

# PROJECT 10073 RECORD

|                                                                                                |                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. DATE - TIME GROUP<br>18 Jul 64 19/0355Z                                                     | 2. LOCATION<br>Lynn, Massachusetts                                                                                                                                                                                                                          |
| 3. SOURCE<br>Civilian                                                                          | 10. CONCLUSION<br>BALLOON                                                                                                                                                                                                                                   |
| 4. NUMBER OF OBJECTS<br>One                                                                    | Sighting descriptive of a balloon observation.                                                                                                                                                                                                              |
| 5. LENGTH OF OBSERVATION<br>More than 10 minutes                                               | 11. BRIEF SUMMARY AND ANALYSIS<br>Object resembling Star with same mag as ECHO II moving SSW. Moved at same speed as ECHO. Object then slowed down and stopped. Moved back overhead. Maintained starlike appearance. Object moved away steadily to the NNE. |
| 6. TYPE OF OBSERVATION<br>Ground-Visual                                                        |                                                                                                                                                                                                                                                             |
| 7. COURSE<br>Varied                                                                            |                                                                                                                                                                                                                                                             |
| 8. PHOTOS<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No            |                                                                                                                                                                                                                                                             |
| 9. PHYSICAL EVIDENCE<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No |                                                                                                                                                                                                                                                             |



September 16, 1964

Dear Mr. [REDACTED]

This is in reply to your recent letter in which you detailed the observation of an Unidentified Flying Object.

Our Project Blue Book office at Wright-Patterson Air Force Base, Ohio, has attempted an evaluation of this observation from the details you gave. The motion and description of the object is comparable to that of a radiosonde or a rawinsonde balloon with a light attached.

Inclosed is a summary of information on Project Blue Book, the program for the investigation and evaluation of UFO reports. We think this information will be of interest to you.

Sincerely,

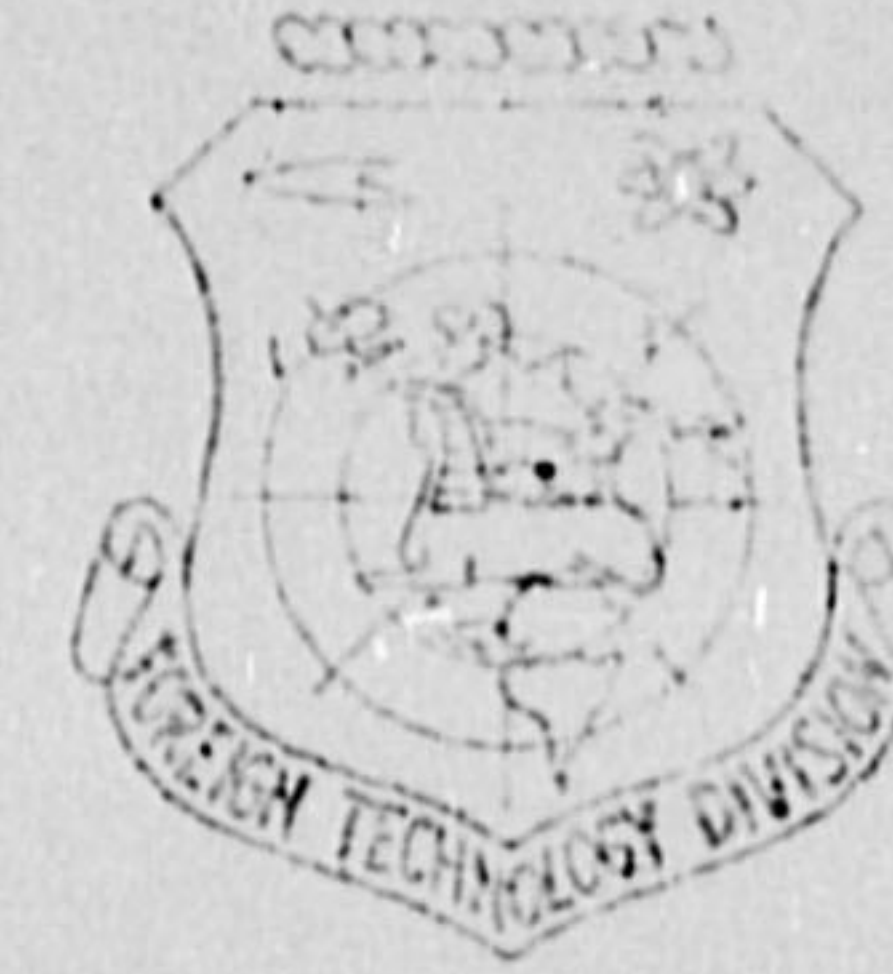
MASTON M. JACKS  
Major, USAF  
Public Information Division  
Office of Information

Inclosure

Mr. [REDACTED]  
[REDACTED]  
Lynn, Massachusetts



HEADQUARTERS  
FOREIGN TECHNOLOGY DIVISION  
AIR FORCE SYSTEMS COMMAND  
UNITED STATES AIR FORCE  
WRIGHT-PATTERSON AIR FORCE BASE, OHIO



REPLY TO  
ATTN OF: TDEW

SUBJECT: UFO Sighting, 18 Jul 64, Lynn, Massachusetts

4 Sep 64

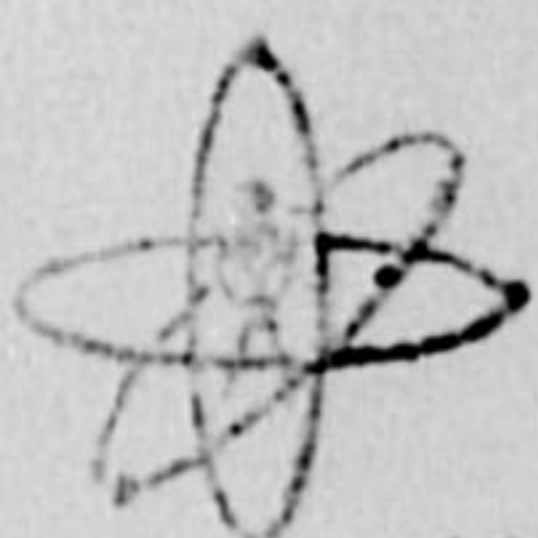
TO: Hq USAF SAFOI PB (Mrs Gaiser)  
Wash D C 20330

1. Reference the attached letter from Mr [REDACTED] regarding a satellite-like observation on 18 Jul 64 at Lynn, Massachusetts.
2. The direction of motion to the SSW is contrary to normal orbital flights. The motion and description of the object is comparable with a radiosonde or a rawinsonde balloon with a light attached. With the exception of the lighting up of the immediate area, which was not observed by Mr [REDACTED], but reported by his sister, no association can be established between the object observed by him and his wife or that of his sister. It is suggested that Mr [REDACTED] be informed that his sighting has been evaluated as a probable balloon observation and that a Fact Sheet be forwarded to explain the Air Force's position on unidentified flying objects.

FOR THE COMMANDER

*Eric T de Jonckheere*  
ERIC T de JONCKHEERE  
Colonel, USAF  
Deputy for Technology  
and Subsystems

1 Atch  
Ltr, [REDACTED],  
22 Jul 64



YOU - THE NUCLEUS OF SECURITY!



HEADQUARTERS  
FOREIGN TECHNOLOGY DIVISION  
AIR FORCE SYSTEMS COMMAND  
UNITED STATES AIR FORCE  
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

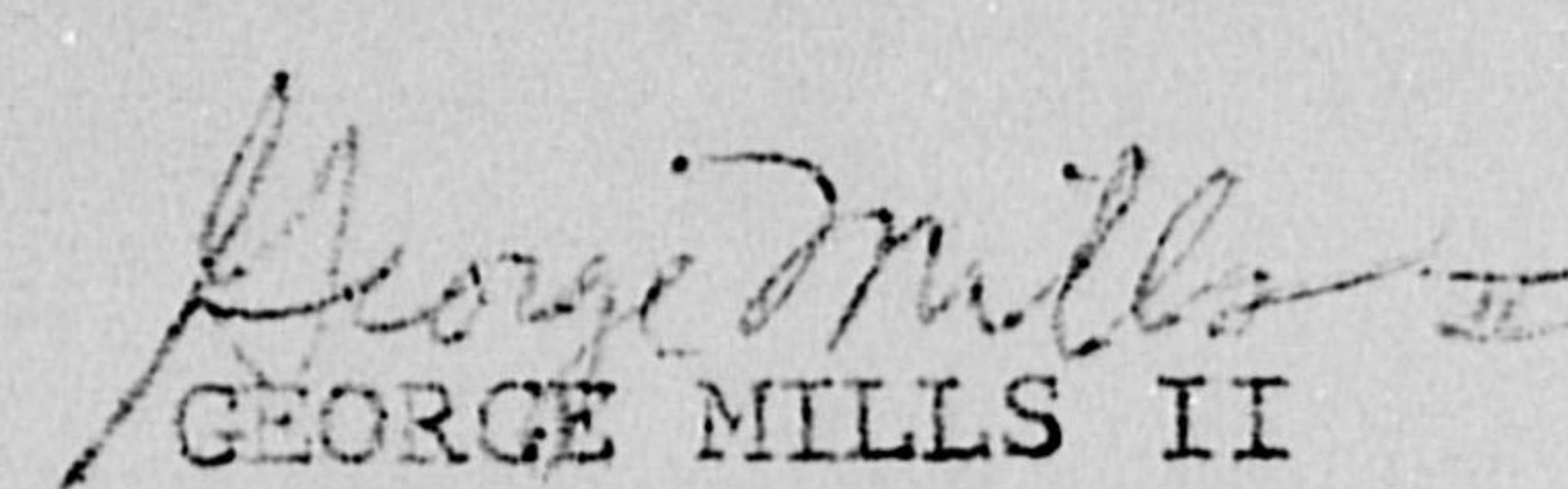


REPLY TO  
ATTN OF: TDFCC/Maj Mills/57223  
SUBJECT: Meteorological Data

DEC 3 1964

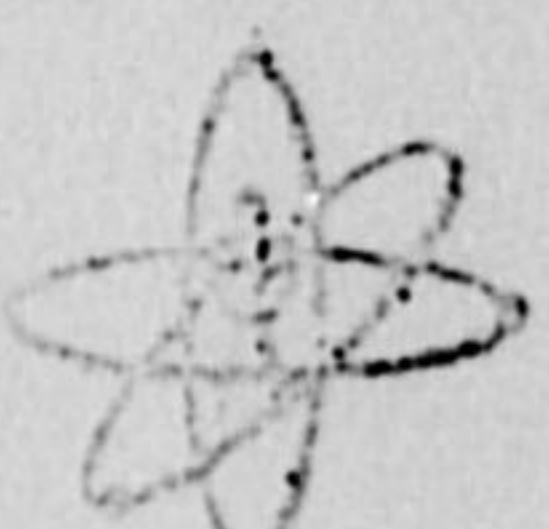
TO: TDEW (Maj Quintanilla).  
(TSgt Moody)

