --- | --- | 3 |
| 770 - 780 | | 3.4 | ----- | ---- | ----- | --- | --- | 1 |
| 780 - 790 | | 1.2 | ----- | ---- | ----- | --- | --- | 1 |
| 790 - 800 | | ---- | -2.5 | ---- | ----- | --- | --- | 1 |
| [a]800 - 810 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 810 - 820 | | 4.9 | -6.5 | ---- | -7.7 | --- | 60 | 4 |
| 820 - 830 | | 3.7 | ----- | 7.0 | ----- | 110 | --- | 1 |
| 830 - 840 | | ---- | -3.7 | ---- | -6.1 | --- | 210 | 1 |
| 840 - 850 | | 5.3 | -4.0 | ---- | ----- | --- | --- | 4 |
| 850 - 860 | | 2.2 | -3.4 | 3.8 | ----- | 74 | --- | 2 |
| 860 - 870 | | 3.7 | -4.0 | ---- | -5.6 | --- | 102 | 2 |
| 870 - 880 | | 5.9 | -9.3 | ---- | ----- | --- | --- | 9 |
| 880 - 890 | | 9.6 | -4.0 | ---- | ----- | --- | --- | 13 |
| 890 - 900 | | 8.0 | -11.1 | ---- | ----- | --- | --- | 9 |
| 900 - 910 | | 10.8 | -15.8 | ---- | ----- | --- | --- | 11 |
| 910 - 920 | | 4.0 | -4.0 | ---- | ----- | --- | --- | 8 |
| 920 - 930 | | 4.0 | -4.6 | ---- | ----- | --- | --- | 2 |
| [b]930 - 940 | | 1.9 | -4.0 | ---- | ----- | --- | --- | 8 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 351 - Traverse 5<br>Length of traverse 1211.0 sec | | | | | | | | |
| 940 - 950 | 9,500 | 4.3 | -3.7 | ---- | ----- | --- | --- | 4 |
| 950 - 960 | | 2.2 | -7.1 | ---- | ----- | --- | --- | 5 |
| 960 - 970 | | 4.9 | -4.6 | ---- | ----- | --- | --- | 6 |
| [a]970 - 980 | | 8.3 | -7.4 | ---- | ----- | --- | --- | 9 |
| 980 - 990 | | 9.3 | -10.5 | ---- | ----- | --- | --- | 9 |
| [b]990 - 1000 | | 4.0 | ----- | 8.0 | ----- | 116 | --- | 1 |
| 1000 - 1010 | | 8.3 | -2.1 | ---- | ----- | --- | --- | 3 |
| 1010 - 1020 | | 8.6 | -7.1 | 6.7 | ----- | 87 | --- | 12 |
| 1020 - 1030 | | 6.5 | -7.4 | ---- | ----- | --- | --- | 7 |
| [a]1030 - 1040 | | 6.2 | -9.9 | ---- | ----- | --- | --- | 9 |
| 1040 - 1050 | 10,000 | 11.1 | -9.6 | ---- | ----- | --- | --- | 11 |
| 1050 - 1060 | | 10.5 | -8.6 | ---- | ----- | --- | --- | 8 |
| 1060 - 1070 | | 5.9 | -8.3 | ---- | ----- | --- | --- | 7 |
| 1070 - 1080 | | 6.8 | ----- | ---- | ----- | --- | --- | 1 |
| 1080 - 1090 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1090 - 1100 | | ---- | -4.3 | ---- | ----- | --- | --- | 2 |
| 1100 - 1110 | | 6.4 | -7.7 | ---- | ----- | --- | --- | 8 |
| 1110 - 1120 | | 3.7 | -4.3 | ---- | ----- | --- | --- | 2 |
| 1120 - 1130 | | 2.1 | -5.8 | ---- | ----- | --- | --- | 5 |
| 1130 - 1140 | | 11.4 | -8.3 | ---- | ----- | --- | --- | 2 |
| 1140 - 1150 | | 2.1 | -3.7 | ---- | ----- | --- | --- | 3 |
| [b]1150 - 1160 | | 7.1 | -4.6 | ---- | ----- | --- | --- | 4 |
| 1160 - 1170 | | 4.0 | -6.8 | ---- | ----- | --- | --- | 6 |
| 1170 - 1180 | | ---- | -3.4 | ---- | ----- | --- | --- | 2 |
| 1180 - 1190 | | 1.8 | -3.7 | ---- | ----- | --- | --- | 4 |
| 1190 - 1220 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 333 - Traverse 1<br>Length of traverse 491.0 sec | | | | | | | | |
| 0 - 20 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]20 - 30 | | 6.9 | -3.9 | 10.3 | ----- | 57 | --- | 6 |
| 30 - 40 | | 14.1 | -13.7 | ---- | ----- | --- | --- | 4 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 333 - Traverse 1<br>Length of traverse 491.0 sec | | | | | | | | |
| 40 - 50 | 6,000 | ---- | -12.4 | ---- | ----- | --- | --- | 1 |
| 50 - 60 | | ---- | -14.5 | ---- | ----- | --- | --- | 1 |
| 60 - 70 | | 4.6 | -12.5 | 8.0 | ----- | 89 | --- | 4 |
| 70 - 80 | 5,500 | 6.2 | -5.4 | ---- | ----- | --- | --- | 7 |
| 80 - 130 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 130 - 140 | | 9.4 | ----- | ---- | ----- | --- | --- | 3 |
| 140 - 150 | 6,000 | 2.0 | -3.0 | ---- | ----- | --- | --- | 2 |
| 150 - 160 | | 2.3 | -14.5 | ---- | ----- | --- | --- | 3 |
| 160 - 170 | | 3.7 | -4.5 | ---- | ----- | --- | --- | 5 |
| 170 - 210 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]210 - 220 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 220 - 260 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 260 - 280 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]280 - 290 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 290 - 380 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]380 - 390 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 390 - 500 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 333 - Traverse 2<br>Length of traverse 530.0 sec | | | | | | | | |
| 0 - 10 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]10 - 20 | | ---- | -6.6 | ---- | ----- | --- | --- | 3 |
| [b]20 - 30 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 30 - 40 | | 3.6 | -6.5 | ---- | ----- | --- | --- | 4 |
| 40 - 50 | | 4.6 | -8.1 | ---- | ----- | --- | --- | 3 |
| 50 - 60 | | ---- | -1.8 | ---- | ----- | --- | --- | 1 |
| 60 - 70 | | 5.8 | -4.4 | 6.8 | ----- | 92 | --- | 4 |
| [a]70 - 80 | | 9.9 | ----- | ---- | ----- | --- | --- | 3 |
| 80 - 90 | | 6.1 | -7.8 | ---- | -14.0 | --- | 223 | 5 |
| 90 - 100 | | 4.4 | -12.3 | ---- | -20.7 | --- | 93 | 6 |
| 100 - 110 | | 9.5 | -8.3 | ---- | ----- | --- | --- | 4 |
| [b]110 - 120 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 120 - 130 | | ---- | -2.4 | ---- | ----- | --- | --- | 2 |
| 130 - 140 | | 3.0 | -4.0 | ---- | ----- | --- | --- | 2 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 333 - Traverse 2<br>Length of traverse 530.0 sec | | | | | | | | |
| 140 - 150 | 5,500 | ---- | -3.3 | ---- | -5.2 | --- | 94 | 2 |
| [a-b]150 - 160 | | ---- | -5.0 | ---- | -13.6 | --- | 264 | 1 |
| 160 - 200 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]200 - 210 | | 8.3 | -5.7 | 12.9 | ----- | 161 | --- | 3 |
| 210 - 220 | 6,000 | 6.7 | -9.3 | ---- | ----- | --- | --- | 3 |
| 220 - 230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 230 - 240 | | 7.0 | -2.4 | ---- | ----- | --- | --- | 2 |
| 240 - 250 | | 13.2 | -5.6 | ---- | ----- | --- | --- | 5 |
| 250 - 260 | | 6.4 | -12.9 | ---- | ----- | --- | --- | 6 |
| [b]260 - 270 | | 7.8 | -1.9 | 7.3 | -5.2 | 95 | 116 | 3 |
| [a]270 - 280 | | 15.8 | -9.7 | 24.3 | ----- | 175 | --- | 9 |
| 280 - 290 | 6,500 | 11.8 | -16.3 | ---- | ----- | --- | --- | 9 |
| 290 - 300 | | 6.7 | -8.4 | ---- | ----- | --- | --- | 2 |
| 300 - 310 | | 9.9 | -14.7 | ---- | ----- | --- | --- | 2 |
| 310 - 320 | | 8.0 | -8.6 | 10.6 | ----- | 66 | --- | 5 |
| 320 - 330 | | 5.1 | -10.8 | ---- | ----- | --- | --- | 4 |
| 330 - 340 | | 5.6 | -5.4 | ---- | ----- | --- | --- | 6 |
| 340 - 350 | | 18.0 | ----- | ---- | ----- | --- | --- | 3 |
| 350 - 360 | 7,000 | 2.2 | -1.9 | ---- | ----- | --- | --- | 2 |
| 360 - 370 | | 5.5 | -9.4 | ---- | ----- | --- | --- | 4 |
| 370 - 380 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 380 - 390 | | 7.2 | ----- | ---- | ----- | --- | --- | 3 |
| [b]390 - 400 | | 3.9 | -3.3 | ---- | ----- | --- | --- | 2 |
| 400 - 410 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 410 - 440 | 6,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 440 - 450 | | 4.2 | ----- | ---- | ----- | --- | --- | 1 |
| [a]450 - 460 | 6,000 | 7.1 | -6.3 | ---- | ----- | --- | --- | 4 |
| 460 - 470 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 470 - 480 | | 4.5 | -2.7 | ---- | ----- | --- | --- | 3 |
| [b]480 - 490 | | 3.9 | -6.4 | ---- | ----- | --- | --- | 4 |
| 490 - 530 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 333 - Traverse 3<br>Length of traverse 352.9 sec | | | | | | | | |
| 0 - 10 | 5,000 | ---- | -2.7 | ---- | ----- | --- | --- | 1 |
| 10 - 20 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]20 - 30 | 4,500 | 3.8 | ----- | ---- | ----- | --- | --- | 1 |
| 30 - 40 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 40 - 50 | 5,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 50 - 60 | | 5.7 | -5.2 | ---- | ----- | --- | --- | 3 |
| 60 - 70 | | 5.1 | -5.5 | ---- | ----- | --- | --- | 8 |
| 70 - 80 | 4,500 | 6.4 | -6.0 | ---- | ----- | --- | --- | 5 |
| 80 - 90 | | 2.0 | ----- | ---- | ----- | --- | --- | 1 |
| 90 - 100 | 5,000 | 3.7 | ----- | ---- | ----- | --- | --- | 1 |
| 100 - 110 | | 4.7 | -5.5 | ---- | ----- | --- | --- | 2 |
| 110 - 130 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 130 - 140 | | ---- | -3.4 | ---- | ----- | --- | --- | 1 |
| 140 - 150 | | 5.1 | -9.8 | ---- | ----- | --- | --- | 2 |
| 150 - 160 | | 11.1 | -15.7 | 18.3 | ----- | 114 | --- | 5 |
| 160 - 170 | 5,500 | 10.4 | -6.7 | ---- | ----- | --- | --- | 4 |
| 170 - 180 | | 8.2 | -13.5 | ---- | ----- | --- | --- | 7 |
| 180 - 190 | 5,000 | 12.3 | -3.9 | ---- | ----- | --- | --- | 3 |
| 190 - 200 | | 8.8 | -9.4 | ---- | ----- | --- | --- | 5 |
| [b]200 - 210 | | 14.3 | -4.1 | 12.3 | ----- | 45 | --- | 4 |
| 210 - 220 | | 11.6 | -5.0 | ---- | -8.1 | --- | 76 | 6 |
| [a]220 - 230 | | 8.3 | -7.0 | 10.7 | ----- | 61 | --- | 8 |
| 230 - 240 | | 17.5 | ----- | ---- | ----- | --- | --- | 4 |
| 240 - 250 | | 9.3 | ----- | ---- | ----- | --- | --- | 2 |
| 250 - 260 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]260 - 270 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 270 - 360 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 333 - Traverse 4<br>Length of traverse 869.2 sec | | | | | | | | |
| 0 - 20 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 20 - 30 | 6,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 333 - Traverse 4<br>Length of traverse 869.2 sec | | | | | | | | |
| [a]30 - 40 | 6,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 40 - 70 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 70 - 80 | | 3.9 | ----- | ---- | ----- | --- | --- | 1 |
| 80 - 110 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 110 - 120 | | ---- | -2.4 | ---- | ----- | --- | --- | 1 |
| 120 - 180 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 180 - 190 | | 10.4 | -7.3 | ---- | ----- | --- | --- | 2 |
| 190 - 200 | | 6.8 | -3.0 | 11.8 | ----- | 126 | --- | 4 |
| 200 - 210 | 6,000 | 2.9 | ----- | ---- | ----- | --- | --- | 1 |
| 210 - 220 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 220 - 230 | 5,500 | 5.8 | -5.6 | 6.6 | ----- | 175 | --- | 5 |
| 230 - 240 | | ---- | -7.5 | ---- | -12.8 | --- | 155 | 2 |
| 240 - 250 | 6,000 | 6.1 | -10.6 | ---- | ----- | --- | --- | 4 |
| 250 - 260 | | ---- | -5.4 | ---- | ----- | --- | --- | 1 |
| 260 - 270 | | 9.0 | ----- | ---- | ----- | --- | --- | 2 |
| 270 - 290 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 290 - 300 | | 3.7 | -7.9 | ---- | ----- | --- | --- | 5 |
| 300 - 310 | | 5.5 | ----- | ---- | ----- | --- | --- | 1 |
| 310 - 320 | | 7.2 | -7.1 | ---- | ----- | --- | --- | 4 |
| 320 - 330 | | 5.9 | -2.3 | ---- | ----- | --- | --- | 4 |
| 330 - 340 | | 4.1 | -6.1 | ---- | ----- | --- | --- | 3 |
| [b]340 - 350 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]350 - 360 | | 6.5 | -8.7 | ---- | ----- | --- | --- | 1 |
| [b]360 - 370 | | 7.2 | -9.0 | ---- | ----- | --- | --- | 5 |
| 370 - 380 | | 2.9 | -3.9 | ---- | ----- | --- | --- | 3 |
| 380 - 390 | | 6.8 | ----- | ---- | ----- | --- | --- | 1 |
| 390 - 400 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 400 - 410 | | 7.2 | -5.2 | ---- | ----- | --- | --- | 3 |
| 410 - 420 | | 11.9 | -9.8 | ---- | -14.6 | --- | 82 | 3 |
| [b]420 - 430 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 430 - 520 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 520 - 530 | | 3.6 | -3.0 | ---- | ----- | --- | --- | 2 |
| 530 - 570 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 570 - 580 | | ---- | -4.5 | ---- | -5.9 | --- | 136 | 3 |
| 580 - 590 | | 1.2 | -3.0 | ---- | ----- | --- | --- | 2 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 29 | | | | | | | | |
| Airplane 333 - Traverse 4<br>Length of traverse 869.2 sec | | | | | | | | |
| 590 - 600 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 600 - 610 | | ---- | -5.1 | ---- | ----- | --- | --- | 1 |
| 610 - 620 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a-b]620 - 630 | | ---- | -5.3 | ---- | ----- | --- | --- | 1 |
| 630 - 650 | 6,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 650 - 660 | | ---- | -5.8 | ---- | ----- | --- | --- | 1 |
| 660 - 670 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 670 - 680 | | 4.0 | ----- | ---- | ----- | --- | --- | 1 |
| 680 - 690 | | 2.7 | ----- | ---- | ----- | --- | --- | 1 |
| 690 - 700 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 700 - 710 | 6,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]710 - 720 | | 5.3 | -4.7 | ---- | ----- | --- | --- | 3 |
| [b]720 - 730 | | ---- | -2.4 | ---- | ----- | --- | --- | 1 |
| 730 - 740 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]740 - 750 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]750 - 760 | 5,500 | 6.9 | ----- | ---- | ----- | --- | --- | 2 |
| 760 - 770 | | 5.6 | -2.3 | ---- | -5.8 | --- | 146 | 3 |