1. Reference your November request for meteorological data. The attached data are for 1964 dates: 2 Apr, 18 May, 9-10 and 18-19 July.
2. I have extracted the wind data for Boston and Cleveland areas.
3. Please call if any further explanations are needed.

  
GEORGE MILLS II  
Major, USAF  
Meteorologist

6 Atch

- ① Boston and Cleveland winds, 18-19 Jul 64
- ② Madison, Wisconsin, 2 Apr Surface Data
- ③ Washington, D.C. 18 May Surface Data
- ④ Portland, Me., Boston, Mass. and Nantucket, Mass. July 16-19 Upper Wind Data
- ⑤ Toledo, Ohio and Pittsburgh, Pa., 17-18 July Upper Wind Data
- ⑥ Adiabatic Charts for Missouri area, 9-10 July





# Boston Area Winds 18-19 July 1964, Local Times

Directions in degrees from which wind blows, e.g., 240 is a SW wind 270 is from the west. Speed in knots.

| 1000 Ft<br>Level | 18 July 1800L |       | 19 July 0000L |       | 19 July 0620L |       |
|------------------|---------------|-------|---------------|-------|---------------|-------|
|                  | Degrees       | Knots | Degrees       | Knots | Degrees       | Knots |
| Surface          | 240           | 23    | 240           | 30    | 280           | 22    |
| 2                | 250           | 25    | 260           | 37    | 290           | 30    |
| 3                | 260           | 24    | 260           | 33    | 300           | 30    |
| 4                | 260           | 25    | 260           | 25    | 290           | 26    |
| 5                | 260           | 25    | 260           | 19    | 280           | 23    |
| 6                | 270           | 28    | 270           | 18    | 270           | 22    |
| 7                | 270           | 29    | 270           | 17    | 260           | 21    |
| 8                | 270           | 28    | 270           | 16    | 250           | 21    |
| 9                | 270           | 23    | 270           | 14    | 260           | 23    |
| 10               | 270           | 19    | 290           | 22    | 260           | 21    |
| 12               | 260           | 23    | 290           | 15    |               |       |
| 14               | 260           | 19    | 270           | 15    |               |       |
| 16               | 270           | 16    | 270           | 20    |               |       |
| 18               | 290           | 19    | 300           | 21    |               |       |
| 20               | 290           | 18    | 300           | 18    |               |       |
| 23               | 290           | 15    | 300           | 27    |               |       |
| 25               | 300           | 15    | 300           | 29    |               |       |
| 30               | 280           | 18    | 280           | 34    |               |       |

## Cleveland Area Winds 18 July 1964 estimated for 0245 GMT

|         |     |    |
|---------|-----|----|
| Surface | 220 | 11 |
| 2       | 220 | 20 |
| 3       | 230 | 20 |
| 4       | 240 | 20 |
| 5       | 240 | 16 |
| 6       | 250 | 15 |
| 7       | 260 | 14 |
| 8       | 280 | 11 |
| 9       | 300 | 9  |
| 10      | 300 | 6  |



610-12

|                                                                                                              |  |                                                                                                                         |  |                               |              |            |           |              |
|--------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------|--|-------------------------------|--------------|------------|-----------|--------------|
| Identification<br>WBAS, BOSTON 28, MASS.<br>42° 22'N 71° 02'W<br>PIRAL THEODOLITE<br>75th MEER ELEV. 11' MSL |  | U.S. DEPARTMENT OF COMMERCE<br>WEATHER BUREAU<br><b>WINDS-ALOFT COMPUTATION SHEET</b><br>(LAND STATION FORM)<br>WBAN-20 |  | Actual<br>(local<br>standard) | Year<br>1964 | Month<br>5 | Day<br>12 | Time<br>1100 |
|                                                                                                              |  |                                                                                                                         |  | Scheduled<br>(G.M.T.)         | 1964         | 5          | 17        | 000          |
|                                                                                                              |  |                                                                                                                         |  | Ascension No. 645             |              |            |           |              |

Type of balloon 100 Gy

Orientation, 360° = South

| Slant<br>range<br>(m.) (yds.) | Pibal<br>ht. above<br>sfc. (m.)<br>30<br>gram<br>100<br>gram | Minute | Rawin<br>ht. above<br>surface<br>(m.) | Elevation angle° |          | Distance from<br>observation<br>point<br>(m.) | Azimuth<br>angle<br>° | Minute | Wind                    |                   | Rawinsonde Time-Altitude Data |                   |                          |                           |
|-------------------------------|--------------------------------------------------------------|--------|---------------------------------------|------------------|----------|-----------------------------------------------|-----------------------|--------|-------------------------|-------------------|-------------------------------|-------------------|--------------------------|---------------------------|
|                               |                                                              |        |                                       | Observed         | Smoothed |                                               |                       |        | Direction°<br>360° = N. | Speed<br>(m.p.s.) | Con-<br>tact                  | Pressure<br>(mb.) | Altitude<br>(m., m.s.l.) | Elapsed<br>time<br>(min.) |
|                               |                                                              |        |                                       |                  |          |                                               |                       |        | sfc. 212                | 7.7               |                               |                   |                          |                           |
|                               | 216                                                          | 1      |                                       | 21.7             |          | 880                                           | 215.5                 | 1      | 219                     | 15.0              | +                             |                   |                          |                           |
|                               | 350                                                          |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 414                                                          | 2      |                                       | 20.6             |          | 1785                                          | 219.3                 | 2      | 233                     | 15.5              | 5                             |                   |                          |                           |
|                               | 670                                                          |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 612                                                          | 3      |                                       | 19.7             |          | 2735                                          | 227.4                 | 3      | 248                     | 15.1              | 10                            |                   |                          |                           |
|                               | 980                                                          |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 801                                                          | 4      |                                       | 20.1             |          | 3512                                          | 233.7                 | 4      | 263                     | 12.9              | 15                            |                   |                          |                           |
|                               | 1285                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 990                                                          | 5      |                                       | 21.2             |          | 4085                                          | 239.9                 | 5      | 273                     | 11.9              | 20                            |                   |                          |                           |
|                               | 1585                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 1170                                                         | 6      |                                       |                  |          |                                               |                       | 6      |                         |                   | 25                            |                   |                          |                           |
|                               | 1880                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 1350                                                         | 7      |                                       |                  |          |                                               |                       | 7      |                         |                   | 30                            |                   |                          |                           |
|                               | 2170                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 1530                                                         | 8      |                                       |                  |          |                                               |                       | 8      |                         |                   | 35                            |                   |                          |                           |
|                               | 2455                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 1710                                                         | 9      |                                       |                  |          |                                               |                       | 9      |                         |                   | 40                            |                   |                          |                           |
|                               | 2740                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 1890                                                         | 10     |                                       |                  |          |                                               |                       | 10     |                         |                   | 45                            |                   |                          |                           |
|                               | 3020                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 2070                                                         | 11     |                                       |                  |          |                                               |                       | 11     |                         |                   | 50                            |                   |                          |                           |
|                               | 3300                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 2250                                                         | 12     |                                       |                  |          |                                               |                       | 12     |                         |                   | 55                            |                   |                          |                           |
|                               | 3580                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 2430                                                         | 13     |                                       |                  |          |                                               |                       | 13     |                         |                   | 60                            |                   |                          |                           |
|                               | 3955                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 2610                                                         | 14     |                                       |                  |          |                                               |                       | 14     |                         |                   | 65                            |                   |                          |                           |
|                               | 4110                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 2790                                                         | 15     |                                       |                  |          |                                               |                       | 15     |                         |                   | 70                            |                   |                          |                           |
|                               | 4405                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 2970                                                         | 16     |                                       |                  |          |                                               |                       | 16     |                         |                   | 75                            |                   |                          |                           |
|                               | 4675                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 3150                                                         | 17     |                                       |                  |          |                                               |                       | 17     |                         |                   | 80                            |                   |                          |                           |
|                               | 4945                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 3330                                                         | 18     |                                       |                  |          |                                               |                       | 18     |                         |                   | 85                            |                   |                          |                           |
|                               | 5215                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 3510                                                         | 19     |                                       |                  |          |                                               |                       | 19     |                         |                   | 90                            |                   |                          |                           |
|                               | 5485                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 3690                                                         | 20     |                                       |                  |          |                                               |                       | 20     |                         |                   | 95                            |                   |                          |                           |
|                               | 5755                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |
|                               | 4870                                                         |        |                                       |                  |          |                                               |                       |        |                         |                   |                               |                   |                          |                           |