| 770 - 780 | | 10.1 | -5.0 | ---- | ----- | --- | --- | 4 |
| 780 - 870 | 6,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| August 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 344 - Traverse 1<br>Length of traverse 161.3 sec | | | | | | | | |
| 0 - 10 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]10 - 20 | | 12.3 | -6.5 | ---- | ----- | --- | --- | 5 |
| 20 - 30 | | 9.0 | -4.3 | ---- | ----- | --- | --- | 4 |
| [b]30 - 40 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 40 - 50 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]50 - 60 | | 10.7 | -5.1 | ---- | ----- | --- | --- | 3 |
| [b]60 - 70 | | ---- | -12.9 | ---- | ----- | --- | --- | 4 |
| 70 - 170 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 344 - Traverse 2<br>Length of traverse 153.5 sec | | | | | | | | |
| 0 - 40 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 40 - 50 | | 5.9 | -3.9 | 11.3 | ----- | 84 | --- | 5 |
| [a]50 - 60 | | ---- | -6.8 | ---- | ----- | --- | --- | 4 |
| 60 - 70 | 19,500 | 17.7 | ----- | ---- | ----- | --- | --- | 3 |
| 70 - 80 | 20,000 | 14.5 | -12.0 | ---- | ----- | --- | --- | 5 |
| 80 - 90 | | 7.6 | -14.2 | ---- | ----- | --- | --- | 6 |
| 90 - 100 | | 8.7 | -9.6 | ---- | ----- | --- | --- | 8 |
| 100 - 110 | 20,500 | 7.6 | -6.3 | ---- | ----- | --- | --- | 4 |
| [b]110 - 120 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 120 - 160 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 3<br>Length of traverse 225.6 sec | | | | | | | | |
| 0 - 80 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]80 - 90 | | 6.7 | -7.0 | ---- | ----- | --- | --- | 6 |
| 90 - 100 | | 18.1 | -14.2 | 33.1 | ----- | 205 | --- | 9 |
| 100 - 110 | | 8.4 | -4.7 | ---- | ----- | --- | --- | 8 |
| 110 - 120 | | 4.4 | -4.8 | ---- | ----- | --- | --- | 3 |
| 120 - 130 | | 17.6 | -8.3 | ---- | ----- | --- | --- | 6 |
| 130 - 140 | | 18.9 | -12.1 | ---- | ----- | --- | --- | 3 |
| 140 - 180 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]180 - 190 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 190 - 230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 4<br>Length of traverse 164.8 sec | | | | | | | | |
| 0 - 40 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]40 - 50 | | 16.5 | -2.8 | ---- | ----- | --- | --- | 2 |
| 50 - 60 | 20,000 | 5.7 | -14.0 | ---- | ----- | --- | --- | 5 |
| 60 - 70 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 70 - 80 | | 5.7 | -8.8 | ---- | ----- | --- | --- | 7 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 344 - Traverse 4<br>Length of traverse 164.8 sec | | | | | | | | |
| 80 - 90 | 20,000 | 11.1 | -10.4 | ---- | ----- | --- | --- | 5 |
| 90 - 100 | | 7.8 | -23.7 | ---- | ----- | --- | --- | 7 |
| 100 - 110 | | 8.8 | -9.3 | ---- | ----- | --- | --- | 12 |
| 110 - 120 | | 3.9 | -8.1 | 6.2 | ----- | 160 | --- | 6 |
| 120 - 130 | | 5.7 | -13.3 | 6.4 | ----- | 176 | --- | 6 |
| [b]130 - 140 | | 4.8 | -8.7 | 8.6 | ----- | 48 | --- | 5 |
| 140 - 170 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 5<br>Length of traverse 227.9 sec | | | | | | | | |
| 0 - 50 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]50 - 60 | | 9.2 | -8.1 | ---- | ----- | --- | --- | 5 |
| 60 - 70 | | 9.6 | -14.5 | ---- | ----- | --- | --- | 4 |
| 70 - 80 | | 12.5 | -15.3 | ---- | -19.2 | --- | 218 | 3 |
| 80 - 90 | | 16.6 | -13.3 | ---- | ----- | --- | --- | 11 |
| 90 - 100 | | 13.2 | -8.8 | ---- | ----- | --- | --- | 3 |
| 100 - 110 | | 7.8 | -10.9 | ---- | ----- | --- | --- | 7 |
| 110 - 120 | | 8.5 | -12.1 | ---- | ----- | --- | --- | 8 |
| 120 - 130 | | 5.2 | -4.7 | ---- | ----- | --- | --- | 3 |
| 130 - 140 | 20,500 | 5.2 | ----- | 6.9 | ----- | 122 | --- | 1 |
| 140 - 150 | | ---- | -9.7 | ---- | -18.1 | --- | 427 | 1 |
| 150 - 160 | | 5.6 | -7.5 | ---- | ----- | --- | --- | 4 |
| 160 - 180 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]180 - 190 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 190 - 230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 6<br>Length of traverse 270.2 sec | | | | | | | | |
| 0 - 100 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]100 - 110 | | 3.8 | -6.8 | ---- | ----- | --- | --- | 3 |
| 110 - 120 | | 11.9 | -9.3 | ---- | ----- | --- | --- | 4 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 344 - Traverse 6<br>Length of traverse 270.2 sec | | | | | | | | |
| 120 - 130 | 19,500 | 8.8 | -7.7 | ---- | ----- | --- | --- | 4 |
| 130 - 140 | | 3.4 | -9.8 | ---- | ----- | --- | --- | 13 |
| 140 - 150 | 20,000 | 11.7 | -15.3 | ---- | ----- | --- | --- | 11 |
| 150 - 160 | 20,500 | 11.9 | -10.6 | ---- | ----- | --- | --- | 10 |
| 160 - 170 | 21,000 | 16.0 | -18.6 | ---- | ----- | --- | --- | 10 |
| 170 - 180 | | 16.4 | -13.9 | ---- | ----- | --- | --- | 7 |
| 180 - 190 | | 8.0 | -8.0 | ---- | ----- | --- | --- | 10 |
| 190 - 200 | | 3.2 | -8.0 | 7.7 | ----- | 77 | --- | 5 |
| [b]200 - 210 | 21,500 | 5.3 | -3.5 | ---- | ----- | --- | --- | 3 |
| 210 - 220 | | 3.9 | ----- | ---- | ----- | --- | --- | 1 |
| 220 - 230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 230 - 240 | | ---- | -10.8 | ---- | -17.2 | --- | 247 | 1 |
| 240 - 250 | 21,000 | 7.5 | -7.9 | ---- | ----- | --- | --- | 8 |
| 250 - 260 | | ---- | -6.7 | ---- | ----- | --- | --- | 1 |
| 260 - 280 | 20,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 7<br>Length of traverse 262.0 sec | | | | | | | | |
| 0 - 10 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 10 - 20 | | ---- | -5.0 | ---- | ----- | --- | --- | 1 |
| 20 - 40 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]40 - 50 | | ---- | -6.7 | ---- | ----- | --- | --- | 2 |
| [b]50 - 60 | | ---- | -6.2 | ---- | -13.4 | --- | 319 | 1 |
| [a]60 - 70 | | 3.3 | -6.2 | ---- | ----- | --- | --- | 4 |
| 70 - 80 | | 5.9 | -4.8 | ---- | ----- | --- | --- | 4 |
| 80 - 90 | | 8.1 | -8.2 | ---- | ----- | --- | --- | 7 |
| 90 - 100 | | 7.4 | -4.8 | ---- | ----- | --- | --- | 2 |
| 100 - 110 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 110 - 120 | | ---- | -4.9 | ---- | ----- | --- | --- | 2 |
| 120 - 130 | | 5.3 | -4.1 | ---- | ----- | --- | --- | 5 |
| 130 - 140 | | 8.8 | -5.0 | ---- | ----- | --- | --- | 3 |
| 140 - 150 | | 5.5 | -6.0 | ---- | ----- | --- | --- | 2 |
| 150 - 160 | | ---- | -4.9 | ---- | ----- | --- | --- | 2 |
| 160 - 180 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1948 - Flight 30 | | | | | | | | |
| Airplane 344 - Traverse 7<br>Length of traverse 262.0 sec | | | | | | | | |
| 180 - 190 | 19,500 | 7.3 | -8.8 | 11.1 | ----- | 92 | --- | 6 |
| 190 - 200 | | 13.8 | -10.0 | ---- | ----- | --- | --- | 8 |
| 200 - 210 | | 11.1 | -15.9 | ---- | ----- | --- | --- | 9 |
| 210 - 220 | | 13.5 | -8.6 | ---- | ----- | --- | --- | 3 |
| [b]220 - 230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 230 - 270 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 8<br>Length of traverse 84.0 sec | | | | | | | | |
| [a]0 - 10 | 19,500 | 12.5 | -14.7 | ---- | ----- | --- | --- | 3 |
| 10 - 20 | 20,500 | 12.9 | -15.5 | ---- | ----- | --- | --- | 7 |
| 20 - 30 | 21,000 | ---- | -8.9 | ---- | ----- | --- | --- | 2 |
| 30 - 40 | | ---- | -13.7 | ---- | ----- | --- | --- | 3 |
| 40 - 50 | 20,500 | 34.9 | -27.3 | 69.0 | ----- | 95 | --- | 7 |
| 50 - 60 | 20,000 | 15.2 | -12.6 | ---- | ----- | --- | --- | 2 |
| 60 - 70 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]70 - 80 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 80 - 90 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 9<br>Length of traverse 233.4 sec | | | | | | | | |
| 0 - 40 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]40 - 50 | | 9.2 | -9.9 | ---- | ----- | --- | --- | 4 |
| 50 - 60 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 60 - 70 | 19,500 | 3.0 | ----- | ---- | ----- | --- | --- | 1 |
| [b]70 - 80 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 80 - 90 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 90 - 100 | | 2.4 | ----- | ---- | ----- | --- | --- | 1 |
| 100 - 110 | | 3.3 | -4.7 | ---- | ----- | --- | --- | 3 |
| 110 - 140 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]140 - 150 | | 3.4 | -8.0 | ---- | ----- | --- | --- | 3 |
| 150 - 160 | | 7.0 | -9.2 | ---- | ----- | --- | --- | 7 |
| 160 - 170 | | 23.9 | -12.2 | 37.6 | ----- | 229 | --- | 7 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 344 - Traverse 9<br>Length of traverse 233.4 sec | | | | | | | | |
| 170 - 180 | 20,000 | 13.6 | -17.9 | ---- | ----- | --- | --- | 4 |
| 180 - 190 | | 10.1 | -21.5 | ---- | ----- | --- | --- | 7 |
| 190 - 200 | | 11.8 | -11.3 | ---- | ----- | --- | --- | 7 |
| 200 - 210 | | 10.4 | -14.6 | ---- | ----- | --- | --- | 5 |
| [b]210 - 220 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 220 - 230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 356 - Traverse 1<br>Length of traverse 2973.5 sec | | | | | | | | |
| 0 - 10 | 14,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 10 - 20 | | 3.2 | ----- | 3.8 | ----- | 48 | --- | 1 |
| 20 - 50 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 50 - 60 | | 2.6 | ----- | ---- | ----- | --- | --- | 1 |
| 60 - 70 | 15,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 70 - 110 | 14,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 110 - 120 | | 8.0 | -5.1 | ---- | -3.4 | --- | 82 | 5 |
| [a]120 - 130 | | 4.8 | -3.8 | ---- | ----- | --- | --- | 8 |
| 130 - 140 | | 8.0 | -4.5 | ---- | ----- | --- | --- | 9 |
| 140 - 150 | | 8.0 | -6.4 | ---- | ----- | --- | --- | 6 |
| [b]150 - 160 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 160 - 240 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 240 - 280 | 15,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 280 - 300 | 14,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 300 - 310 | | ---- | -3.2 | ---- | -3.3 | --- | 105 | 1 |
| [a]310 - 320 | | 4.8 | -3.8 | ---- | ----- | --- | --- | 6 |
| 320 - 330 | | 6.1 | -4.8 | ---- | ----- | --- | --- | 3 |
| 330 - 340 | | 3.2 | ----- | ---- | ----- | --- | --- | 1 |
| 340 - 350 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 350 - 360 | | 4.5 | ----- | ---- | ----- | --- | --- | 2 |
| 360 - 370 | | ---- | -5.7 | ---- | ----- | --- | --- | 2 |
| 370 - 380 | | 4.3 | -10.5 | ---- | ----- | --- | --- | 6 |
| 380 - 390 | | 12.1 | -12.8 | ---- | ----- | --- | --- | 8 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 356 - Traverse 1<br>Length of traverse 2973.5 sec | | | | | | | | |
| 390 - 400 | 14,500 | 8.0 | -8.0 | ---- | ----- | --- | --- | 7 |
| 400 - 410 | | 15.6 | -7.3 | ---- | ----- | --- | --- | 7 |
| 410 - 420 | 15,000 | 15.3 | -27.7 | ---- | ----- | --- | --- | 6 |
| 420 - 430 | 15,500 | 10.8 | -11.2 | ---- | ----- | --- | --- | 9 |
| 430 - 440 | | 3.8 | -13.1 | ---- | ----- | --- | --- | 7 |
| 440 - 450 | | 15.0 | -17.2 | ---- | ----- | --- | --- | 9 |
| 450 - 460 | | 10.2 | ----- | ---- | ----- | --- | --- | 2 |
| 460 - 470 | | 3.5 | ----- | ---- | ----- | --- | --- | 1 |
| [b]470 - 480 | | 5.4 | ----- | 4.8 | ----- | 75 | --- | 1 |
| 480 - 630 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]630 - 640 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 640 - 650 | | 14.6 | -17.8 | ---- | ----- | --- | --- | 7 |
| 650 - 660 | | 23.8 | -14.0 | ---- | ----- | --- | --- | 8 |
| 660 - 670 | | 21.6 | -13.0 | ---- | ----- | --- | --- | 7 |
| 670 - 680 | 16,500 | 16.2 | -11.7 | ---- | ----- | --- | --- | 11 |
| 680 - 690 | 17,000 | 2.9 | -18.4 | ---- | ----- | --- | --- | 7 |
| 690 - 700 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]700 - 710 | | ---- | -4.1 | ---- | ----- | --- | --- | 1 |
| [a]710 - 720 | 16,500 | 7.3 | -7.0 | ---- | ----- | --- | --- | 4 |
| [b]720 - 730 | | 7.3 | ----- | ---- | ----- | --- | --- | 2 |
| [a]730 - 740 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]740 - 750 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 750 - 780 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 780 - 810 | 16,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 810 - 820 | | ---- | -2.9 | ---- | 8.9 | --- | 197 | 1 |
| [a]820 - 830 | 16,500 | 4.8 | ----- | ---- | ----- | --- | --- | 2 |
| 830 - 850 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 850 - 860 | 16,000 | 3.2 | ----- | ---- | ----- | --- | --- | 1 |
| 860 - 870 | | 3.8 | ----- | ---- | ----- | --- | --- | 1 |
| 870 - 880 | | 13.3 | -9.5 | ---- | ----- | --- | --- | 9 |
| 880 - 890 | | 15.8 | -12.3 | ---- | ----- | --- | --- | 9 |
| 890 - 900 | 16,500 | 11.1 | ----- | ---- | ----- | --- | --- | 1 |
| 900 - 930 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]930 - 940 | 16,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.

[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 356 - Traverse 1<br>Length of traverse 2973.5 sec | | | | | | | | |
| 940 - 950 | 15,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 950 - 960 | 14,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 960 - 1040 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]1040 - 1050 | | 9.2 | ----- | ---- | ----- | --- | --- | 1 |
| 1050 - 1070 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1070 - 1080 | | ---- | -8.2 | ---- | -8.1 | --- | 74 | 2 |
| 1080 - 1090 | | 6.6 | -5.1 | ---- | ----- | --- | --- | 2 |
| 1090 - 1100 | 14,000 | 3.8 | ----- | ---- | ----- | --- | --- | 1 |
| 1100 - 1110 | | 4.4 | -6.6 | ---- | ----- | --- | --- | 8 |
| 1110 - 1120 | | 8.5 | -3.5 | ---- | ----- | --- | --- | 6 |
| 1120 - 1130 | | 9.2 | -13.0 | ---- | ----- | --- | --- | 8 |
| 1130 - 1140 | | 3.8 | -6.6 | ---- | ----- | --- | --- | 8 |
| 1140 - 1150 | | 7.3 | -11.4 | ---- | ----- | --- | --- | 3 |
| 1150 - 1160 | | 14.9 | -13.9 | ---- | ----- | --- | --- | 8 |
| 1160 - 1170 | | 8.9 | -4.1 | ---- | ----- | --- | --- | 6 |
| 1170 - 1180 | | 4.4 | -3.2 | ---- | ----- | --- | --- | 2 |
| [b]1180 - 1190 | | 4.1 | ----- | ---- | ----- | --- | --- | 1 |
| 1190 - 1200 | | 7.9 | -3.2 | ---- | ----- | --- | --- | 2 |
| 1200 - 1210 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1210 - 1220 | | ---- | -2.8 | ---- | ----- | --- | --- | 1 |
| 1220 - 1360 | 14,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1360 - 1400 | 15,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1400 - 1410 | | 5.0 | ----- | ---- | ----- | --- | --- | 1 |
| 1410 - 1420 | | 4.4 | ----- | 8.1 | ----- | 74 | --- | 1 |
| 1420 - 1430 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1430 - 1440 | 14,500 | 5.4 | ----- | 5.8 | ----- | 65 | --- | 2 |
| [a]1440 - 1450 | | 6.3 | -3.1 | ---- | ----- | --- | --- | 7 |
| 1450 - 1460 | 15,000 | 4.1 | -3.5 | ---- | ----- | --- | --- | 6 |
| 1460 - 1470 | | 5.0 | -7.6 | ---- | ----- | --- | --- | 6 |
| 1470 - 1480 | | 13.9 | -9.4 | ---- | ----- | --- | --- | 6 |
| 1480 - 1490 | | 7.2 | -6.9 | ---- | ----- | --- | --- | 5 |
| 1490 - 1500 | 15,500 | 7.2 | ----- | ---- | ----- | --- | --- | 3 |
| 1500 - 1510 | 15,000 | ---- | -9.1 | ---- | ----- | --- | --- | 2 |
| 1510 - 1550 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 356 - Traverse 1<br>Length of traverse 2973.5 sec | | | | | | | | |
| [b]1550 - 1560 | 15,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1560 - 1660 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1660 - 1670 | | 5.0 | -20.5 | ---- | ----- | --- | --- | 9 |
| 1670 - 1690 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]1690 - 1700 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1700 - 1710 | | 12.9 | -6.9 | ---- | ----- | --- | --- | 9 |
| 1710 - 1720 | | 6.3 | -15.1 | ---- | ----- | --- | --- | 5 |
| [b]1720 - 1730 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1730 - 1790 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]1790 - 1800 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1800 - 1840 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1840 - 1850 | | 4.1 | -1.9 | ---- | ----- | --- | --- | 2 |
| 1850 - 1860 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1860 - 1870 | | ---- | -7.2 | ---- | ----- | --- | --- | 1 |
| 1870 - 1890 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]1890 - 1900 | | 4.4 | -8.5 | ---- | ----- | --- | --- | 2 |
| [a]1900 - 1910 | | 8.5 | -16.0 | ---- | ----- | --- | --- | 9 |
| 1910 - 1920 | | 23.2 | -22.2 | ---- | ----- | --- | --- | 7 |
| 1920 - 1930 | | 18.8 | -10.3 | ---- | ----- | --- | --- | 9 |
| 1930 - 1940 | | 13.2 | -13.5 | ---- | ----- | --- | --- | 10 |
| 1940 - 1950 | | 5.6 | -5.3 | ---- | ----- | --- | --- | 5 |
| 1950 - 1960 | | 6.3 | -6.9 | ---- | ----- | --- | --- | 4 |
| 1960 - 1970 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1970 - 1980 | | 9.4 | -8.5 | ---- | ----- | --- | --- | 3 |
| 1980 - 1990 | | 8.1 | -13.8 | ---- | ----- | --- | --- | 10 |
| 1990 - 2000 | | 7.2 | -6.9 | ---- | ----- | --- | --- | 4 |
| 2000 - 2010 | | 5.0 | -4.1 | ---- | ----- | --- | --- | 6 |
| 2010 - 2020 | | 5.6 | -2.5 | ---- | -4.3 | --- | 127 | 2 |
| 2020 - 2030 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]2030 - 2040 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]2040 - 2050 | | 6.3 | -6.6 | ---- | ----- | --- | --- | 9 |
| 2050 - 2060 | | 14.4 | -15.0 | ---- | ----- | --- | --- | 13 |
| 2060 - 2070 | | 18.2 | -7.2 | ---- | ----- | --- | --- | 12 |
| 2070 - 2080 | 15,500 | 11.6 | -8.5 | ---- | ----- | --- | --- | 11 |
| 2080 - 2090 | 16,000 | 4.4 | -19.1 | ---- | ----- | --- | --- | 7 |
| 2090 - 2100 | | 9.4 | -13.2 | ---- | ----- | --- | --- | 8 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 356 - Traverse 1<br>Length of traverse 2973.5 sec | | | | | | | | |
| 2100 - 2110 | 16,000 | 10.0 | -9.4 | ---- | ----- | --- | --- | 9 |
| 2110 - 2120 | 15,500 | 4.7 | -5.6 | ---- | ----- | --- | --- | 6 |
| 2120 - 2130 | | 3.8 | -3.8 | ---- | ----- | --- | --- | 2 |
| 2130 - 2140 | | 8.1 | -3.1 | ---- | ----- | --- | --- | 3 |
| 2140 - 2150 | 16,000 | 12.2 | -11.3 | ---- | ----- | --- | --- | 5 |
| [b]2150 - 2160 | | 3.1 | -8.1 | ---- | ----- | --- | --- | 4 |
| 2160 - 2170 | 15,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2170 - 2210 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2210 - 2290 | 15,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]2290 - 2300 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2300 - 2310 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]2310 - 2320 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2320 - 2330 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]2330 - 2340 | | 12.5 | -5.6 | ---- | ----- | --- | --- | 4 |
| 2340 - 2350 | | 5.6 | -10.0 | ---- | ----- | --- | --- | 6 |
| 2350 - 2360 | | 9.1 | -4.4 | ---- | ----- | --- | --- | 5 |
| 2360 - 2370 | 15,000 | 7.8 | -3.1 | ---- | ----- | --- | --- | 6 |
| 2370 - 2380 | | 5.3 | -6.6 | ---- | ----- | --- | --- | 10 |
| 2380 - 2390 | | 3.4 | -6.6 | ---- | ----- | --- | --- | 5 |
| 2390 - 2400 | | 10.9 | -8.4 | ---- | ----- | --- | --- | 6 |
| 2400 - 2410 | 14,500 | 12.5 | -6.9 | ---- | ----- | --- | --- | 7 |
| 2410 - 2420 | | 7.2 | ----- | 6.9 | ----- | 70 | --- | 1 |
| 2420 - 2440 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]2440 - 2450 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2450 - 2460 | | ---- | -5.3 | ---- | ----- | --- | --- | 0 |
| 2460 - 2470 | | 4.1 | -3.4 | ---- | ----- | --- | --- | 6 |
| 2470 - 2480 | | 3.4 | -2.5 | ---- | ----- | --- | --- | 3 |
| 2480 - 2490 | | 6.6 | -7.2 | ---- | ----- | --- | --- | 6 |
| 2490 - 2500 | | 5.3 | -4.7 | ---- | ----- | --- | --- | 5 |
| 2500 - 2510 | | 5.9 | -5.0 | ---- | ----- | --- | --- | 6 |
| [a]2510 - 2520 | | 3.1 | -5.0 | ---- | ----- | --- | --- | 6 |
| 2520 - 2530 | | 7.5 | -8.7 | ---- | ----- | --- | --- | 8 |
| 2530 - 2540 | | 10.3 | -11.9 | ---- | ----- | --- | --- | 6 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 356 - Traverse 1<br>Length of traverse 2973.5 sec | | | | | | | | |
| 2540 - 2550 | 14,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2550 - 2560 | 14,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2560 - 2580 | 14,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2580 - 2590 | 14,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2590 - 2600 | 13,500 | 11.9 | ----- | ---- | ----- | --- | --- | 2 |
| 2600 - 2610 | 14,000 | 10.6 | -4.7 | ---- | ----- | --- | --- | 7 |
| 2610 - 2620 | 14,500 | 5.0 | -7.2 | ---- | ----- | --- | --- | 8 |
| 2620 - 2630 | | 5.3 | -3.1 | ---- | ----- | --- | --- | 6 |
| 2630 - 2640 | | ---- | -5.9 | ---- | ----- | --- | --- | 7 |
| 2640 - 2650 | | 5.9 | -6.9 | ---- | ----- | --- | --- | 10 |
| 2650 - 2660 | 14,000 | 5.0 | -3.7 | ---- | ----- | --- | --- | 6 |
| 2660 - 2670 | 14,500 | 6.6 | -4.4 | ---- | ----- | --- | --- | 2 |
| 2670 - 2680 | | 6.6 | -5.6 | ---- | ----- | --- | --- | 2 |
| 2680 - 2690 | | ---- | -6.6 | ---- | ----- | --- | --- | 1 |
| 2690 - 2700 | | 3.4 | -9.1 | ---- | ----- | --- | --- | 3 |
| 2700 - 2710 | | 4.7 | ----- | ---- | ----- | --- | --- | 4 |
| 2710 - 2720 | | ---- | -2.8 | ---- | ----- | --- | --- | 1 |
| 2720 - 2730 | | 2.8 | -4.1 | ---- | ----- | --- | --- | 3 |
| 2730 - 2740 | | 6.6 | -9.1 | ---- | ----- | --- | --- | 9 |
| 2740 - 2750 | 14,000 | 20.0 | -3.7 | ---- | ----- | --- | --- | 11 |
| 2750 - 2760 | | 12.5 | -5.3 | ---- | ----- | --- | --- | 6 |
| 2760 - 2770 | | 9.4 | -5.6 | ---- | ----- | --- | --- | 6 |
| 2770 - 2780 | 14,500 | 10.9 | -9.4 | ---- | ----- | --- | --- | 9 |
| 2780 - 2790 | 15,000 | 9.4 | -5.9 | ---- | ----- | --- | --- | 10 |
| 2790 - 2800 | | 4.4 | -9.7 | ---- | ----- | --- | --- | 5 |
| 2800 - 2810 | 14,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2810 - 2820 | | 5.3 | -6.2 | ---- | ----- | --- | --- | 4 |
| 2820 - 2830 | 14,000 | 9.4 | ----- | ---- | ----- | --- | --- | 2 |
| 2830 - 2840 | | 7.8 | ----- | ---- | ----- | --- | --- | 2 |
| 2840 - 2850 | 13,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]2850 - 2860 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2860 - 2870 | 12,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2870 - 2980 | 11,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |