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|-------|----|--|--|--|--|----|--|--|
| 6025  | 21 |  |  |  |  | 21 |  |  |
| 4050  | 22 |  |  |  |  | 22 |  |  |
| 6295  |    |  |  |  |  |    |  |  |
| 4230  | 23 |  |  |  |  | 23 |  |  |
| 6565  |    |  |  |  |  |    |  |  |
| 4410  | 24 |  |  |  |  | 24 |  |  |
| 6835  |    |  |  |  |  |    |  |  |
| 4590  | 25 |  |  |  |  | 25 |  |  |
| 7105  |    |  |  |  |  |    |  |  |
| 4770  | 26 |  |  |  |  | 26 |  |  |
| 7375  |    |  |  |  |  |    |  |  |
| 4950  | 27 |  |  |  |  | 27 |  |  |
| 7645  |    |  |  |  |  |    |  |  |
| 5130  | 28 |  |  |  |  | 28 |  |  |
| 7915  |    |  |  |  |  |    |  |  |
| 5310  | 29 |  |  |  |  | 29 |  |  |
| 8185  |    |  |  |  |  |    |  |  |
| 5490  | 30 |  |  |  |  | 30 |  |  |
| 8455  |    |  |  |  |  |    |  |  |
| 5670  | 31 |  |  |  |  | 31 |  |  |
| 8730  |    |  |  |  |  |    |  |  |
| 5850  | 32 |  |  |  |  | 32 |  |  |
| 9005  |    |  |  |  |  |    |  |  |
| 6030  | 33 |  |  |  |  | 33 |  |  |
| 9285  |    |  |  |  |  |    |  |  |
| 6210  | 34 |  |  |  |  | 34 |  |  |
| 9555  |    |  |  |  |  |    |  |  |
| 6390  | 35 |  |  |  |  | 35 |  |  |
| 9850  |    |  |  |  |  |    |  |  |
| 5570  | 36 |  |  |  |  | 36 |  |  |
| 10135 |    |  |  |  |  |    |  |  |
| 6750  | 37 |  |  |  |  | 37 |  |  |
| 10420 |    |  |  |  |  |    |  |  |
| 6930  | 38 |  |  |  |  | 38 |  |  |
| 10710 |    |  |  |  |  |    |  |  |
| 7110  | 39 |  |  |  |  | 39 |  |  |
| 11005 |    |  |  |  |  |    |  |  |
| 7290  | 40 |  |  |  |  | 40 |  |  |
| 11300 |    |  |  |  |  |    |  |  |
| 7470  | 41 |  |  |  |  | 41 |  |  |
| 11595 |    |  |  |  |  |    |  |  |
| 7650  | 42 |  |  |  |  | 42 |  |  |
| 11890 |    |  |  |  |  |    |  |  |
| 7830  | 43 |  |  |  |  | 43 |  |  |
| 12185 |    |  |  |  |  |    |  |  |
| 8010  | 44 |  |  |  |  | 44 |  |  |
| 12480 |    |  |  |  |  |    |  |  |
| 8190  | 45 |  |  |  |  | 45 |  |  |
| 12775 |    |  |  |  |  |    |  |  |
| 8370  | 46 |  |  |  |  | 46 |  |  |
| 13075 |    |  |  |  |  |    |  |  |
| 8550  | 47 |  |  |  |  | 47 |  |  |
| 13375 |    |  |  |  |  |    |  |  |
| 8730  | 48 |  |  |  |  | 48 |  |  |
| 13675 |    |  |  |  |  |    |  |  |
| 8910  | 49 |  |  |  |  | 49 |  |  |
| 13975 |    |  |  |  |  |    |  |  |
| 9090  | 50 |  |  |  |  | 50 |  |  |
| 14275 |    |  |  |  |  |    |  |  |

Coded Data for Transmission

|       |       |      |      |      |      |      |        |
|-------|-------|------|------|------|------|------|--------|
| 225.9 | 00451 | 2226 | 2230 | 2429 | 0626 | 2723 | 8      |
| 0     | 2     | 4    | 6    | 8    | 0    | 0000 | 72509  |
|       |       |      |      |      |      |      | XMTDCP |
|       |       |      |      |      |      |      |        |
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|-----|--|--|
| 100 |  |  |
| 105 |  |  |
| 110 |  |  |
| 115 |  |  |
| 120 |  |  |
| 125 |  |  |
| 130 |  |  |
| 135 |  |  |
| 140 |  |  |
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Punched Card Data

| Altitude          | Direction (degrees) | Speed (m.p.s.) | Card columns | Altitude          | Direction (degrees) | Speed |
|-------------------|---------------------|----------------|--------------|-------------------|---------------------|-------|
| Card No. 1        |                     |                | 15           | Card No. 2        |                     |       |
| Type of equipment | 0                   |                | 16           | Type of equipment |                     |       |
| sfc.              | 212                 | 8              | 17-21        | 7                 |                     |       |
| 150 m.            | 215                 | 11             | 22-26        | 8                 |                     |       |
| 300 m.            | 217                 | 14             | 27-31        | 9                 |                     |       |
| 0.5               | 225                 | 15             | 32-36        | 10                |                     |       |
| 1.0               | 248                 | 15             | 37-41        | 11                |                     |       |
| 1.5               | 269                 | 12             | 42-46        | 12                |                     |       |
| 2.0               |                     |                | 47-51        | 13                |                     |       |
| 2.5               |                     |                | 52-56        | 14                |                     |       |
| 3                 |                     |                | 57-61        | 15                |                     |       |
| 4                 |                     |                | 62-66        | 16                |                     |       |
| 5                 |                     |                | 67-71        | 17                |                     |       |
| 6                 |                     |                | 72-76        | 18                |                     |       |

Maximum Wind Speed Data

|                                                          |  |  |
|----------------------------------------------------------|--|--|
| Min. alt. wind speed 45 m.p.s. or more (m.)              |  |  |
| Alt. of maximum wind speed (m.)                          |  |  |
| Max. wind speed (m.p.s.) and dir. (degrees)              |  |  |
| Max. alt. wind speed 45 m.p.s. or more (m.)              |  |  |
| Enter check if additional levels appear on reverse side. |  |  |

Computer  
Verifier



610 12

|                                                                                                               |  |                                                                                                                         |  |                                               |              |                                               |             |
|---------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------|--------------|-----------------------------------------------|-------------|
| *Identification<br>WBAS, BOSTON 28, MASS.<br>42° 22' N 71° 02' W<br>Pibal THEODOLITE<br>75th MRR MSLV 11' MSL |  | U.S. DEPARTMENT OF COMMERCE<br>WEATHER BUREAU<br><b>WINDS-ALOFT COMPUTATION SHEET</b><br>(LAND STATION FORM)<br>WBAN-20 |  | Year<br>1964                                  | Month<br>Jul | Day<br>19                                     | Time<br>002 |
| Actual (local standard)<br>Scheduled (G.M.T.)                                                                 |  | Actual (local standard)<br>Scheduled (G.M.T.)                                                                           |  | Actual (local standard)<br>Scheduled (G.M.T.) |              | Actual (local standard)<br>Scheduled (G.M.T.) |             |
| Ascension No. 647                                                                                             |  |                                                                                                                         |  |                                               |              |                                               |             |

| Type of balloon         |                           | 100 GR |                              | Orientation, 360° = South |          |                                      |                 |        |                      |                |                               |                |                       |                     |
|-------------------------|---------------------------|--------|------------------------------|---------------------------|----------|--------------------------------------|-----------------|--------|----------------------|----------------|-------------------------------|----------------|-----------------------|---------------------|
| Slant range (m.) (yds.) | Pibal ht. above sfc. (m.) | Minute | Rawin ht. above surface (m.) | Elevation angle°          |          | Distance from observation point (m.) | Azimuth angle ° | Minute | Wind                 |                | Rowinsonde Time-Altitude Data |                |                       |                     |
|                         | 30 gram<br>100 gram       |        |                              | Observed                  | Smoothed |                                      |                 |        | Direction° 360° = N. | Speed (m.p.s.) | Con-tact                      | Pressure (mb.) | Altitude (m., m.s.l.) | Elapsed time (min.) |
|                         |                           |        |                              |                           |          |                                      |                 |        |                      |                |                               |                |                       |                     |
|                         | 216<br>350                | 1      |                              | 24.0                      |          | 785                                  | 238.6           | 1      | 245                  | 17.1           | +                             |                |                       |                     |
|                         | 414<br>670                | 2      |                              | 18.1                      |          | 2050                                 | 244.8           | 2      | 259                  | 20.0           | 5                             |                |                       |                     |
|                         | 612<br>980                | 3      |                              | 17.4                      |          | 3125                                 | 252.1           | 3      | 265                  | 16.0           | 10                            |                |                       |                     |
|                         | 801<br>1285               | 4      |                              | 18.2                      |          | 3910                                 | 254.5           | 4      | 263                  | 11.8           | 15                            |                |                       |                     |
|                         | 990<br>1585               | 5      |                              | 19.3                      |          | 4575                                 | 255.5           | 5      | 263                  | 9.8            | 20                            |                |                       |                     |
|                         | 1170<br>1880              | 6      |                              | 20.4                      |          | 5055                                 | 256.3           | 6      | 266                  | 9.1            | 25                            |                |                       |                     |
|                         | 1350<br>2170              | 7      |                              | 21.2                      |          | 5595                                 | 257.5           | 7      | 270                  | 8.8            | 30                            |                |                       |                     |
|                         | 1530<br>2455              | 8      |                              | 22.0                      |          | 6075                                 | 258.8           | 8      | 271                  | 7.9            | 35                            |                |                       |                     |
|                         | 1710<br>2740              | 9      |                              | 22.8                      |          | 6520                                 | 259.4           | 9      | 267                  | 7.0            | 40                            |                |                       |                     |
|                         | 1890<br>3020              | 10     |                              | 23.6                      |          | 6910                                 | 259.8           | 10     | 265                  | 6.8            | 45                            |                |                       |                     |
|                         | 2070<br>3300              | 11     |                              |                           |          |                                      |                 | 11     |                      |                | 50                            |                |                       |                     |
|                         | 2250<br>3580              | 12     |                              |                           |          |                                      |                 | 12     |                      |                | 55                            |                |                       |                     |
|                         | 2430<br>3855              | 13     |                              |                           |          |                                      |                 | 13     |                      |                | 60                            |                |                       |                     |
|                         | 2610<br>4130              | 14     |                              |                           |          |                                      |                 | 14     |                      |                | 65                            |                |                       |                     |
|                         | 2790<br>4405              | 15     |                              |                           |          |                                      |                 | 15     |                      |                | 70                            |                |                       |                     |
|                         | 2970<br>4675              | 16     |                              |                           |          |                                      |                 | 16     |                      |                | 75                            |                |                       |                     |
|                         | 3150<br>4945              | 17     |                              |                           |          |                                      |                 | 17     |                      |                | 80                            |                |                       |                     |
|                         | 3330<br>5215              | 18     |                              |                           |          |                                      |                 | 18     |                      |                | 85                            |                |                       |                     |
|                         | 3510<br>5485              | 19     |                              |                           |          |                                      |                 | 19     |                      |                | 90                            |                |                       |                     |
|                         | 3690<br>5755              | 20     |                              |                           |          |                                      |                 | 20     |                      |                | 95                            |                |                       |                     |