[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 351 - Traverse 1<br>Length of traverse 516.7 sec | | | | | | | | |
| 0 - 40 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]40 - 50 | | 3.2 | ----- | ---- | ----- | --- | --- | 1 |
| 50 - 60 | 9,500 | 1.6 | -3.5 | ---- | ----- | --- | --- | 3 |
| 60 - 70 | | 6.1 | -2.2 | ---- | ----- | --- | --- | 7 |
| 70 - 80 | | 11.2 | -11.2 | ---- | ----- | --- | --- | 7 |
| 80 - 90 | 10,000 | 8.6 | -7.7 | ---- | ----- | --- | --- | 7 |
| 90 - 100 | | 5.1 | ----- | ---- | ----- | --- | --- | 1 |
| 100 - 110 | | 6.1 | -8.3 | ---- | ----- | --- | --- | 7 |
| 110 - 120 | | 1.9 | -4.8 | ---- | ----- | --- | --- | 4 |
| 120 - 130 | | 3.2 | -3.5 | 7.3 | ----- | 184 | --- | 3 |
| [b]130 - 140 | 9,500 | 1.6 | ----- | ---- | ----- | --- | --- | 1 |
| 140 - 230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 230 - 240 | | 3.8 | ----- | ---- | ----- | --- | --- | 1 |
| 240 - 250 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 250 - 280 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 280 - 290 | | ---- | -4.5 | ---- | ----- | --- | --- | 2 |
| [a]290 - 300 | | 12.5 | -4.8 | ---- | ----- | --- | --- | 4 |
| 300 - 310 | | 4.5 | -6.4 | ---- | ----- | --- | --- | 6 |
| [b]310 - 320 | | 4.5 | -4.2 | ---- | ----- | --- | --- | 4 |
| 320 - 330 | | 2.2 | -4.8 | 7.9 | ----- | 216 | --- | 3 |
| 330 - 340 | | 4.8 | -4.8 | ---- | ----- | --- | --- | 6 |
| 340 - 350 | | 4.2 | -5.4 | ---- | ----- | --- | --- | 2 |
| 350 - 360 | | 1.6 | ----- | ---- | ----- | --- | --- | 1 |
| 360 - 380 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]380 - 390 | | 1.6 | -4.8 | ---- | ----- | --- | --- | 6 |
| 390 - 400 | | 11.8 | -8.6 | ---- | ----- | --- | --- | 9 |
| 400 - 410 | 10,500 | 6.4 | -15.4 | ---- | ----- | --- | --- | 11 |
| 410 - 420 | | 10.9 | -3.5 | ---- | ----- | --- | --- | 7 |
| 420 - 430 | | 5.4 | -6.7 | 8.9 | ----- | 118 | --- | 5 |
| 430 - 440 | | 11.2 | -23.0 | ---- | ----- | --- | --- | 6 |
| 440 - 450 | | 10.2 | -6.1 | ---- | ----- | --- | --- | 14 |
| 450 - 460 | | 5.1 | -6.1 | ---- | -4.5 | --- | 80 | 8 |
| [b]460 - 470 | 10,000 | 4.2 | -2.6 | ---- | ----- | --- | --- | 4 |
| 470 - 520 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 351 - Traverse 2<br>Length of traverse 1257.4 sec | | | | | | | | |
| 0 - 90 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 90 - 100 | | ---- | -8.0 | ---- | ----- | --- | --- | 1 |
| [a]100 - 110 | | 9.5 | -7.0 | ---- | ----- | --- | --- | 9 |
| 110 - 120 | | 9.9 | -12.7 | ---- | ----- | --- | --- | 8 |
| 120 - 130 | | 15.3 | -10.5 | ---- | ----- | --- | --- | 11 |
| 130 - 140 | | 11.1 | -8.6 | ---- | ----- | --- | --- | 8 |
| 140 - 150 | | 5.1 | -6.4 | ---- | ----- | --- | --- | 6 |
| [b]150 - 160 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]160 - 170 | | 4.1 | -3.8 | ---- | ----- | --- | --- | 4 |
| 170 - 180 | | 3.2 | -8.6 | ---- | ----- | --- | --- | 5 |
| 180 - 190 | | 8.9 | -6.4 | ---- | ----- | --- | --- | 8 |
| 190 - 200 | | 3.5 | -14.0 | ---- | ----- | --- | --- | 4 |
| 200 - 210 | | 4.1 | -4.1 | ---- | ----- | --- | --- | 5 |
| 210 - 220 | | 4.5 | -6.0 | ---- | ----- | --- | --- | 4 |
| [b]220 - 230 | | ---- | -2.5 | ---- | ----- | --- | --- | 2 |
| 230 - 390 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 390 - 400 | | 5.1 | ----- | ---- | ----- | --- | --- | 1 |
| 400 - 410 | 9,500 | 4.1 | ----- | 8.5 | ----- | 228 | --- | 1 |
| 410 - 420 | | 5.7 | ----- | ---- | ----- | --- | --- | 1 |
| 420 - 460 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 460 - 570 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]570 - 580 | | 1.9 | ----- | ---- | ----- | --- | --- | 2 |
| 580 - 590 | | 3.5 | ----- | ---- | ----- | --- | --- | 2 |
| [b-a]590 - 600 | | 3.5 | -5.4 | ---- | ----- | --- | --- | 5 |
| 600 - 610 | | 2.2 | -4.8 | ---- | ----- | --- | --- | 5 |
| 610 - 620 | | 2.2 | -6.3 | ---- | ----- | --- | --- | 5 |
| 620 - 630 | | 3.2 | -4.8 | ---- | ----- | --- | --- | 5 |
| 630 - 640 | 9,500 | 8.6 | -6.0 | ---- | -11.2 | --- | 263 | 5 |
| 640 - 650 | | 3.5 | -5.4 | ---- | -4.5 | --- | 58 | 7 |
| 650 - 660 | | 4.4 | -5.7 | ---- | ----- | --- | --- | 9 |
| 660 - 670 | | 10.8 | -6.7 | ---- | ----- | --- | --- | 6 |
| 670 - 680 | | 7.3 | -9.2 | ---- | ----- | --- | --- | 10 |
| 680 - 690 | | 10.8 | -4.4 | ---- | ----- | --- | --- | 3 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 351 - Traverse 2<br>Length of traverse 1257.4 sec | | | | | | | | |
| 690 - 700 | 9,500 | 1.6 | -8.2 | ---- | ----- | --- | --- | 4 |
| [b]700 - 710 | | 3.8 | -5.7 | ---- | ----- | --- | --- | 3 |
| 710 - 720 | | 1.9 | ----- | 3.3 | ----- | 67 | --- | 1 |
| 720 - 730 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]730 - 740 | | 4.4 | -6.6 | ---- | ----- | --- | --- | 4 |
| 740 - 750 | 10,000 | 13.9 | -11.4 | ---- | ----- | --- | --- | 10 |
| [b]750 - 760 | 9,500 | 2.2 | -20.2 | ---- | ----- | --- | --- | 4 |
| 760 - 830 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 830 - 840 | 10,000 | ---- | -11.4 | ---- | ----- | --- | --- | 1 |
| 840 - 920 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 920 - 930 | | 2.5 | -3.5 | ---- | ----- | --- | --- | 2 |
| [a]930 - 940 | | 3.5 | -6.6 | ---- | ----- | --- | --- | 2 |
| [b]940 - 950 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 950 - 960 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 960 - 980 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]980 - 990 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 990 - 1000 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1000 - 1010 | | 7.2 | -4.4 | ---- | ----- | --- | --- | 4 |
| 1010 - 1020 | | 7.6 | -13.2 | ---- | ----- | --- | --- | 10 |
| 1020 - 1030 | | 6.9 | -10.1 | ---- | ----- | --- | --- | 7 |
| 1030 - 1040 | | 6.6 | -11.6 | ---- | ----- | --- | --- | 8 |
| 1040 - 1050 | | 6.0 | -8.5 | ---- | ----- | --- | --- | 8 |
| 1050 - 1060 | 10,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]1060 - 1070 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1070 - 1080 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1080 - 1100 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]1100 - 1110 | | 10.4 | -7.9 | ---- | ----- | --- | --- | 9 |
| [b-a]1110 - 1120 | | 4.7 | -7.9 | ---- | ----- | --- | --- | 8 |
| [b]1120 - 1130 | 10,500 | 6.6 | -9.1 | ---- | ----- | --- | --- | 2 |
| 1130 - 1190 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1190 - 1200 | 9,500 | 1.9 | ----- | ---- | ----- | --- | --- | 1 |
| 1200 - 1210 | 9,000 | 1.9 | -3.5 | ---- | ----- | --- | --- | 3 |
| 1210 - 1220 | 8,500 | 1.6 | ----- | 3.8 | ----- | 62 | --- | 1 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 351 - Traverse 2<br>Length of traverse 1257.4 sec | | | | | | | | |
| 1220 - 1240 | 8,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1240 - 1250 | 7,500 | 2.2 | ----- | ---- | ----- | --- | --- | 1 |
| 1250 - 1260 | 7,000 | 2.8 | ----- | ---- | ----- | --- | --- | 2 |
| Airplane 333 - Traverse 1<br>Length of traverse 3218.0 sec | | | | | | | | |
| 0 - 90 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 90 - 100 | | ---- | -3.2 | ---- | -3.1 | --- | 73 | 1 |
| [a]100 - 110 | | 3.8 | -4.1 | 8.8 | ----- | 138 | --- | 5 |
| 110 - 120 | | 4.5 | ----- | 8.4 | ----- | 113 | --- | 2 |
| 120 - 130 | | 5.4 | -9.9 | ---- | ----- | --- | --- | 3 |
| 130 - 140 | | ---- | -3.2 | ---- | ----- | --- | --- | 1 |
| 140 - 170 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 170 - 180 | | 8.3 | -4.1 | ---- | ----- | --- | --- | 2 |
| 180 - 190 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 190 - 200 | | 4.8 | ----- | ---- | ----- | --- | --- | 1 |
| 200 - 210 | | 27.1 | -7.7 | ---- | ----- | --- | --- | 6 |
| [b]210 - 220 | | 6.4 | -4.8 | ---- | ----- | --- | --- | 5 |
| 220 - 230 | | ---- | -4.1 | ---- | ----- | --- | --- | 3 |
| 230 - 240 | | ---- | -3.2 | ---- | ----- | --- | --- | 1 |
| 240 - 250 | | ---- | -3.2 | ---- | ----- | --- | --- | 2 |
| 250 - 260 | | 2.9 | ----- | ---- | ----- | --- | --- | 1 |
| 260 - 270 | | ---- | -4.1 | ---- | ----- | --- | --- | 1 |
| 270 - 280 | | 3.8 | -4.1 | ---- | ----- | --- | --- | 2 |
| 280 - 390 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 390 - 400 | | ---- | -2.6 | ---- | ----- | --- | --- | 1 |
| [a-b]400 - 410 | | ---- | -2.6 | ---- | ----- | --- | --- | 3 |
| 410 - 430 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]430 - 440 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 440 - 510 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 510 - 520 | | 4.5 | -3.8 | ---- | ----- | --- | --- | 3 |
| 520 - 530 | | 5.4 | -3.2 | ---- | ----- | --- | --- | 2 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 333 - Traverse 1<br>Length of traverse 3218.0 sec | | | | | | | | |
| 530 - 540 | 5,500 | ---- | -10.2 | ---- | ----- | --- | --- | 2 |
| 540 - 550 | 6,000 | 7.0 | -6.4 | ---- | ----- | --- | --- | 3 |
| 550 - 560 | | 7.6 | -8.6 | ---- | -11.6 | --- | 67 | 5 |
| 560 - 570 | | 7.3 | -6.4 | ---- | ----- | --- | --- | 4 |
| 570 - 580 | | 7.6 | -3.5 | ---- | ----- | --- | --- | 2 |
| 580 - 590 | | 2.9 | -7.3 | ---- | -12.2 | --- | 63 | 2 |
| 590 - 600 | | 4.4 | -3.8 | ---- | ----- | --- | --- | 3 |
| 600 - 610 | | 5.4 | -6.4 | 10.3 | -11.6 | 56 | 221 | 3 |
| 610 - 620 | | 4.4 | -4.1 | ---- | ----- | --- | --- | 4 |
| [b]620 - 630 | | ---- | -4.8 | ---- | ----- | --- | --- | 1 |
| 630 - 690 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 690 - 700 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 700 - 710 | | 3.5 | -3.8 | ---- | ----- | --- | --- | 2 |
| 710 - 840 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 840 - 850 | | 4.7 | -7.0 | ---- | ----- | --- | --- | 4 |
| 850 - 860 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 860 - 870 | | 4.4 | -4.4 | ---- | ----- | --- | --- | 5 |
| 870 - 880 | | 1.9 | ----- | 3.2 | ----- | 57 | --- | 1 |
| 880 - 890 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 890 - 900 | | 4.4 | -11.4 | 6.8 | ----- | 114 | --- | 5 |
| 900 - 910 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 910 - 920 | | 7.3 | -10.4 | ---- | ----- | --- | --- | 2 |
| 920 - 930 | | 3.5 | -8.5 | ---- | ----- | --- | --- | 3 |
| 930 - 950 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 950 - 960 | | 9.8 | -3.8 | ---- | ----- | --- | --- | 4 |
| 960 - 970 | | 3.5 | -3.8 | ---- | ----- | --- | --- | 3 |
| 970 - 1000 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1000 - 1010 | | 5.1 | ----- | 8.1 | ----- | 84 | --- | 3 |
| 1010 - 1020 | | 4.4 | -3.8 | ---- | ----- | --- | --- | 3 |
| 1020 - 1030 | | 7.6 | -8.5 | ---- | ----- | --- | --- | 7 |
| 1030 - 1040 | | 4.7 | -10.8 | ---- | -7.3 | --- | 120 | 4 |
| [a]1040 - 1050 | 5,000 | 19.6 | -27.8 | ---- | ----- | --- | --- | 10 |
| 1050 - 1060 | 5,500 | 15.5 | -6.3 | ---- | ----- | --- | --- | 7 |
| 1060 - 1070 | | 10.4 | ----- | ---- | ----- | --- | --- | 2 |
| 1070 - 1080 | | 9.2 | -7.9 | ---- | ----- | --- | --- | 4 |
| 1080 - 1090 | | 11.7 | -7.3 | ---- | ----- | --- | --- | 2 |
| 1090 - 1100 | | 4.7 | ----- | ---- | ----- | --- | --- | 1 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 333 - Traverse 1<br>Length of traverse 3218.0 sec | | | | | | | | |
| 1100 - 1110 | 5,500 | 7.9 | -7.9 | 12.2 | ----- | 136 | --- | 6 |
| 1110 - 1120 | | 5.4 | -5.7 | 10.8 | ----- | 121 | --- | 5 |
| 1120 - 1130 | | 6.0 | -8.5 | ---- | ----- | --- | --- | 3 |
| 1130 - 1140 | | 6.0 | -2.2 | ---- | ----- | --- | --- | 2 |
| 1140 - 1150 | | 5.1 | -3.2 | ---- | ----- | --- | --- | 3 |
| 1150 - 1170 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]1170 - 1180 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1180 - 1290 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]1290 - 1300 | | 6.0 | -3.1 | ---- | ----- | --- | --- | 3 |
| 1300 - 1320 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1320 - 1330 | | 5.0 | -4.1 | 10.7 | -11.2 | 77 | 112 | 2 |
| 1330 - 1340 | | 6.3 | -5.0 | 15.5 | -6.5 | 210 | 85 | 6 |
| 1340 - 1370 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1370 - 1380 | | 5.4 | -4.1 | ---- | -7.5 | --- | 87 | 4 |
| 1380 - 1390 | | 5.4 | -2.5 | ---- | ----- | --- | --- | 2 |
| 1390 - 1400 | | 3.8 | ----- | ---- | ----- | --- | --- | 1 |
| 1400 - 1420 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1420 - 1430 | | 3.5 | -3.1 | ---- | -3.1 | --- | 73 | 4 |
| 1430 - 1440 | | 8.8 | -7.9 | ---- | ----- | --- | --- | 2 |
| 1440 - 1450 | | 5.0 | -4.7 | 9.8 | ----- | 29 | --- | 4 |
| 1450 - 1480 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1480 - 1550 | 6,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1550 - 1560 | | 4.4 | -5.7 | ---- | ----- | --- | --- | 3 |
| 1560 - 1570 | | 5.4 | -8.8 | ---- | ----- | --- | --- | 2 |
| 1570 - 1580 | | 9.4 | ----- | ---- | ----- | --- | --- | 1 |
| 1580 - 1590 | | 2.8 | -6.3 | ---- | ----- | --- | --- | 4 |
| 1590 - 1600 | | ---- | -6.3 | ---- | ----- | --- | --- | 2 |
| 1600 - 1610 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b-a]1610 - 1620 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1620 - 1640 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]1640 - 1650 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1650 - 1660 | | 10.4 | ----- | 19.1 | ----- | 355 | --- | 1 |
| 1660 - 1700 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 333 - Traverse 1<br>Length of traverse 3218.0 sec | | | | | | | | |
| 1700 - 1710 | 5,500 | 8.8 | ----- | 8.2 | ----- | 152 | --- | 1 |
| 1710 - 1750 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1750 - 1760 | | 4.7 | ----- | ---- | ----- | --- | --- | 1 |
| [a]1760 - 1770 | | 3.8 | ----- | ---- | ----- | --- | --- | 1 |
| 1770 - 1780 | | ---- | -5.3 | ---- | -8.6 | --- | 74 | 2 |
| 1780 - 1790 | | 5.0 | -4.7 | ---- | ----- | --- | --- | 3 |
| 1790 - 1800 | | ---- | -3.1 | ---- | -4.0 | --- | 92 | 1 |
| 1800 - 1810 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1810 - 1820 | | 6.0 | -2.2 | ---- | ----- | --- | --- | 2 |
| 1820 - 1830 | | 9.7 | -3.1 | ---- | -3.3 | --- | 46 | 4 |
| 1830 - 1840 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1840 - 1850 | 6,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1850 - 1860 | | 5.6 | ----- | ---- | ----- | --- | --- | 1 |
| 1860 - 1870 | | 4.7 | ----- | 9.8 | ----- | 112 | --- | 4 |
| 1870 - 1890 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1890 - 1900 | | 4.4 | -4.4 | ---- | ----- | --- | --- | 2 |
| 1900 - 1930 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1930 - 1960 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1960 - 1970 | | 8.2 | -3.1 | ---- | ----- | --- | --- | 4 |
| 1970 - 1980 | 6,000 | 6.0 | -12.5 | ---- | ----- | --- | --- | 5 |
| 1980 - 1990 | | 7.5 | -6.3 | ---- | ----- | --- | --- | 7 |
| 1990 - 2000 | | 5.3 | -3.1 | ---- | ----- | --- | --- | 6 |
| 2000 - 2010 | | 3.8 | -3.1 | ---- | -20.7 | --- | 86 | 3 |
| 2010 - 2020 | 6,500 | 7.2 | -9.1 | ---- | ----- | --- | --- | 4 |
| 2020 - 2030 | | ---- | -5.0 | ---- | ----- | --- | --- | 1 |
| 2030 - 2040 | | 8.2 | -5.6 | ---- | ----- | --- | --- | 4 |
| 2040 - 2050 | | 9.1 | -5.6 | ---- | ----- | --- | --- | 3 |
| 2050 - 2060 | | 7.8 | ----- | ---- | ----- | --- | --- | 2 |
| 2060 - 2070 | | 3.8 | -4.7 | ---- | ----- | --- | --- | 3 |
| 2070 - 2080 | | 7.8 | -7.5 | ---- | ----- | --- | --- | 6 |
| 2080 - 2090 | 6,000 | 4.7 | ----- | ---- | ----- | --- | --- | 2 |
| 2090 - 2130 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]2130 - 2140 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2140 - 2230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2230 - 2240 | | ---- | -4.4 | ---- | -3.5 | --- | 197 | 2 |
| 2240 - 2260 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 333 - Traverse 1<br>Length of traverse 3218.0 sec | | | | | | | | |
| 2260 - 2270 | 6,000 | 5.6 | ----- | 8.8 | ----- | 205 | --- | 1 |
| 2270 - 2280 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2280 - 2290 | | ---- | -3.7 | ---- | ----- | --- | --- | 1 |
| 2290 - 2370 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]2370 - 2380 | | 5.3 | ----- | ---- | ----- | --- | --- | 1 |
| 2380 - 2390 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2390 - 2400 | | 3.7 | -3.1 | ---- | -4.8 | --- | 134 | 3 |
| 2400 - 2410 | | 4.7 | -7.5 | ---- | -3.8 | --- | 26 | 3 |
| 2410 - 2420 | | 5.0 | -2.5 | ---- | ----- | --- | --- | 2 |
| 2420 - 2430 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2430 - 2440 | | ---- | -12.5 | ---- | -20.9 | --- | 32 | 2 |
| 2440 - 2450 | | ---- | -3.4 | ---- | -5.6 | --- | 67 | 2 |
| 2450 - 2460 | | ---- | -11.9 | ---- | ----- | --- | --- | 1 |
| 2460 - 2470 | | ---- | -7.2 | ---- | ----- | --- | --- | 2 |
| 2470 - 2480 | | ---- | -3.4 | ---- | ----- | --- | --- | 1 |
| 2480 - 2540 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2540 - 2550 | | ---- | -3.4 | ---- | -4.6 | --- | 37 | 2 |
| 2550 - 2560 | | 8.1 | ----- | 13.8 | ----- | 200 | --- | 1 |
| 2560 - 2570 | | ---- | -3.1 | ---- | -5.1 | --- | 266 | 1 |
| 2570 - 2580 | | 6.2 | ----- | ---- | ----- | --- | --- | 1 |
| 2580 - 2590 | | ---- | -3.1 | ---- | ----- | --- | --- | 2 |
| 2590 - 2600 | | 4.4 | -3.7 | ---- | ----- | --- | --- | 2 |
| 2600 - 2630 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]2630 - 2640 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2640 - 2660 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2660 - 2700 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]2700 - 2710 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2710 - 2720 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2720 - 2730 | | ---- | -4.7 | ---- | ----- | --- | --- | 1 |
| 2730 - 2740 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2740 - 2750 | | 5.9 | ----- | ---- | ----- | --- | --- | 2 |
| 2750 - 2770 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2770 - 2780 | | 8.4 | -8.4 | ---- | ----- | --- | --- | 3 |
| 2780 - 2790 | | ---- | -3.1 | ---- | ----- | --- | --- | 1 |
| 2790 - 2860 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 21, 1947 - Flight 30 | | | | | | | | |
| Airplane 333 - Traverse 1<br>Length of traverse 3218.0 sec | | | | | | | | |
| 2860 - 2870 | 5,500 | 5.3 | -2.8 | ---- | ----- | --- | --- | 4 |
| 2870 - 2880 | | 5.6 | -7.5 | ---- | ----- | --- | --- | 2 |
| 2880 - 2890 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2890 - 2900 | | 8.7 | -5.3 | ---- | ----- | --- | --- | 6 |
| 2900 - 2910 | | 19.6 | -6.8 | ---- | ----- | --- | --- | 7 |
| 2910 - 2920 | | 10.6 | -8.1 | ---- | ----- | --- | --- | 3 |
| 2920 - 2930 | | 8.7 | ----- | ---- | ----- | --- | --- | 1 |
| 2930 - 2940 | | 12.1 | -8.4 | ---- | -8.1 | --- | 75 | 3 |
| 2940 - 2950 | | ---- | -9.0 | ---- | ----- | --- | --- | 2 |
| 2950 - 2990 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 2990 - 3000 | | 4.0 | ----- | ---- | ----- | --- | --- | 1 |
| 3000 - 3010 | | ---- | -5.6 | ---- | -8.3 | --- | 63 | 2 |
| 3010 - 3020 | | 5.3 | ----- | 8.3 | ----- | 34 | --- | 2 |
| 3020 - 3030 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 3030 - 3040 | | 3.7 | ----- | ---- | ----- | --- | --- | 1 |
| 3040 - 3050 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 3050 - 3060 | | ---- | -3.1 | ---- | ----- | --- | --- | 1 |
| 3060 - 3070 | 6,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 3070 - 3080 | | 9.3 | ----- | 10.6 | ----- | 137 | --- | 2 |
| 3080 - 3090 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 3090 - 3100 | 5,500 | 6.8 | -5.6 | ---- | -11.6 | --- | 125 | 7 |
| 3100 - 3150 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]3150 - 3160 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 3160 - 3220 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| August 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 327 - Traverse 1<br>Length of traverse 497.5 sec | | | | | | | | |
| 0 - 270 | 25,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 270 - 280 | | 3.5 | ----- | ---- | ----- | --- | --- | 1 |
| 280 - 290 | | 1.8 | -4.6 | ---- | ----- | --- | --- | 3 |

[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 327 - Traverse 1<br>Length of traverse 497.5 sec | | | | | | | | |
| 290 - 300 | 25,000 | 1.8 | -3.1 | ---- | ----- | --- | --- | 3 |
| 300 - 310 | | 1.2 | ----- | ---- | ----- | --- | --- | 1 |
| 310 - 320 | | 2.2 | ----- | ---- | ----- | --- | --- | 1 |
| 320 - 330 | | 8.8 | -4.6 | ---- | -7.5 | --- | 272 | 5 |
| 330 - 340 | | 5.1 | -8.3 | ---- | ----- | --- | --- | 4 |
| 340 - 350 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 350 - 360 | | 10.3 | -7.1 | ---- | ----- | --- | --- | 5 |
| 360 - 370 | | 11.9 | -22.9 | ---- | ----- | --- | --- | 9 |
| 370 - 380 | | 23.5 | -26.0 | ---- | ----- | --- | --- | 10 |
| 380 - 390 | | 14.8 | -27.5 | ---- | ----- | --- | --- | 11 |
| 390 - 400 | | 14.0 | -13.0 | ---- | ----- | --- | --- | 8 |
| 400 - 410 | 25,500 | 9.1 | -11.2 | ---- | ----- | --- | --- | 5 |
| 410 - 500 | 25,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 327 - Traverse 2<br>Length of traverse 179.6 sec | | | | | | | | |
| 0 - 80 | 24,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 80 - 90 | 25,000 | 12.7 | -10.1 | ---- | ----- | --- | --- | 6 |
| 90 - 100 | | 14.3 | -14.6 | ---- | ----- | --- | --- | 9 |
| 100 - 110 | 25,500 | 10.1 | -9.6 | ---- | ----- | --- | --- | 7 |
| 110 - 120 | | 9.9 | -14.9 | ---- | ----- | --- | --- | 6 |
| 120 - 130 | | 2.6 | -10.4 | ---- | ----- | --- | --- | 4 |
| 130 - 180 | 25,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 1<br>Length of traverse 176.2 sec | | | | | | | | |
| 0 - 30 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]30 - 40 | | 10.6 | -11.9 | ---- | -6.6 | --- | 218 | 2 |
| 40 - 50 | | 14.5 | -5.0 | ---- | ----- | --- | --- | 7 |
| 50 - 60 | 19,500 | 9.9 | -7.1 | ---- | ----- | --- | --- | 4 |
| [b]60 - 70 | | 8.6 | -6.2 | ---- | ----- | --- | --- | 4 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 344 - Traverse 1<br>Length of traverse 176.2 sec | | | | | | | | |
| 70 - 80 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 80 - 90 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]90 - 100 | | 6.7 | -12.0 | ---- | ----- | --- | --- | 10 |
| 100 - 110 | 19,500 | 12.4 | ----- | ---- | ----- | --- | --- | 4 |
| 110 - 120 | | 8.3 | -5.5 | ---- | ----- | --- | --- | 5 |
| 120 - 130 | 20,000 | ---- | -7.1 | ---- | ----- | --- | --- | 3 |
| 130 - 140 | | ---- | -5.1 | ---- | -8.0 | --- | 113 | 2 |
| [b]140 - 150 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 150 - 180 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 2<br>Length of traverse 139.9 sec | | | | | | | | |
| 0 - 60 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 60 - 70 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]70 - 80 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 80 - 90 | | 7.4 | -4.5 | ---- | ----- | --- | --- | 5 |
| 90 - 100 | | 3.0 | ----- | ---- | ----- | --- | --- | 1 |
| 100 - 110 | | 2.2 | ----- | ---- | -7.3 | --- | 115 | 2 |
| [b]110 - 120 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 120 - 130 | | 5.7 | ----- | ---- | ----- | --- | --- | 1 |
| 130 - 140 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 3<br>Length of traverse 125.2 sec | | | | | | | | |
| 0 - 30 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 30 - 40 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a-b]40 - 50 | | 3.5 | -6.7 | ---- | ----- | --- | --- | 8 |
| 50 - 60 | | ---- | -6.9 | ---- | ----- | --- | --- | 1 |
| 60 - 70 | 19,500 | 7.4 | -6.9 | ---- | ----- | --- | --- | 8 |
| [a]70 - 80 | | 9.1 | -14.7 | ---- | ----- | --- | --- | 8 |
| 80 - 90 | | 11.1 | -7.9 | ---- | ----- | --- | --- | 5 |
| [b]90 - 100 | | 9.8 | -9.0 | ---- | ----- | --- | --- | 3 |
| 100 - 130 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 344 - Traverse 4<br>Length of traverse 62.8 sec | | | | | | | | |
| 0 - 30 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]30 - 40 | | 9.9 | -15.8 | ---- | ----- | --- | --- | 7 |
| 40 - 50 | | 14.7 | -15.2 | ---- | ----- | --- | --- | 8 |
| 50 - 60 | | 18.8 | -15.8 | ---- | ----- | --- | --- | 7 |
| 60 - 70 | | 36.4 | -10.7 | ---- | ----- | --- | --- | 3 |
| Airplane 344 - Traverse 5<br>Length of traverse 80.3 sec | | | | | | | | |
| 0 - 10 | 20,000 | 14.9 | -7.3 | ---- | ----- | --- | --- | 6 |
| 10 - 20 | 25,000 | ---- | -10.3 | ---- | ----- | --- | --- | 1 |
| [b]20 - 30 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 30 - 90 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 6<br>Length of traverse 158.1 sec | | | | | | | | |
| 0 - 20 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 20 - 50 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 50 - 70 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]70 - 80 | | 7.8 | -5.9 | ---- | ----- | --- | --- | 4 |
| 80 - 90 | 20,000 | 6.4 | -7.6 | ---- | ----- | --- | --- | 6 |
| 90 - 100 | | 14.7 | -22.4 | ---- | ----- | --- | --- | 5 |
| 100 - 110 | | 20.2 | -21.1 | ---- | ----- | --- | --- | 9 |
| 110 - 120 | | 7.0 | -6.9 | ---- | ----- | --- | --- | 6 |
| [b]120 - 130 | | ---- | -4.6 | ---- | ----- | --- | --- | 1 |
| 130 - 140 | 19,500 | 3.2 | ----- | ---- | ----- | --- | --- | 1 |
| 140 - 160 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 7<br>Length of traverse 166.4 sec | | | | | | | | |
| 0 - 30 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 30 - 50 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 50 - 60 | | ---- | -3.7 | ---- | ----- | --- | --- | 1 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 344 - Traverse 7<br>Length of traverse 166.4 sec | | | | | | | | |
| [a]60 - 70 | 20,000 | ---- | -2.9 | ---- | -9.4 | --- | 113 | 3 |
| 70 - 80 | 19,500 | 7.6 | -3.7 | ---- | -8.1 | --- | 67 | 3 |
| 80 - 90 | | 19.2 | -5.8 | ---- | ----- | --- | --- | 4 |
| 90 - 100 | 20,000 | 9.1 | -8.4 | ---- | ----- | --- | --- | 8 |
| 100 - 110 | | 5.9 | -4.8 | ---- | ----- | --- | --- | 3 |
| 110 - 120 | | 4.6 | -4.1 | ---- | ----- | --- | --- | 2 |
| [b]120 - 130 | | ---- | -2.9 | ---- | ----- | --- | --- | 1 |
| 130 - 170 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 8<br>Length of traverse 157.9 sec | | | | | | | | |
| 0 - 30 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 30 - 80 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]80 - 90 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 90 - 100 | | 12.3 | -19.2 | ---- | ----- | --- | --- | 7 |
| 100 - 110 | | 18.0 | -11.2 | ---- | ----- | --- | --- | 6 |
| 110 - 120 | | 10.6 | -5.9 | ---- | ----- | --- | --- | 8 |
| [b]120 - 130 | | ---- | -9.5 | ---- | ----- | --- | --- | 1 |
| 130 - 160 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 344 - Traverse 9<br>Length of traverse 131.3 sec | | | | | | | | |
| 0 - 20 | 19,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 20 - 50 | 20,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]50 - 60 | 19,500 | 3.4 | -5.6 | ---- | ----- | --- | --- | 6 |
| 60 - 70 | | 9.9 | -11.6 | ---- | ----- | --- | --- | 7 |
| 70 - 80 | | 10.5 | -9.7 | ---- | ----- | --- | --- | 8 |
| 80 - 90 | | 20.7 | -8.3 | ---- | ----- | --- | --- | 5 |
| 90 - 100 | | 9.1 | -11.2 | ---- | ----- | --- | --- | 8 |
| [b]100 - 110 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 110 - 140 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 353 - Traverse 1<br>Length of traverse 1923.8 sec | | | | | | | | |
| 0 - 30 | 15,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]30 - 40 | | 8.1 | -10.6 | ---- | ----- | --- | --- | 2 |
| 40 - 50 | | 12.1 | ----- | ---- | ----- | --- | --- | 3 |
| 50 - 60 | | 19.2 | -14.9 | ---- | ----- | --- | --- | 8 |
| 60 - 70 | | 11.5 | -17.9 | ---- | ----- | --- | --- | 7 |
| 70 - 80 | | 19.6 | -5.3 | ---- | ----- | --- | --- | 9 |
| 80 - 90 | | 10.2 | -19.9 | ---- | ----- | --- | --- | 6 |
| 90 - 100 | 16,000 | 13.3 | -7.4 | ---- | ----- | --- | --- | 3 |
| 100 - 110 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 110 - 120 | | 5.1 | ----- | ---- | ----- | --- | --- | 1 |
| 120 - 130 | 15,500 | 24.7 | -25.8 | ---- | ----- | --- | --- | 6 |
| 130 - 140 | | 13.8 | -9.2 | ---- | ----- | --- | --- | 5 |
| 140 - 150 | | 9.6 | -4.4 | ---- | ----- | --- | --- | 5 |
| 150 - 160 | | ---- | -4.6 | ---- | ----- | --- | --- | 1 |
| 160 - 170 | | 6.0 | ----- | ---- | ----- | --- | --- | 1 |
| [b]170 - 180 | | ---- | -2.5 | ---- | -8.9 | --- | 143 | 1 |
| 180 - 370 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 370 - 380 | | ---- | -4.9 | ---- | ----- | --- | --- | 2 |
| [a]380 - 390 | | 4.2 | -7.3 | ---- | ----- | --- | --- | 5 |
| 390 - 400 | | 9.9 | -5.2 | ---- | ----- | --- | --- | 6 |
| 400 - 410 | 15,000 | 6.8 | -9.1 | ---- | ----- | --- | --- | 6 |
| 410 - 420 | | 9.8 | -4.4 | ---- | ----- | --- | --- | 3 |
| 420 - 430 | 15,500 | 16.4 | -12.3 | ---- | ----- | --- | --- | 6 |
| 430 - 440 | | 18.1 | -18.1 | ---- | ----- | --- | --- | 7 |
| 440 - 450 | 16,000 | 19.1 | -12.6 | ---- | ----- | --- | --- | 10 |
| 450 - 460 | 16,500 | 17.4 | -18.0 | ---- | ----- | --- | --- | 9 |
| 460 - 470 | | 20.0 | -10.3 | ---- | ----- | --- | --- | 3 |
| 470 - 480 | | 13.6 | -6.2 | ---- | ----- | --- | --- | 5 |
| 480 - 490 | | 7.9 | -8.9 | ---- | ----- | --- | --- | 7 |
| 490 - 500 | | 6.3 | -12.0 | ---- | ----- | --- | --- | 5 |
| 500 - 510 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]510 - 520 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 520 - 550 | 15,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 550 - 590 | 15,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 353 - Traverse 1<br>Length of traverse 1923.8 sec | | | | | | | | |
| 590 - 740 | 15,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 740 - 750 | | 6.4 | ----- | ---- | ----- | --- | --- | 1 |
| 750 - 760 | | 4.2 | -6.4 | ---- | ----- | --- | --- | 6 |
| [a]760 - 770 | | 10.8 | -9.9 | ---- | ----- | --- | --- | 3 |
| 770 - 780 | | 15.9 | -5.5 | ---- | ----- | --- | --- | 10 |
| 780 - 790 | 15,000 | 14.5 | -18.1 | ---- | ----- | --- | --- | 8 |
| 790 - 800 | 15,500 | 18.1 | -13.6 | ---- | ----- | --- | --- | 5 |
| 800 - 810 | | 14.1 | -16.6 | ---- | ----- | --- | --- | 6 |
| 810 - 820 | 16,000 | 6.3 | -6.0 | ---- | ----- | --- | --- | 9 |
| 820 - 830 | | 8.1 | -11.5 | ---- | ----- | --- | --- | 6 |
| 830 - 840 | | 15.1 | -36.6 | 26.4 | ----- | 145 | --- | 8 |
| 840 - 850 | | 7.0 | -9.1 | 16.2 | ----- | 339 | --- | 3 |
| 850 - 860 | 15,500 | 6.5 | -4.9 | 9.9 | ----- | 139 | --- | 2 |
| [b]860 - 870 | | 6.7 | -9.9 | ---- | ----- | --- | --- | 2 |
| 870 - 880 | | 6.0 | ----- | ---- | ----- | --- | --- | 1 |
| 880 - 890 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 890 - 900 | 16,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 900 - 910 | 15,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 910 - 1070 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1070 - 1080 | | ---- | -8.0 | ---- | ----- | --- | --- | 1 |
| [a]1080 - 1090 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1090 - 1100 | | ---- | -8.1 | ---- | ----- | --- | --- | 2 |
| [b]1100 - 1110 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1110 - 1120 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]1120 - 1130 | | 2.9 | -4.3 | ---- | ----- | --- | --- | 4 |
| 1130 - 1140 | | 7.2 | -6.9 | ---- | ----- | --- | --- | 3 |
| 1140 - 1150 | 15,000 | 5.3 | -7.4 | ---- | ----- | --- | --- | 7 |
| 1150 - 1160 | | 16.5 | -12.2 | ---- | ----- | --- | --- | 7 |
| 1160 - 1170 | | 26.2 | -15.7 | 54.0 | -8.6 | 75 | 92 | 7 |
| 1170 - 1180 | | 21.1 | -16.3 | ---- | ----- | --- | --- | 6 |
| 1180 - 1190 | | ---- | -6.1 | ---- | ----- | --- | --- | 1 |
| [b]1190 - 1200 | 15,500 | ---- | ----- | ---- | ----- | --- | --- | 4 |
| 1200 - 1230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 353 - Traverse 1<br>Length of traverse 1923.8 sec | | | | | | | | |
| 1230 - 1250 | 15,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1250 - 1310 | 15,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1310 - 1340 | 15,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1340 - 1540 | 14,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]1540 - 1550 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1550 - 1560 | | 7.5 | -5.7 | ---- | ----- | --- | --- | 3 |
| 1560 - 1570 | | 14.6 | -31.5 | ---- | ----- | --- | --- | 9 |
| 1570 - 1580 | | 14.7 | -14.7 | ---- | ----- | --- | --- | 7 |
| 1580 - 1590 | | 11.5 | -10.3 | ---- | ----- | --- | --- | 6 |
| 1590 - 1600 | | 14.7 | -12.2 | ---- | ----- | --- | --- | 6 |
| 1600 - 1610 | | 4.2 | -12.6 | 29.8 | ----- | 256 | --- | 8 |
| 1610 - 1620 | | ---- | -8.9 | ---- | -13.9 | --- | 169 | 1 |
| 1620 - 1630 | | ---- | -4.6 | ---- | ----- | --- | --- | 1 |
| 1630 - 1640 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]1640 - 1650 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1650 - 1660 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1660 - 1670 | | 4.5 | -3.4 | 6.6 | ----- | 77 | --- | 3 |
| 1670 - 1680 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1680 - 1690 | | ---- | -3.5 | ---- | -7.7 | --- | 101 | 1 |
| 1690 - 1770 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]1770 - 1780 | | ---- | -3.4 | ---- | ----- | --- | --- | 1 |
| 1780 - 1800 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1800 - 1810 | | 4.2 | -9.4 | ---- | ----- | --- | --- | 2 |
| 1810 - 1820 | | 6.9 | -7.8 | ---- | -8.4 | --- | 84 | 4 |
| 1820 - 1830 | 14,000 | 8.6 | -8.6 | ---- | ----- | --- | --- | 3 |
| 1830 - 1840 | | 15.4 | -7.7 | ---- | ----- | --- | --- | 4 |
| 1840 - 1850 | | 10.0 | -7.7 | ---- | ----- | --- | --- | 8 |
| 1850 - 1860 | | 20.1 | -13.6 | ---- | ----- | --- | --- | 6 |
| 1860 - 1870 | | 4.9 | -8.6 | ---- | ----- | --- | --- | 7 |
| [b]1870 - 1880 | | 3.3 | -2.3 | ---- | ----- | --- | --- | 3 |
| 1880 - 1910 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1910 - 1930 | 13,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 356 - Traverse 1<br>Length of traverse 1920.1 sec | | | | | | | | |
| 0 - 40 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 40 - 50 | | 8.4 | -5.8 | ---- | ----- | --- | --- | 2 |
| 50 - 60 | | 3.9 | -3.9 | 10.1 | ----- | 212 | --- | 6 |
| [a]60 - 70 | | 12.4 | -8.1 | ---- | ----- | --- | --- | 8 |
| 70 - 80 | | 4.1 | -8.7 | ---- | ----- | --- | --- | 4 |
| 80 - 90 | | 13.5 | -8.7 | ---- | ----- | --- | --- | 12 |
| [b]90 - 100 | 9,500 | 11.5 | -13.9 | ---- | ----- | --- | --- | 3 |
| 100 - 110 | 10,000 | 6.0 | -3.6 | ---- | ----- | --- | --- | 3 |
| 110 - 140 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 140 - 170 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]170 - 180 | 10,000 | 10.7 | -11.7 | ---- | ----- | --- | --- | 4 |
| 180 - 190 | | 7.0 | -4.6 | ---- | ----- | --- | --- | 4 |
| 190 - 200 | 9,500 | 13.1 | ----- | ---- | ----- | --- | --- | 1 |
| 200 - 210 | | 10.7 | -8.9 | 20.1 | ----- | 69 | --- | 6 |
| 210 - 220 | 10,000 | 5.0 | -9.4 | ---- | ----- | --- | --- | 2 |
| 220 - 230 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 230 - 240 | | 7.5 | -6.6 | ---- | -10.7 | --- | 121 | 7 |
| 240 - 250 | | ---- | -11.6 | ---- | ----- | --- | --- | 2 |
| [b]250 - 260 | 9,500 | 4.7 | ----- | ---- | ----- | --- | --- | 1 |
| 260 - 300 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 300 - 320 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]320 - 330 | | 18.9 | -14.4 | ---- | ----- | --- | --- | 5 |
| 330 - 340 | | 18.0 | -7.1 | 6.5 | ----- | 274 | --- | 3 |
| 340 - 350 | | 5.1 | -9.7 | ---- | ----- | --- | --- | 6 |
| 350 - 360 | 10,500 | 5.0 | -7.4 | ---- | ----- | --- | --- | 4 |
| 360 - 370 | | 23.0 | -11.6 | ---- | ----- | --- | --- | 6 |
| 370 - 380 | 11,000 | 10.6 | -15.0 | ---- | ----- | --- | --- | 8 |
| 380 - 390 | | 8.1 | -8.2 | ---- | ----- | --- | --- | 8 |
| 390 - 400 | | 21.4 | -21.3 | ---- | ----- | --- | --- | 6 |
| 400 - 410 | | 9.1 | -6.8 | 7.6 | ----- | 137 | --- | 4 |
| 410 - 420 | | 16.2 | -11.8 | ---- | ----- | --- | --- | 5 |
| 420 - 430 | | 4.5 | -8.9 | ---- | ----- | --- | --- | 3 |
| 430 - 440 | | 3.9 | -5.2 | ---- | ----- | --- | --- | 4 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 356 - Traverse 1<br>Length of traverse 1920.1 sec | | | | | | | | |
| 440 - 450 | 11,000 | 3.0 | -6.0 | ---- | ----- | --- | --- | 4 |
| 450 - 460 | | 5.6 | -3.6 | ---- | ----- | --- | --- | 2 |
| [b]460 - 470 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 470 - 480 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 480 - 490 | | 3.4 | ----- | ---- | ----- | --- | --- | 1 |
| 490 - 500 | 10,500 | 2.5 | ----- | ---- | ----- | --- | --- | 1 |
| 500 - 520 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 520 - 530 | | 7.1 | ----- | ---- | ----- | --- | --- | 3 |
| 530 - 540 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 540 - 580 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 580 - 590 | 10,500 | 3.5 | -5.3 | ---- | ----- | --- | --- | 2 |
| 590 - 600 | 10,000 | 2.7 | -4.0 | ---- | ----- | --- | --- | 2 |
| 600 - 610 | | 4.8 | -10.2 | ---- | ----- | --- | --- | 5 |
| 610 - 620 | | 4.7 | -6.0 | ---- | ----- | --- | --- | 4 |
| 620 - 630 | 9,500 | 3.9 | -3.7 | 10.7 | ----- | 90 | --- | 4 |
| 630 - 640 | | 7.9 | ----- | 11.9 | ----- | 191 | --- | 1 |
| 640 - 650 | | 5.1 | -4.4 | ---- | ----- | --- | --- | 4 |
| 650 - 660 | | 6.5 | -7.2 | ---- | ----- | --- | --- | 5 |
| 660 - 690 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 690 - 720 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 720 - 730 | | ---- | -3.4 | ---- | ----- | --- | --- | 1 |
| 730 - 750 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 750 - 760 | | 2.2 | ----- | ---- | ----- | --- | --- | 1 |
| 760 - 780 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 780 - 810 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 810 - 820 | | 4.6 | ----- | 7.3 | ----- | 67 | --- | 3 |
| 820 - 830 | | 7.8 | ----- | ---- | ----- | --- | --- | 1 |
| 830 - 850 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 850 - 860 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 860 - 870 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]870 - 880 | | ---- | -10.2 | ---- | ----- | --- | --- | 1 |
| 880 - 890 | | 14.9 | -14.6 | ---- | ----- | --- | --- | 11 |
| 890 - 900 | | 13.3 | -7.9 | ---- | ----- | --- | --- | 5 |
| 900 - 910 | | 14.8 | -15.6 | ---- | ----- | --- | --- | 9 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS.- Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 356 - Traverse 1<br>Length of traverse 1920.1 sec | | | | | | | | |
| 910 - 920 | 10,000 | 19.3 | -12.0 | ---- | ----- | --- | --- | 6 |
| 920 - 930 | | ---- | -14.9 | ---- | -17.4 | --- | 124 | 2 |
| 930 - 940 | 10,500 | 8.7 | -11.3 | ---- | ----- | --- | --- | 7 |
| 940 - 970 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 970 - 980 | | ---- | -4.9 | ---- | ----- | --- | --- | 1 |
| 980 - 990 | 10,500 | 10.5 | ----- | ---- | ----- | --- | --- | 1 |
| [b]990 - 1000 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1000 - 1020 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1020 - 1030 | | 12.6 | -2.9 | ---- | ----- | --- | --- | 9 |
| 1030 - 1040 | 9,500 | 9.3 | -13.2 | ---- | ----- | --- | --- | 3 |
| 1040 - 1050 | 10,000 | 7.0 | -5.9 | ---- | ----- | --- | --- | 6 |
| 1050 - 1100 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1100 - 1130 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1130 - 1140 | 10,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1140 - 1150 | | 3.0 | ----- | 6.5 | ----- | 97 | --- | 1 |
| 1150 - 1160 | | 9.4 | -16.8 | ---- | ----- | --- | --- | 5 |
| 1160 - 1170 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1170 - 1190 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1190 - 1200 | | 3.6 | -5.0 | ---- | ----- | --- | --- | 5 |
| 1200 - 1210 | | 2.7 | -10.6 | ---- | ----- | --- | --- | 4 |
| 1210 - 1220 | | 10.7 | -9.9 | ---- | ----- | --- | --- | 5 |
| 1220 - 1230 | | 17.4 | -12.4 | ---- | ----- | --- | --- | 7 |
| 1230 - 1240 | | 9.2 | -5.8 | ---- | ----- | --- | --- | 4 |
| 1240 - 1250 | 9,000 | 7.9 | -11.8 | ---- | ----- | --- | --- | 5 |
| 1250 - 1260 | | 12.6 | -5.9 | ---- | ----- | --- | --- | 9 |
| 1260 - 1270 | | 8.9 | ----- | ---- | ----- | --- | --- | 1 |
| 1270 - 1340 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1340 - 1350 | | 14.1 | -4.3 | ---- | -11.2 | --- | 79 | 4 |
| 1350 - 1400 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1400 - 1420 | 9,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1420 - 1430 | | 2.9 | -9.8 | ---- | ----- | --- | --- | 3 |
| [a]1430 - 1440 | 9,500 | 18.3 | -14.3 | ---- | ----- | --- | --- | 7 |
| 1440 - 1450 | 9,000 | 13.8 | -16.4 | ---- | ----- | --- | --- | 7 |
| 1450 - 1460 | | 11.5 | -13.4 | ---- | ----- | --- | --- | 4 |