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Computer L.M. Cohen  
Verifier J. J. Perry

[illegible]

| Altitude#         | Direction (degrees) | Speed (m.p.s.) | Card columns | Altitude#         | Direction (degrees) | Speed |
|-------------------|---------------------|----------------|--------------|-------------------|---------------------|-------|
| Card No. 1        |                     |                | 15           | Card No. 2        |                     |       |
| Type of equipment |                     | 0              | 16           | Type of equipment |                     |       |
| sfc.              | 220                 | 8              | 17-21        | 7                 |                     |       |
| 150 m.            | 230                 | 12             | 22-26        | 8                 |                     |       |
| 300 m.            | 241                 | 16             | 27-31        | 9                 |                     |       |
| 0.5               | 251                 | 18             | 32-36        | 10                |                     |       |
| 1.0               | 265                 | 16             | 37-41        | 11                |                     |       |
| 1.5               | 263                 | 10             | 42-46        | 12                |                     |       |
| 2.0               | 268                 | 9              | 47-51        | 13                |                     |       |
| 2.5               | 271                 | 8              | 52-56        | 14                |                     |       |
| 3                 | 266                 | 7              | 57-61        | 15                |                     |       |
| 4                 |                     |                | 62-66        | 16                |                     |       |
| 5                 |                     |                | 67-71        | 17                |                     |       |
| 6                 |                     |                | 72-76        | 18                |                     |       |

|                                                             |  |  |
|-------------------------------------------------------------|--|--|
| Min. alt. wind speed<br>45 m.p.s. or more (m.)              |  |  |
| Alt. of maximum<br>wind speed (m.)                          |  |  |
| Max. wind speed (m.p.s.)<br>and dir. (degrees)              |  |  |
| Max. alt. wind speed<br>45 m.p.s. or more (m.)              |  |  |
| Enter check if additional levels<br>appear on reverse side. |  |  |



610-12

\*Identification

WBAS, BOSTON 22, MASS.  
 42° 22' N 71° 02' W  
 PIBAL THEODOLITE  
 75th MER ELEV 11' MSL

U.S. DEPARTMENT OF COMMERCE  
 WEATHER BUREAU

WINDS-ALOFT COMPUTATION SHEET  
 (LAND STATION FORM)

WBAN-20

|                         | Year | Month | Day | Time |
|-------------------------|------|-------|-----|------|
| Actual (local standard) | 1964 | July  | 19  | 062  |
| Scheduled (G.M.T.)      | 1964 | July  | 19  | 120  |
| Ascension No. 648       |      |       |     |      |