[a]Cloud entry.
[b]Cloud exit.

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TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 356 - Traverse 1<br>Length of traverse 1920.1 sec | | | | | | | | |
| 1460 - 1470 | 8,500 | 22.2 | ----- | ---- | ----- | --- | --- | 2 |
| 1470 - 1480 | 9,000 | 15.8 | -7.8 | ---- | ----- | --- | --- | 7 |
| 1480 - 1490 | | 1.5 | -5.5 | ---- | ----- | --- | --- | 3 |
| 1490 - 1500 | | ---- | -5.3 | ---- | ----- | --- | --- | 2 |
| [b]1500 - 1510 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1510 - 1590 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1590 - 1620 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1620 - 1630 | | 6.0 | ----- | ---- | ----- | --- | --- | 1 |
| [a]1630 - 1640 | | 17.8 | -6.9 | ---- | ----- | --- | --- | 4 |
| 1640 - 1650 | | 17.8 | -13.1 | ---- | ----- | --- | --- | 5 |
| 1650 - 1660 | | 10.4 | -15.9 | ---- | ----- | --- | --- | 7 |
| 1660 - 1670 | | 7.9 | ----- | ---- | ----- | --- | --- | 1 |
| 1670 - 1680 | | 5.7 | -7.7 | 15.3 | ----- | 240 | --- | 3 |
| 1680 - 1690 | | 4.7 | -9.1 | ---- | ----- | --- | --- | 6 |
| 1690 - 1700 | 9,000 | 7.3 | -3.8 | ---- | ----- | --- | --- | 6 |
| 1700 - 1710 | | 8.1 | -4.2 | ---- | ----- | --- | --- | 7 |
| 1710 - 1720 | | 4.6 | -6.0 | ---- | -7.9 | --- | 83 | 3 |
| 1720 - 1730 | | 7.1 | ----- | ---- | ----- | --- | --- | 2 |
| 1730 - 1740 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1740 - 1750 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]1750 - 1760 | 9,000 | 3.8 | ----- | ---- | ----- | --- | --- | 1 |
| 1760 - 1770 | | 5.7 | ----- | ---- | ----- | --- | --- | 1 |
| 1770 - 1800 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1800 - 1810 | | ---- | -6.3 | ---- | ----- | --- | --- | 1 |
| 1810 - 1820 | | 5.5 | ----- | ---- | ----- | --- | --- | 2 |
| 1820 - 1840 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1840 - 1920 | 9,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| Airplane 333 - Traverse 1<br>Length of traverse 1885.6 sec | | | | | | | | |
| 0 - 10 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 10 - 20 | | 6.3 | ----- | ---- | ----- | --- | --- | 1 |
| 20 - 40 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 333 - Traverse 1<br>Length of traverse 1885.6 sec | | | | | | | | |
| 40 - 50 | 5,500 | 5.4 | ----- | 5.9 | ----- | 177 | --- | 2 |
| [a]50 - 60 | | ---- | -6.7 | ---- | ----- | --- | --- | 1 |
| 60 - 70 | | ---- | -5.8 | ---- | -5.4 | --- | 71 | 1 |
| 70 - 80 | | 6.0 | ----- | ---- | ----- | --- | --- | 1 |
| 80 - 90 | | 11.0 | -7.1 | ---- | -7.5 | --- | 80 | 5 |
| 90 - 100 | | ---- | -8.4 | ---- | ----- | --- | --- | 3 |
| [b]100 - 110 | 6,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 110 - 200 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]200 - 210 | | 6.3 | -10.5 | ---- | ----- | --- | --- | 4 |
| 210 - 220 | | 7.5 | -3.8 | ---- | ----- | --- | --- | 2 |
| 220 - 230 | | 6.7 | -8.2 | ---- | ----- | --- | --- | 4 |
| 230 - 240 | | 5.6 | -9.9 | ---- | ----- | --- | --- | 4 |
| 240 - 250 | | 6.9 | -12.5 | ---- | ----- | --- | --- | 3 |
| 250 - 260 | 5,500 | 12.0 | -7.3 | ---- | ----- | --- | --- | 6 |
| 260 - 270 | | ---- | -4.8 | ---- | ----- | --- | --- | 2 |
| 270 - 280 | | 7.4 | -2.4 | ---- | ----- | --- | --- | 2 |
| 280 - 290 | | 10.1 | -7.8 | ---- | ----- | --- | --- | 4 |
| [b]290 - 300 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 300 - 310 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 310 - 320 | | 6.2 | ----- | ---- | ----- | --- | --- | 1 |
| 320 - 330 | | 6.3 | -8.8 | ---- | ----- | --- | --- | 2 |
| 330 - 340 | | 5.2 | ----- | ---- | ----- | --- | --- | 1 |
| 340 - 390 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 390 - 400 | | 5.4 | ----- | ---- | ----- | --- | --- | 2 |
| 400 - 410 | 6,000 | 4.0 | -6.1 | ---- | -5.9 | --- | 61 | 2 |
| 410 - 450 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]450 - 460 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 460 - 470 | | ---- | -4.7 | ---- | ----- | --- | --- | 1 |
| 470 - 480 | | 14.8 | ----- | ---- | ----- | --- | --- | 1 |
| 480 - 490 | 6,000 | 7.8 | -11.9 | ---- | -20.9 | --- | 133 | 6 |
| [b]490 - 500 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 500 - 510 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 510 - 520 | | 1.9 | ----- | ---- | ----- | --- | --- | 1 |
| 520 - 570 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Continued

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 333 - Traverse 1<br>Length of traverse 1885.6 sec | | | | | | | | |
| 570 - 640 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]640 - 650 | | 2.2 | -5.8 | ---- | ----- | --- | --- | 2 |
| 650 - 660 | | 10.8 | -4.9 | ---- | ----- | --- | --- | 4 |
| 660 - 670 | | 11.7 | -8.0 | ---- | ----- | --- | --- | 8 |
| 670 - 680 | | 11.0 | -9.4 | ---- | ----- | --- | --- | 4 |
| 680 - 690 | | 9.2 | -11.6 | ---- | ----- | --- | --- | 3 |
| 690 - 700 | | 5.4 | -8.6 | ---- | ----- | --- | --- | 3 |
| 700 - 710 | | 12.5 | -7.0 | 3.2 | ----- | 393 | --- | 4 |
| [b]710 - 720 | | 4.7 | -8.3 | ---- | ----- | --- | --- | 2 |
| 720 - 750 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 750 - 760 | | ---- | -4.8 | ---- | -5.2 | --- | 250 | 2 |
| 760 - 880 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]880 - 890 | | ---- | -10.0 | ---- | ----- | --- | --- | 3 |
| 890 - 920 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 920 - 930 | | 5.5 | ----- | 3.4 | ----- | 145 | --- | 3 |
| 930 - 940 | | 12.2 | -7.1 | ---- | ----- | --- | --- | 4 |
| 940 - 970 | 6,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]970 - 980 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 980 - 1110 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]1110 - 1120 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1120 - 1130 | | 3.4 | -7.7 | ---- | ----- | --- | --- | 3 |
| 1130 - 1140 | | ---- | -8.1 | ---- | ----- | --- | --- | 1 |
| 1140 - 1150 | 5,000 | 21.6 | -5.7 | ---- | ----- | --- | --- | 4 |
| 1150 - 1160 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1160 - 1170 | | ---- | -3.2 | ---- | ----- | --- | --- | 1 |
| 1170 - 1180 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [b]1180 - 1190 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1190 - 1210 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1210 - 1220 | | 6.8 | ----- | 15.0 | ----- | 149 | --- | 2 |
| 1220 - 1250 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1250 - 1260 | | 9.3 | -15.5 | ---- | ----- | --- | --- | 3 |
| 1260 - 1320 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1320 - 1330 | | ---- | -12.0 | ---- | ----- | --- | --- | 2 |
| 1330 - 1340 | | 8.4 | ----- | 4.6 | ----- | 216 | --- | 1 |