Type of balloon

100 GR

Orientation, 360° = South

| Slant range (m.) (yds.) | Pibal ht. above sfc. (m.)<br>30<br>60<br>90<br>120<br>150<br>180<br>210<br>240<br>270<br>300<br>330<br>360<br>390<br>420<br>450<br>480<br>510<br>540<br>570<br>600<br>630<br>660<br>690<br>720<br>750<br>780<br>810<br>840<br>870<br>900<br>930<br>960<br>990<br>1020<br>1050<br>1080<br>1110<br>1140<br>1170<br>1200<br>1230<br>1260<br>1290<br>1320<br>1350<br>1380<br>1410<br>1440<br>1470<br>1500<br>1530<br>1560<br>1590<br>1620<br>1650<br>1680<br>1710<br>1740<br>1770<br>1800<br>1830<br>1860<br>1890<br>1920<br>1950<br>1980<br>2010<br>2040<br>2070<br>2100<br>2130<br>2160<br>2190<br>2220<br>2250<br>2280<br>2310<br>2340<br>2370<br>2400<br>2430<br>2460<br>2490<br>2520<br>2550<br>2580<br>2610<br>2640<br>2670<br>2700<br>2730<br>2760<br>2790<br>2820<br>2850<br>2880<br>2910<br>2940<br>2970<br>3000<br>3030<br>3060<br>3090<br>3120<br>3150<br>3180<br>3210<br>3240<br>3270<br>3300<br>3330<br>3360<br>3390<br>3420<br>3450<br>3480<br>3510<br>3540<br>3570<br>3600<br>3630<br>3660<br>3690<br>3720<br>3750<br>3780<br>3810<br>3840<br>3870<br>3900<br>3930<br>3960<br>3990<br>4020<br>4050<br>4080<br>4110<br>4140<br>4170<br>4200<br>4230<br>4260<br>4290<br>4320<br>4350<br>4380<br>4410<br>4440<br>4470<br>4500<br>4530<br>4560<br>4590<br>4620<br>4650<br>4680<br>4710<br>4740<br>4770<br>4800<br>4830<br>4860<br>4890<br>4920<br>4950<br>4980<br>5010<br>5040<br>5070<br>5100<br>5130<br>5160<br>5190<br>5220<br>5250<br>5280<br>5310<br>5340<br>5370<br>5400<br>5430<br>5460<br>5490<br>5520<br>5550<br>5580<br>5610<br>5640<br>5670<br>5700<br>5730<br>5760<br>5790<br>5820<br>5850<br>5880<br>5910<br>5940<br>5970<br>6000<br>6030<br>6060<br>6090<br>6120<br>6150<br>6180<br>6210<br>6240<br>6270<br>6300<br>6330<br>6360<br>6390<br>6420<br>6450<br>6480<br>6510<br>6540<br>6570<br>6600<br>6630<br>6660<br>6690<br>6720<br>6750<br>6780<br>6810<br>6840<br>6870<br>6900<br>6930<br>6960<br>6990<br>7020<br>7050<br>7080<br>7110<br>7140<br>7170<br>7200<br>7230<br>7260<br>7290<br>7320<br>7350<br>7380<br>7410<br>7440<br>7470<br>7500<br>7530<br>7560<br>7590<br>7620<br>7650<br>7680<br>7710<br>7740<br>7770<br>7800<br>7830<br>7860<br>7890<br>7920<br>7950<br>7980<br>8010<br>8040<br>8070<br>8100<br>8130<br>8160<br>8190<br>8220<br>8250<br>8280<br>8310<br>8340<br>8370<br>8400<br>8430<br>8460<br>8490<br>8520<br>8550<br>8580<br>8610<br>8640<br>8670<br>8700<br>8730<br>8760<br>8790<br>8820<br>8850<br>8880<br>8910<br>8940<br>8970<br>9000<br>9030<br>9060<br>9090<br>9120<br>9150<br>9180<br>9210<br>9240<br>9270<br>9300<br>9330<br>9360<br>9390<br>9420<br>9450<br>9480<br>9510<br>9540<br>9570<br>9600<br>9630<br>9660<br>9690<br>9720<br>9750<br>9780<br>9810<br>9840<br>9870<br>9900<br>9930<br>9960<br>9990<br>10020<br>10050<br>10080<br>10110<br>10140<br>10170<br>10200<br>10230<br>10260<br>10290<br>10320<br>10350<br>10380<br>10410<br>10440<br>10470<br>10500<br>10530<br>10560<br>10590<br>10620<br>10650<br>10680<br>10710<br>10740<br>10770<br>10800<br>10830<br>10860<br>10890<br>10920<br>10950<br>10980<br>11010<br>11040<br>11070<br>11100<br>11130<br>11160<br>11190<br>11220<br>11250<br>11280<br>11310<br>11340<br>11370<br>11400<br>11430<br>11460<br>11490<br>11520<br>11550<br>11580<br>11610<br>11640<br>11670<br>11700<br>11730<br>11760<br>11790<br>11820<br>11850<br>11880<br>11910<br>11940<br>11970<br>12000<br>12030<br>12060<br>12090<br>12120<br>12150<br>12180<br>12210<br>12240<br>12270<br>12300<br>12330<br>12360<br>12390<br>12420<br>12450<br>12480<br>12510<br>12540<br>12570<br>12600<br>12630<br>12660<br>12690<br>12720<br>12750<br>12780<br>12810<br>12840<br>12870<br>12900<br>12930<br>12960<br>12990<br>13020<br>13050<br>13080<br>13110<br>13140<br>13170<br>13200<br>13230<br>13260<br>13290<br>13320<br>13350<br>13380<br>13410<br>13440<br>13470<br>13500<br>13530<br>13560<br>13590<br>13620<br>13650<br>13680<br>13710<br>13740<br>13770<br>13800<br>13830<br>13860<br>13890<br>13920<br>13950<br>13980<br>14010<br>14040<br>14070<br>14100<br>14130<br>14160<br>14190<br>14220<br>14250<br>14280<br>14310<br>14340<br>14370<br>14400<br>14430<br>14460<br>14490<br>14520<br>14550<br>14580<br>14610<br>14640<br>14670<br>14700<br>14730<br>14760<br>14790<br>14820<br>14850<br>14880<br>14910<br>14940<br>14970<br>15000<br>15030<br>15060<br>15090<br>15120<br>15150<br>15180<br>15210<br>15240<br>15270<br>15300<br>15330<br>15360<br>15390<br>15420<br>15450<br>15480<br>15510<br>15540<br>15570<br>15600<br>15630<br>15660<br>15690<br>15720<br>15750<br>15780<br>15810<br>15840<br>15870<br>15900<br>15930<br>15960<br>15990<br>16020<br>16050<br>16080<br>16110<br>16140<br>16170<br>16200<br>16230<br>16260<br>16290<br>16320<br>16350<br>16380<br>16410<br>16440<br>16470<br>16500<br>16530<br>16560<br>16590<br>16620<br>16650<br>16680<br>16710<br>16740<br>16770<br>16800<br>16830<br>16860<br>16890<br>16920<br>16950<br>16980<br>17010<br>17040<br>17070<br>17100<br>17130<br>17160<br>17190<br>17220<br>17250<br>17280<br>17310<br>17340<br>17370<br>17400<br>17430<br>17460<br>17490<br>17520<br>17550<br>17580<br>17610<br>17640<br>17670<br>17700<br>17730<br>17760<br>17790<br>17820<br>17850<br>17880<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| 3870  | 21 |  |  |  |  | 21 |  |  |
| 6025  | 22 |  |  |  |  | 22 |  |  |
| 4050  | 23 |  |  |  |  | 23 |  |  |
| 6295  | 24 |  |  |  |  | 24 |  |  |
| 4230  | 25 |  |  |  |  | 25 |  |  |
| 6565  | 26 |  |  |  |  | 26 |  |  |
| 4410  | 27 |  |  |  |  | 27 |  |  |
| 6835  | 28 |  |  |  |  | 28 |  |  |
| 4590  | 29 |  |  |  |  | 29 |  |  |
| 7105  | 30 |  |  |  |  | 30 |  |  |
| 4770  | 31 |  |  |  |  | 31 |  |  |
| 7375  | 32 |  |  |  |  | 32 |  |  |
| 4950  | 33 |  |  |  |  | 33 |  |  |
| 7645  | 34 |  |  |  |  | 34 |  |  |
| 5130  | 35 |  |  |  |  | 35 |  |  |
| 7915  | 36 |  |  |  |  | 36 |  |  |
| 5310  | 37 |  |  |  |  | 37 |  |  |
| 8185  | 38 |  |  |  |  | 38 |  |  |
| 5490  | 39 |  |  |  |  | 39 |  |  |
| 8455  | 40 |  |  |  |  | 40 |  |  |
| 5670  | 41 |  |  |  |  | 41 |  |  |
| 8730  | 42 |  |  |  |  | 42 |  |  |
| 5850  | 43 |  |  |  |  | 43 |  |  |
| 9005  | 44 |  |  |  |  | 44 |  |  |
| 6030  | 45 |  |  |  |  | 45 |  |  |
| 9295  | 46 |  |  |  |  | 46 |  |  |
| 6210  | 47 |  |  |  |  | 47 |  |  |
| 9565  | 48 |  |  |  |  | 48 |  |  |
| 6390  | 49 |  |  |  |  | 49 |  |  |
| 9850  | 50 |  |  |  |  | 50 |  |  |
| 6570  |    |  |  |  |  |    |  |  |
| 10135 |    |  |  |  |  |    |  |  |
| 6750  |    |  |  |  |  |    |  |  |
| 10420 |    |  |  |  |  |    |  |  |
| 6930  |    |  |  |  |  |    |  |  |
| 10710 |    |  |  |  |  |    |  |  |
| 7110  |    |  |  |  |  |    |  |  |
| 11005 |    |  |  |  |  |    |  |  |
| 7290  |    |  |  |  |  |    |  |  |
| 11300 |    |  |  |  |  |    |  |  |
| 7470  |    |  |  |  |  |    |  |  |
| 11595 |    |  |  |  |  |    |  |  |
| 7650  |    |  |  |  |  |    |  |  |
| 11890 |    |  |  |  |  |    |  |  |
| 7830  |    |  |  |  |  |    |  |  |
| 12185 |    |  |  |  |  |    |  |  |
| 8010  |    |  |  |  |  |    |  |  |
| 12480 |    |  |  |  |  |    |  |  |
| 8190  |    |  |  |  |  |    |  |  |
| 12775 |    |  |  |  |  |    |  |  |
| 8370  |    |  |  |  |  |    |  |  |
| 13075 |    |  |  |  |  |    |  |  |
| 8550  |    |  |  |  |  |    |  |  |
| 13375 |    |  |  |  |  |    |  |  |
| 8730  |    |  |  |  |  |    |  |  |
| 13675 |    |  |  |  |  |    |  |  |
| 8910  |    |  |  |  |  |    |  |  |
| 13975 |    |  |  |  |  |    |  |  |
| 9090  |    |  |  |  |  |    |  |  |
| 14275 |    |  |  |  |  |    |  |  |

Coded Data for Transmission

|       |       |        |       |       |       |      |       |      |       |
|-------|-------|--------|-------|-------|-------|------|-------|------|-------|
| 72509 | 12462 | 2822   | 22930 | 3030  | 12726 | 2823 | 12722 | 2621 | 02521 |
| 2623  | 02621 | 013912 | 12509 | 01M10 | 0     | 5    |       |      |       |
|       |       |        |       |       |       |      |       |      |       |
|       |       |        |       |       |       |      |       |      |       |
|       |       |        |       |       |       |      |       |      |       |
|       |       |        |       |       |       |      |       |      |       |
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| 100 |  |  |  |
| 105 |  |  |  |
| 110 |  |  |  |
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| 120 |  |  |  |
| 125 |  |  |  |
| 130 |  |  |  |
| 135 |  |  |  |
| 140 |  |  |  |
| x   |  |  |  |

Punched Card Data

| Altitude          | Direction (degrees) | Speed (m.p.s.) | Card columns | Altitude          | Direction (degrees) | Speed |
|-------------------|---------------------|----------------|--------------|-------------------|---------------------|-------|
| Card No. 1        |                     |                | 15           | Card No. 2        |                     |       |
| Type of equipment |                     |                | 16           | Type of equipment |                     |       |
| sfc. 260          | 8                   | 17-21          | 7            |                   |                     |       |
| 150 m. 208        | 9                   | 22-26          | 8            |                   |                     |       |
| 300 m. 277        | 12                  | 27-31          | 9            |                   |                     |       |
| 0.5 285           | 14                  | 32-36          | 10           |                   |                     |       |
| 1.0 298           | 15                  | 37-41          | 11           |                   |                     |       |
| 1.5 280           | 12                  | 42-46          | 12           |                   |                     |       |
| 2.0 263           | 11                  | 47-51          | 13           |                   |                     |       |
| 2.5 255           | 11                  | 52-56          | 14           |                   |                     |       |
| 3 262             | 11                  | 57-61          | 15           |                   |                     |       |
| 4                 |                     | 62-66          | 16           |                   |                     |       |
| 5                 |                     | 67-71          | 17           |                   |                     |       |
| 6                 |                     | 72-76          | 18           |                   |                     |       |

Maximum Wind Speed Data

|                                                          |  |  |
|----------------------------------------------------------|--|--|
| Min. alt. wind speed 45 m.p.s. or more (m.)              |  |  |
| Alt. of maximum wind speed (m.)                          |  |  |
| Max. wind speed (m.p.s.) and dir. (degrees)              |  |  |
| Max. alt. wind speed 45 m.p.s. or more (m.)              |  |  |
| Enter check if additional levels appear on reverse side. |  |  |

MS

J.M. Cohen

Verifier M. 222101

PP



Page

1

Stamp the following:

Name of Station

Lat. and long.

Local Standard time, \_\_\_\_\_th meridian

El. of Station

Method of obs., e.g., rawinsonde, rawin, pibal

Type of equip., e.g., WBRT-57, GMD-1A, GMD-1, SCR-650, theodolite

## \*Identification

Nantucket, Mass. (Memorial Airport)  
 41° 15' N 70° 04' W 75th Meridian Time  
 Station Elev. 14 M Method Obs. *Rabal*  
 Type of Equipment *Theodolite - WBRT-57*

U.S. DEPARTMENT OF COMMERCE  
WEATHER BUREAUWINDS-ALOFT COMPUTATION SHEET  
(LAND STATION FORM)

WBAN-20

| Actual time<br>th met. | Year | Month | Day | Time |
|------------------------|------|-------|-----|------|
| 75                     | 1964 | JUL   | 16  | 1815 |
| Scheduled<br>(G.M.T.)  |      |       |     |      |
|                        | 1964 | JUL   | 17  | 00   |

Ascension No. 651

Type of balloon 1200 gram

Orientation, 360° = South

| Slant range<br>(m.) (yds.) | Pibal<br>ht. above<br>sfc. (m.)<br>30 gram<br>100 gram | Minute | Rawin<br>ht. above<br>surface<br>(m.) | Elevation angle° |          | Distance from<br>observation<br>point<br>(m.) | Azimuth<br>angle<br>° | Minute | Wind                    |                   | Rawinsonde Time-Altitude Data |                   |                          |                           |
|----------------------------|--------------------------------------------------------|--------|---------------------------------------|------------------|----------|-----------------------------------------------|-----------------------|--------|-------------------------|-------------------|-------------------------------|-------------------|--------------------------|---------------------------|
|                            |                                                        |        |                                       | Observed         | Smoothed |                                               |                       |        | Direction°<br>360° = N. | Speed<br>(m.p.s.) | Con-<br>tact                  | Pressure<br>(mb.) | Altitude<br>(m., m.s.l.) | Elapsed<br>time<br>(min.) |
|                            | 216<br>350                                             | 1      | 250                                   | 25.4             |          | 530                                           | 250.2                 | 1      | 255                     | 9.4               | 2.8                           | 1020              | 14                       | 0                         |
|                            | 414<br>670                                             | 2      | 510                                   | 24.6             |          | 1120                                          | 254.9                 | 2      | 258                     | 9.7               | 5                             | 981               | 350                      | 1.4                       |
|                            | 612<br>980                                             | 3      | 760                                   | 23.8             |          | 1720                                          | 256.3                 | 3      | 263                     | 9.6               | 10                            | 900               | 1100                     | 4.4                       |
|                            | 801<br>1285                                            | 4      | 1020                                  | 23.4             |          | 2300                                          | 259.1                 | 4      | 264                     | 10.5              | 15                            | 822               | 1870                     | 7.5                       |
|                            | 990<br>1585                                            | 5      | 1280                                  | 22.5             |          | 2800                                          | 259.6                 | 5      | 262                     | 10.9              | 20                            | 751               | 2600                     | 10.7                      |
|                            | 1170<br>1880                                           | 6      | 1540                                  | 22.3             |          | 3300                                          | 260.4                 | 6      | 267                     | 10.4              | 25                            | 683               | 3400                     | 13.7                      |
|                            | 1350<br>2170                                           | 7      | 1800                                  | 21.9             |          | 3800                                          | 262.2                 | 7      | 272                     | 9.6               | 30                            | 620               | 4180                     | 16.7                      |
|                            | 1530<br>2455                                           | 8      | 2060                                  | 22.2             |          | 4300                                          | 263.2                 | 8      | 271                     | 9.2               | 35                            | 562               | 4970                     | 19.9                      |
|                            | 1710<br>2740                                           | 9      | 2320                                  | 22.2             |          | 4800                                          | 263.8                 | 9      | 264                     | 9.5               | 40                            | 508               | 5740                     | 23.3                      |
|                            | 1890<br>3020                                           | 10     | 2580                                  | 22.1             |          | 5300                                          | 263.2                 | 10     | 259                     | 10.3              | 45                            | 455               | 6530                     | 26.4                      |
|                            | 2070<br>3300                                           | 11     | 2840                                  | 22.0             |          | 5800                                          | 263.0                 | 11     | 267                     | 9.4               | 50                            | 413               | 7370                     | 29.4                      |
|                            | 2250<br>3580                                           | 12     | 3100                                  | 22.3             |          | 6300                                          | 263.8                 | 12     | 273                     | 9.6               | 55                            | 372               | 8130                     | 32.4                      |
|                            | 2430<br>3865                                           | 13     | 3360                                  | 22.5             |          | 6800                                          | 264.4                 | 13     | 273                     | 9.2               | 60                            | 334               | 8900                     | 34.9                      |
|                            | 2610<br>4150                                           | 14     | 3620                                  | 22.7             |          | 7300                                          | 265.1                 | 14     | 270                     | 8.8               | 65                            | 299               | 9650                     | 37.6                      |
|                            | 2790<br>4435                                           | 15     | 3880                                  | 23.0             |          | 7800                                          | 264.9                 | 15     | 261                     | 8.4               | 70                            | 268               | 10400                    | 40.1                      |
|                            | 2970<br>4720                                           | 16     | 4140                                  | 23.0             |          | 8300                                          | 264.5                 | 16     | 263                     | 11.0              | 75                            | 240               | 11140                    | 42.5                      |
|                            | 3150<br>4945                                           | 17     | 4400                                  | 22.9             |          | 8800                                          | 264.6                 | 17     | 265                     | 10.5              | 80                            | 215               | 11850                    | 45.0                      |
|                            | 3330<br>5215                                           | 18     | 4660                                  | 23.0             |          | 9300                                          | 264.5                 | 18     | 261                     | 10.1              | 85                            | 192               | 12610                    | 47.4                      |
|                            | 3510<br>5485                                           | 19     | 4920                                  | 22.8             |          | 9800                                          | 264.2                 | 19     | 259                     | 10.6              | 90                            | 172               | 13310                    | 49.7                      |



Surface  
Termination  
Alt. for  
150 & 300 m.  
are with  
respect to  
ground, alt.  
for other  
standard  
levels are  
in km., msl.

Reason for termination

Computer: M. S. W. L. and

Verifier: M. F. L. and

|       |    |      |       |       |       |    |     |      |
|-------|----|------|-------|-------|-------|----|-----|------|
| 3590  | 20 | 4760 | 22.8  | 11700 | 263.9 | 20 | 260 | 8.7  |
| 5755  |    |      |       |       |       |    |     |      |
| 3870  | 21 | 4760 | 22.7  | 11700 | 263.8 | 21 | 266 | 10.0 |
| 6025  |    |      |       |       |       |    |     |      |
| 4050  | 22 | 4760 | 22.6  | 11700 | 264.1 | 22 | 267 | 11.4 |
| 6295  |    |      |       |       |       |    |     |      |
| 4230  | 23 | 4760 | 22.5  | 11700 | 264.2 | 23 | 267 | 8.7  |
| 6565  |    |      |       |       |       |    |     |      |
| 4410  | 24 | 4760 | 22.5  | 11700 | 264.2 | 24 | 264 | 10.1 |
| 6835  |    |      |       |       |       |    |     |      |
| 4590  | 25 | 4760 | 22.4  | 11700 | 264.2 | 25 | 262 | 10.8 |
| 7105  |    |      |       |       |       |    |     |      |
| 4770  | 26 | 4760 | 22.6  | 11700 | 264.0 | 26 | 256 | 10.6 |
| 7375  |    |      |       |       |       |    |     |      |
| 4950  | 27 | 4760 | 22.4  | 11700 | 263.5 | 27 | 254 | 12.7 |
| 7645  |    |      |       |       |       |    |     |      |
| 5130  | 28 | 4760 | 22.2  | 11700 | 263.0 | 28 | 247 | 12.6 |
| 7915  |    |      |       |       |       |    |     |      |
| 5310  | 29 | 4760 | 22.0  | 11700 | 262.0 | 29 |     |      |
| 8185  |    |      |       |       |       |    |     |      |
| 5490  | 30 | 4760 | 21.7  | 11700 | 261.0 | 30 | 242 | 12.5 |
| 8455  |    |      |       |       |       |    |     |      |
| 5670  | 31 | 4760 | 21.5  | 11700 | 258.9 | 31 |     |      |
| 8730  |    |      |       |       |       |    |     |      |
| 5850  | 32 | 4760 | 21.4  | 11700 | 258.9 | 32 | 238 | 14.0 |
| 9005  |    |      |       |       |       |    |     |      |
| 6030  | 33 | 4760 | 21.2  | 11700 | 258.4 | 33 |     |      |
| 9285  |    |      |       |       |       |    |     |      |
| 6210  | 34 | 4760 | 21.0  | 11700 | 257.9 | 34 | 247 | 16.5 |
| 9565  |    |      |       |       |       |    |     |      |
| 6390  | 35 | 4760 | 20.8  | 11700 | 257.5 | 35 |     |      |
| 9850  |    |      |       |       |       |    |     |      |
| 6570  | 36 | 4760 | 20.6  | 11700 | 257.3 | 36 | 252 | 16.6 |
| 10135 |    |      |       |       |       |    |     |      |
| 6750  | 37 | 4760 | 20.4  | 11700 | 257.1 | 37 |     |      |
| 10420 |    |      |       |       |       |    |     |      |
| 6930  | 38 | 4760 | 20.2  | 11700 | 257.1 | 38 | 255 | 17.3 |
| 10710 |    |      |       |       |       |    |     |      |
| 7110  | 39 | 4760 | 20.0  | 11700 | 257.1 | 39 |     |      |
| 11005 |    |      |       |       |       |    |     |      |
| 7290  | 40 | 4760 | 19.7  | 11700 | 257.0 | 40 | 255 | 20.4 |
| 11300 |    |      |       |       |       |    |     |      |
| 7470  | 41 | 4760 | 19.4  | 11700 | 256.9 | 41 |     |      |
| 11595 |    |      |       |       |       |    |     |      |
| 7650  | 42 | 4760 | 19.15 | 11700 | 256.8 | 42 | 251 | 22.3 |
| 11890 |    |      |       |       |       |    |     |      |
| 7830  | 43 | 4760 | 18.85 | 11700 | 256.5 | 43 |     |      |
| 12185 |    |      |       |       |       |    |     |      |
| 8010  | 44 | 4760 | 18.55 | 11700 | 256.3 | 44 | 252 | 24.4 |
| 12480 |    |      |       |       |       |    |     |      |
| 8190  | 45 | 4760 | 18.25 | 11700 | 256.3 | 45 |     |      |
| 12775 |    |      |       |       |       |    |     |      |
| 8370  | 46 | 4760 | 18.05 | 11700 | 256.1 | 46 | 252 | 21.5 |
| 13075 |    |      |       |       |       |    |     |      |
| 8550  | 47 | 4760 | 17.90 | 11700 | 255.9 | 47 |     |      |
| 13375 |    |      |       |       |       |    |     |      |
| 8730  | 48 | 4760 | 17.75 | 11700 | 255.6 | 48 | 245 | 21.2 |
| 13675 |    |      |       |       |       |    |     |      |
| 8910  | 49 | 4760 | 17.65 | 11700 | 255.3 | 49 |     |      |
| 13975 |    |      |       |       |       |    |     |      |
| 9090  | 50 | 4760 | 17.75 | 11700 | 254.8 | 50 | 230 | 14.2 |
| 14275 |    |      |       |       |       |    |     |      |