[a]Cloud entry.
[b]Cloud exit.

TABLE I.- SUMMARY OF GUST MEASUREMENTS - Concluded

| Time interval (sec) | 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 25, 1947 - Flight 31 | | | | | | | | |
| Airplane 333 - Traverse 1<br>Length of traverse 1885.6 sec | | | | | | | | |
| 1340 - 1350 | 5,500 | 6.8 | ----- | ---- | ----- | --- | --- | 2 |
| 1350 - 1380 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]1380 - 1390 | | 8.6 | -4.1 | ---- | ----- | --- | --- | 3 |
| 1390 - 1400 | | ---- | -5.0 | ---- | ----- | --- | --- | 5 |
| 1400 - 1410 | | 5.3 | ----- | ---- | ----- | --- | --- | 2 |
| 1410 - 1420 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1420 - 1430 | | 6.7 | -6.2 | ---- | ----- | --- | --- | 6 |
| [b]1430 - 1440 | 6,000 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1440 - 1600 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1600 - 1610 | | 0.3 | -2.2 | ---- | ----- | --- | --- | 2 |
| 1610 - 1660 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| [a]1660 - 1670 | 5,500 | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1670 - 1680 | | 6.6 | -4.6 | ---- | ----- | --- | --- | 5 |
| 1680 - 1690 | | 5.9 | -10.7 | ---- | ----- | --- | --- | 8 |
| 1690 - 1700 | 5,000 | 14.5 | -15.1 | ---- | ----- | --- | --- | 5 |
| 1700 - 1710 | | 20.2 | -3.8 | 7.4 | ----- | 58 | --- | 5 |
| 1710 - 1720 | 5,500 | 4.8 | ----- | ---- | ----- | --- | --- | 1 |
| 1720 - 1730 | | 6.5 | -9.4 | ---- | ----- | --- | --- | 4 |
| [b]1730 - 1740 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1740 - 1750 | | 7.9 | ----- | ---- | ----- | --- | --- | 2 |
| 1750 - 1770 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1770 - 1780 | | ---- | -7.0 | ---- | ----- | --- | --- | 2 |
| 1780 - 1790 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1790 - 1800 | | 4.8 | -4.3 | ---- | ----- | --- | --- | 4 |
| 1800 - 1810 | | 5.5 | -4.0 | 5.9 | ----- | 129 | --- | 4 |
| 1810 - 1820 | | 6.2 | -4.8 | ---- | ----- | --- | --- | 4 |
| 1820 - 1830 | | ---- | ----- | ---- | ----- | --- | --- | 0 |
| 1830 - 1840 | | 3.8 | ----- | ---- | ----- | --- | --- | 1 |
| 1840 - 1850 | | ---- | -6.7 | ---- | ----- | --- | --- | 2 |
| 1850 - 1860 | | ---- | -6.5 | ---- | ----- | --- | --- | 2 |
| 1860 - 1870 | | ---- | -3.2 | ---- | ----- | --- | --- | 1 |
| 1870 - 1890 | | ---- | ----- | ---- | ----- | --- | --- | 0 |

[a]Cloud entry.
[b]Cloud exit.

TABLE II.- SUMMARY OF DRAFT VELOCITY MEASUREMENTS FROM FLIGHTS OF P-61C AIRPLANES WITHIN THUNDERSTORMS

| Date | Flight no. | Airplane no. | Assigned altitude (ft) | Traverse no. | Draft location from start of traverse (sec) | | Draft extent (ft) | Average draft velocity (fps) |
|---|---|---|---|---|---|---|---|---|
| | | | | | Start | End | | |
| 8-21-47 | 29 | 353 | 25,000 | [a]1 | | | | |
| | | | | 2 | 167.5 | 173.5 | 40.0 | 2,172 |
| | | | | 3 | 312.8 | 329.0 | 12.3 | 5,203 |
| | | | | | 335.4 | 364.8 | -21.1 | 9,830 |
| | | | | | 397.2 | 409.0 | -13.3 | 3,895 |
| | | | | | 409.0 | 415.2 | 30.6 | 2,091 |
| | | | | | 497.0 | 519.2 | -16.2 | 7,487 |
| | | | | 4 | 457.0 | 485.0 | -41.4 | 10,546 |
| | | | | | 567.9 | 583.8 | -7.5 | 5,269 |
| | | | | | 1197.0 | 1224.4 | 18.2 | 9,274 |
| | | | | | 1291.0 | 1315.0 | 24.2 | 8,547 |
| | | 344 | 20,000 | [a]1 | | | | |
| | | | | 2 | 391.5 | 417.5 | 28.2 | 9,030 |
| | | | | [a]3 | | | | |
| | | | | 4 | 97.0 | 109.0 | 36.7 | 3,793 |
| | | | | | 200.5 | 231.5 | -11.8 | 10,316 |
| | | | | 5 | 359.0 | 376.4 | 11.5 | 5,608 |
| | | | | | 471.0 | 484.0 | 20.2 | 4,393 |
| | | 356 | 15,000 | 1 | 563.6 | 595.0 | 52.6 | 9,507 |
| | | | | | 927.0 | 938.2 | 13.0 | 3,208 |
| | | | | | 1022.2 | 1038.5 | 15.6 | 4,798 |
| | | | | 2 | 60.5 | 107.0 | -10.7 | 13,661 |
| | | | | | 960.5 | 981.5 | 23.8 | 6,188 |
| | | | | | 1052.0 | 1066.0 | 15.4 | 4,217 |
| | | | | | 1104.0 | 1136.5 | 25.0 | 9,501 |
| | | | | | 1611.4 | 1645.0 | 14.9 | 10,337 |

[a]No draft velocities indicated by records.

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TABLE II.- SUMMARY OF DRAFT VELOCITY MEASUREMENTS - Continued

| Date | Flight no. | Air-plane no. | Assigned altitude (ft) | Trav-erse no. | Draft location from start of traverse (sec) | | Draft extent (ft) | Average draft velocity (fps) |
|---|---|---|---|---|---|---|---|---|
| | | | | | Start | End | | |
| 8-21-47 | 29 | 351 | 10,000 | 1 | 77.0 | 82.5 | 18.2 | 1,474 |
| | | | | [a]2 | | | | |
| | | | | [a]3 | | | | |
| | | | | 4 | 318.0 | 323.2 | 48.1 | 1,599 |
| | | | | | 336.0 | 345.0 | 27.8 | 2,668 |
| | | | | 5 | 873.2 | 886.6 | -20.5 | 3,980 |
| | | | | | 942.0 | 965.0 | 10.9 | 6,578 |
| | | | | | 1041.0 | 1066.4 | 11.3 | 7,748 |
| | | 333 | 6,000 | [a]1 | | | | |
| | | | | 2 | 206.4 | 212.3 | 22.5 | 1,510 |
| | | | | [a]3 | | | | |
| | | | | [a]4 | | | | |
| | 30 | 344 | 20,000 | [a]1 | | | | |
| | | | | 2 | 73.7 | 110.7 | 27.5 | 12,038 |
| | | | | [a]3 | | | | |
| | | | | [a]4 | | | | |
| | | | | [a]5 | | | | |
| | | | | 6 | 136.8 | 155.4 | 52.0 | 6,725 |
| | | | | | 157.5 | 170.5 | 53.8 | 4,532 |
| | | | | | 177.0 | 191.0 | 20.0 | 4,848 |
| | | | | 7 | 56.0 | 91.4 | -13.2 | 11,571 |

[a]No draft velocities indicated by records.

TABLE II.- SUMMARY OF DRAFT VELOCITY MEASUREMENTS - Continued

| Date | Flight no. | Airplane no. | Assigned altitude (ft) | Traverse no. | Draft location from start of traverse (sec) | | Draft extent (ft) | Average draft velocity (fps) |
|---|---|---|---|---|---|---|---|---|
| | | | | | Start | End | | |
| 8-21-47 | 30 | 356 | 15,000 | 1 | 124.0 | 143.3 | 11.1 | 5,924 |
| | | | | | 410.3 | 431.6 | 50.3 | 6,289 |
| | | | | | 667.4 | 687.0 | 63.5 | 5,968 |
| | | | | | 1456.6 | 1468.5 | 21.6 | 3,876 |
| | | | | | 2765.5 | 2788.5 | 31.7 | 7,220 |
| | | 351 | 10,000 | 1 | 81.2 | 85.0 | -29.5 | 1,250 |
| | | | | | 392.5 | 407.5 | 29.2 | 4,731 |
| | | | | 2 | 640.0 | 672.2 | 15.1 | 9,698 |
| | | 333 | 6,000 | 1 | 541.5 | 55.2 | 12.4 | 2,812 |
| | | | | | 1981.2 | 2011.5 | 15.4 | 7,665 |
| | | | | | 2058.5 | 2101.0 | -4.7 | 10,396 |
| | | | | | 2403.5 | 2418.0 | -8.4 | 3,461 |
| 8-25-47 | 31 | 327 | 25,000 | [a]1 | | | | |
| | | | | 2 | 94.5 | 120.9 | 40.5 | 10,482 |
| | | 344 | 20,000 | [a]1 | | | | |
| | | | | [a]2 | | | | |
| | | | | [a]3 | | | | |
| | | | | 4 | 40.5 | 58.3 | -27.4 | 5,683 |
| | | | | [a]5 | | | | |
| | | | | [a]6 | | | | |
| | | | | [a]7 | | | | |
| | | | | [a]8 | | | | |
| | | | | [a]9 | | | | |

[a]No draft velocities indicated by records.

TABLE II.- SUMMARY OF DRAFT VELOCITY MEASUREMENTS - Concluded

| Date | Flight no. | Airplane no. | Assigned altitude (ft) | Traverse no. | Draft location from start of traverse (sec) | | Draft extent (ft) | Average draft velocity (fps) |
|---|---|---|---|---|---|---|---|---|
| | | | | | Start | End | | |
| 8-25-47 | 31 | 353 | 15,000 | 1 | 419.5 | 455.2 | 37.6 | 11,829 |
| | | | | | 789.0 | 824.5 | 23.7 | 11,725 |
| | | | | | 1587.4 | 1593.2 | -34.5 | 1,721 |
| | | | | | 1837.0 | 1851.0 | -11.2 | 4,578 |
| | | 356 | 10,000 | 1 | 49.5 | 67.5 | 23.7 | 4,548 |
| | | | | | 336.8 | 397.6 | 29.0 | 15,231 |
| | | | | | 890.5 | 920.4 | 15.5 | 8,022 |
| | | | | | 1215.5 | 1251.2 | -16.8 | 10,226 |
| | | | | | 1634.4 | 1653.0 | 16.8 | 4,588 |
| | | 333 | 5,000 | 1 | 1125.2 | 1142.5 | -24.7 | 4,228 |

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## INDEX


| Subject | Number |
|---|---|
| Gusts - Structure | 6.1.2.1 |
| Gusts - Frequency | 6.1.2.2 |
| Gusts - Turbulence | 6.1.2.3 |


## ABSTRACT

The gust and draft velocities from NACA instruments installed in P-61C airplanes participating in thunderstorm flights at Clinton County Army Air Field, Ohio, from August 21, 1947 to August 25, 1947 are presented.

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