PP

Coded Data for Transmission

|       |       |       |       |       |       |       |        |       |       |
|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|
| 22586 | 00951 | 2518  | 22619 | 2617  | 12621 | 2620  | 62719  | 2618  | 2620  |
| 2617  | 02111 | 22716 | 42620 | 62617 | 82120 | 02121 | 631526 | 52432 | 02532 |
| 52511 | 62541 | 52422 | 02419 | 32749 |       |       |        |       |       |
| 00000 | 22586 | 02111 | 22716 | 02906 | 00912 | 00425 | 00937  | 00434 | 40934 |

|      |     |       |       |
|------|-----|-------|-------|
| 95   | 153 | 14000 | 51.9  |
| 100  | 136 | 14800 | 54.0  |
| 105  | 141 | 15520 | 56.5  |
| 110  | 107 | 16240 | 59.0  |
| 115  | 93  | 17180 | 61.7  |
| 120  | 80  | 18050 | 64.8  |
| 125  | 68  | 19080 | 68.4  |
| 130  | 55  | 20420 | 72.5  |
| 135  | 42  | 22200 | 77.7  |
| 140  | 29  | 24600 | 84.6  |
| 145  | 16  | 28650 | 96.6  |
| 1470 | 10  | 31785 | 106.3 |

Punched Card Data

| Altitudes         | Direction (degrees) | Speed (m.p.s.) | Card columns | Altitudes         | Direction (degrees) | Speed (m.p.s.) |
|-------------------|---------------------|----------------|--------------|-------------------|---------------------|----------------|
| Card No. 1        |                     |                | 15           | Card No. 2        |                     |                |
| Type of equipment | 2                   |                | 16           | Type of equipment | 2                   |                |
| Alt.              | 240                 | 3              | 17-21        | 7                 | 247                 | 15             |
| 150 m.            | 245                 | 6              | 22-26        | 8                 | 247                 | 15             |
| 300 m.            | 244                 | 9              | 27-31        | 9                 | 247                 | 15             |
| 0.5               | 251                 | 10             | 32-36        | 10                | 255                 | 17             |
| 1.0               | 251                 | 10             | 37-41        | 11                | 255                 | 17             |
| 1.5               | 244                 | 10             | 42-46        | 12                | 251                 | 17             |
| 2.0               | 241                 | 9              | 47-51        | 13                | 240                 | 18             |
| 2.5               | 261                 | 10             | 52-56        | 14                | 247                 | 17             |
| 3                 | 241                 | 7              | 57-61        | 15                | 240                 | 18             |
| 4                 | 262                 | 11             | 62-66        | 16                | 248                 | 17             |
| 5                 | 262                 | 9              | 67-71        | 17                | 241                 | 17             |
| 6                 | 263                 | 11             | 72-76        | 18                | 241                 | 17             |

Maximum Wind Speed Data

|                                                          |  |  |
|----------------------------------------------------------|--|--|
| Min. alt. wind speed 45 m.p.s. or more (m.)              |  |  |
| Alt. of maximum wind speed (m.)                          |  |  |
| Max. wind speed (m.p.s.) and dir. (degrees)              |  |  |
| Dir. (degrees) and speed (m.p.s.) of Max. wind           |  |  |
| Enter check if additional levels appear on reverse side. |  |  |



|                                                                                                   |                                                                                                                      |  |                    |       |     |      |       |
|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--|--------------------|-------|-----|------|-------|
| Identification<br>Portland, Maine (City Airport)<br>43° 39'N 70° 19'W 75m Mer.<br>Rowin Vane 100m | U.S. DEPARTMENT OF COMMERCE<br>WEATHER BUREAU<br><br>WINDS-ALOFT COMPUTATION SHEET<br>(LAND STATION FORM)<br>WBAN-20 |  | Year               | Month | Day | Time |       |
|                                                                                                   |                                                                                                                      |  | Actual time        | 1964  | JUL | 18   | 17:00 |
|                                                                                                   |                                                                                                                      |  | th mor.            |       |     |      |       |
|                                                                                                   |                                                                                                                      |  | Scheduled (G.M.T.) | 1964  | JUL | 18   | 15:00 |
| Ascension No.                                                                                     |                                                                                                                      |  | 798                |       |     |      |       |

| Type of balloon         |                                                  | Orientation, 360° = South |                              |                   |          |                                      |                 |        | Rawinsonde Time-Altitude Data |                |         |                |                       |                     |
|-------------------------|--------------------------------------------------|---------------------------|------------------------------|-------------------|----------|--------------------------------------|-----------------|--------|-------------------------------|----------------|---------|----------------|-----------------------|---------------------|
| Slant range (m.) (yds.) | Pibal ht. above surface (m.)<br>30 gram 100 gram | Minute                    | Rewin ht. above surface (m.) | Elevation angle ° |          | Distance from observation point (m.) | Azimuth angle ° | Minute | Wind                          |                | Contact | Pressure (mb.) | Altitude (m., m.s.l.) | Elapsed time (min.) |
|                         |                                                  |                           |                              | Observed          | Smoothed |                                      |                 |        | Direction ° 360° = N.         | Speed (m.p.s.) |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | Direction ° 360° = N.         | Speed (m.p.s.) |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 360° = N.                     |                |         |                |                       |                     |
|                         |                                                  |                           |                              |                   |          |                                      |                 |        | 36                            |                |         |                |                       |                     |



|       |    |       |      |  |       |       |    |     |     |
|-------|----|-------|------|--|-------|-------|----|-----|-----|
| 7105  | 25 |       |      |  |       |       |    |     |     |
| 4770  |    |       | 41.0 |  |       | 1602  | 26 | 242 | 8.6 |
| 7375  | 26 |       |      |  |       |       |    |     |     |
| 4950  |    |       |      |  |       |       |    |     |     |
| 7645  | 27 | 7810  | 40.9 |  | 9100  | 2594  | 27 |     |     |
| 5130  |    |       |      |  |       |       |    |     |     |
| 7915  | 28 |       | 41.0 |  |       | 257.9 | 28 | 229 | 7.9 |
| 5510  |    |       |      |  |       |       |    |     |     |
| 8135  | 29 | 8580  | 41.0 |  | 9900  | 2563  | 29 |     |     |
| 5490  |    |       |      |  |       |       |    |     |     |
| 8455  | 30 |       | 41.1 |  |       | 2552  | 30 | 224 | 3.9 |
| 5675  |    |       |      |  |       |       |    |     |     |
| 8730  | 31 | 7270  | 41.9 |  | 16300 | 2550  | 31 |     |     |
| 5850  |    |       |      |  |       |       |    |     |     |
| 9005  | 32 |       | 42.4 |  |       | 2550  | 32 | 278 | 1.9 |
| 6030  |    |       |      |  |       |       |    |     |     |
| 9285  | 33 | 7010  | 43.5 |  | 10300 | 2556  | 33 |     |     |
| 6210  |    |       |      |  |       |       |    |     |     |
| 9565  | 34 |       | 44.5 |  |       | 256.5 | 34 | 349 | 4.2 |
| 6550  |    |       |      |  |       |       |    |     |     |
| 9850  | 35 | 10250 | 45.7 |  | 10500 | 2584  | 35 |     |     |
| 6570  |    |       |      |  |       |       |    |     |     |
| 10135 | 36 |       | 45.7 |  |       | 261.0 | 36 | 3   | 8.6 |
| 6750  |    |       |      |  |       |       |    |     |     |
| 10420 | 37 | 11490 | 48.1 |  | 10300 | 265.8 | 37 |     |     |
| 6935  |    |       |      |  |       |       |    |     |     |
| 10710 | 38 |       | 48.9 |  |       | 265.0 | 38 | 342 | 2.7 |
| 7110  |    |       |      |  |       |       |    |     |     |
| 11005 | 39 | 12200 | 49.4 |  | 10400 | 265.4 | 39 |     |     |
| 7290  |    |       |      |  |       |       |    |     |     |
| 11200 | 40 |       | 50.4 |  |       | 264.6 | 40 | 240 | 3.6 |
| 7470  |    |       |      |  |       |       |    |     |     |
| 11595 | 41 | 12940 | 50.5 |  | 10700 | 265.6 | 41 |     |     |
| 7650  |    |       |      |  |       |       |    |     |     |
| 11690 | 42 | 13350 | 51.0 |  | 10800 | 266.2 | 42 | 240 | 1.9 |
| 7830  |    |       |      |  |       |       |    |     |     |
| 12185 | 43 | 13780 | 51.5 |  | 10900 | 265.3 | 43 |     |     |
| 8010  |    |       |      |  |       |       |    |     |     |
| 12480 | 44 | 14180 | 51.8 |  | 11200 | 265.6 | 44 | 226 | 4.6 |
| 8190  |    |       |      |  |       |       |    |     |     |
| 12775 | 45 |       | 52.0 |  |       | 264.4 | 45 |     |     |
| 8370  |    |       |      |  |       |       |    |     |     |
| 13075 | 46 | 14940 | 52.0 |  | 11700 | 267.7 | 46 | 222 | 7.7 |
| 8550  |    |       |      |  |       |       |    |     |     |
| 13375 | 47 |       | 51.5 |  |       | 264.4 | 47 |     |     |
| 8730  |    |       |      |  |       |       |    |     |     |
| 13675 | 48 | 15720 | 51.1 |  | 12200 | 260.4 | 48 | 232 | 9.6 |
| 8910  |    |       |      |  |       |       |    |     |     |
| 13975 | 49 |       |      |  |       |       | 49 |     |     |
| 9090  |    |       |      |  |       |       |    |     |     |
| 14275 | 50 |       |      |  |       |       | 50 |     |     |

[illegible]

### Punched Card Data

## Maximum Wind Speed Data







|       |    |      |       |      |    |     |      |
|-------|----|------|-------|------|----|-----|------|
| 7520  | 27 | 24.1 | 16200 | 27.0 | 27 |     |      |
| 7645  | 28 | 24.2 |       | 27.0 | 28 | 247 | 7.1  |
| 7915  | 29 | 24.5 | 17600 | 27.6 | 29 |     |      |
| 8310  | 30 | 24.4 |       | 27.2 | 30 | 287 | 10.7 |
| 8155  | 31 | 24.5 | 18900 | 27.6 | 31 |     |      |
| 8490  | 32 | 24.8 |       | 27.6 | 32 | 277 | 7.5  |
| 8355  | 33 | 24.9 | 19800 | 27.8 | 33 |     |      |
| 8870  | 34 | 25.0 |       | 27.5 | 34 | 294 | 12.0 |
| 8730  | 35 | 24.6 | 21200 | 27.4 | 35 |     |      |
| 8850  | 36 | 24.7 |       | 27.5 | 36 | 317 | 9.9  |
| 9005  | 37 | 24.7 | 22000 | 27.2 | 37 |     |      |
| 9030  | 38 | 24.9 |       | 27.2 | 38 | 302 | 13.0 |
| 9285  | 39 | 24.7 | 23500 | 27.1 | 39 |     |      |
| 9210  | 40 | 24.9 |       | 27.1 | 40 | 317 | 9.8  |
| 9565  | 41 | 24.9 | 24400 | 28.0 | 41 |     |      |
| 9390  | 42 | 24.5 |       | 28.2 | 42 | 320 | 14.0 |
| 9850  | 43 | 24.5 | 25700 | 28.5 | 43 |     |      |
| 10135 | 44 | 25.0 |       | 28.4 | 44 | 345 | 14.2 |
| 8750  | 45 | 25.1 | 26500 | 28.7 | 45 |     |      |
| 10420 | 46 | 25.2 |       | 28.7 | 46 | 327 | 13.4 |
| 8930  | 47 | 25.2 | 27600 | 28.7 | 47 |     |      |
| 10710 | 48 | 25.2 | 28100 | 28.7 | 48 | 317 | 7.2  |
| 7110  | 49 | 25.6 | 28400 | 28.7 | 49 |     |      |
| 11005 | 50 | 25.7 | 28900 | 28.4 | 50 | 277 | 7.0  |

|     |    |       |      |
|-----|----|-------|------|
| 145 | 20 | 2704L | 29.0 |
|     |    |       |      |
|     |    |       |      |
|     |    |       |      |
| 146 | 17 | 28130 | 92.0 |

Punched Card Data

| Altitude #        | Direction (degrees) | Speed (m.p.s.) | Card columns | Altitude #        | Direction (degrees) | Speed (m.p.s.) |
|-------------------|---------------------|----------------|--------------|-------------------|---------------------|----------------|
| Card No. 1        |                     |                |              | Card No. 2        |                     |                |
| Type of equipment | 8                   |                | 16           | Type of equipment | 8                   |                |
| sfc.              | 230                 | 5              | 17-21        | 7                 | 291                 | 8              |
| 150 M.            | 235                 | 10             | 22-26        | 8                 | 294                 | 8              |
| 300 M.            | 242                 | 12             | 27-31        | 9                 | 277                 | 8              |
| 0.5               | 247                 | 13             | 32-36        | 10                | 312                 | 10             |
| 1.0               | 255                 | 13             | 37-41        | 11                | 310                 | 11             |
| 1.5               | 260                 | 13             | 42-46        | 12                | 320                 | 14             |
| 2.0               | 272                 | 15             | 47-51        | 13                | 324                 | 12             |
| 2.5               | 271                 | 14             | 52-56        | 14                | 279                 | 7              |
| 3                 | 268                 | 10             | 57-61        | 15                | 280                 | 10             |
| 4                 | 250                 | 10             | 62-66        | 16                | 265                 | 8              |
| 5                 | 275                 | 5              | 67-71        | 17                | 280                 | 7              |
| 6                 | 273                 | 9              | 72-76        | 18                | 280                 | 5              |

Coded Data for Transmission

|      |       |       |       |       |       |       |        |       |       |
|------|-------|-------|-------|-------|-------|-------|--------|-------|-------|
| 2222 | 02719 | 22623 | 02619 | 02711 | 02919 | 02918 | 532915 | 53015 | 02818 |
| 3024 | 03422 | 53014 | 02920 | 52715 | ①     |       |        |       |       |
| 2503 | 7     | 0011  | 79916 | 02809 | 00505 | 00719 | 00826  | 20822 | ①     |

Maximum Wind Speed Data

|                                                          |  |  |
|----------------------------------------------------------|--|--|
| Min. alt. wind speed 45 m.p.s. or more (m.)              |  |  |
| Alt. of maximum wind speed (m.)                          |  |  |
| Dir. (degrees) and speed (m.p.s.) of Max. wind           |  |  |
| Max. alt. wind speed 45 m.p.s. or more (m.)              |  |  |
| Enter check if additional levels appear on reverse side. |  |  |







|       |    |       |      |       |       |    |     |      |
|-------|----|-------|------|-------|-------|----|-----|------|
| 4050  | 27 | 9680  | 26.2 | 19600 | 28.2  | 27 |     |      |
| 7415  | 28 |       | 25.7 |       | 28.3  | 28 | 280 | 14.3 |
| 5150  |    |       |      |       |       |    |     |      |
| 7215  | 29 | 10400 | 25.9 | 21300 | 28.0  | 29 |     |      |
| 5310  |    |       |      |       |       |    |     |      |
| 8165  | 30 |       | 25.8 |       | 279.8 | 30 | 278 | 17.6 |
| 5490  |    |       |      |       |       |    |     |      |
| 8455  | 31 | 11120 | 25.3 | 23400 | 279.6 | 31 |     |      |
| 5670  |    |       |      |       |       |    |     |      |
| 8730  | 32 |       | 25.0 |       | 279.5 | 32 | 279 | 18.0 |
| 5850  |    |       |      |       |       |    |     |      |
| 6005  | 33 | 11830 | 24.8 | 25600 | 279.5 | 33 |     |      |
| 6030  |    |       |      |       |       |    |     |      |
| 9235  | 34 |       | 24.7 |       | 279.6 | 34 | 283 | 18.2 |
| 6210  |    |       |      |       |       |    |     |      |
| 9555  | 35 | 12690 | 24.5 | 27900 | 279.8 | 35 |     |      |
| 6390  |    |       |      |       |       |    |     |      |
| 9850  | 36 | 13190 | 24.2 | 29200 | 279.5 | 36 | 284 | 21.2 |
| 6570  |    |       |      |       |       |    |     |      |
| 10135 | 37 | 13560 | 23.9 | 30400 | 279.6 | 37 |     |      |
| 6750  |    |       |      |       |       |    |     |      |
| 10420 | 38 | 14000 | 23.9 | 31400 | 280.8 | 38 | 293 | 16.5 |
| 6930  |    |       |      |       |       |    |     |      |
| 10715 | 39 |       | 23.1 |       | 281.2 | 39 |     |      |
| 7110  |    |       |      |       |       |    |     |      |
| 11005 | 40 | 14820 | 24.0 | 33050 | 281.1 | 40 | 279 | 13.3 |
| 7230  |    |       |      |       |       |    |     |      |
| 11300 | 41 |       | 23.4 |       | 280.9 | 41 |     |      |
| 7470  |    |       |      |       |       |    |     |      |
| 11595 | 42 | 15670 | 24.7 | 33700 | 280.9 | 42 | 266 | 12.0 |
| 7650  |    |       |      |       |       |    |     |      |
| 11890 | 43 |       | 24.4 |       | 280.8 | 43 |     |      |
| 7830  |    |       |      |       |       |    |     |      |
| 12185 | 44 | 16480 | 25.3 | 34600 | 280.3 | 44 | 283 | 9.3  |
| 8010  |    |       |      |       |       |    |     |      |
| 12480 | 45 |       | 25.4 |       | 280.2 | 45 |     |      |
| 8190  |    |       |      |       |       |    |     |      |
| 12775 | 46 | 17400 | 25.6 | 36000 | 280.6 | 46 | 296 | 9.6  |
| 8370  |    |       |      |       |       |    |     |      |
| 13075 | 47 |       | 26.0 |       | 280.8 | 47 |     |      |
| 8550  |    |       |      |       |       |    |     |      |
| 13375 | 48 | 18290 | 26.5 | 36300 | 281.0 | 48 | 304 | 4.0  |
| 8730  |    |       |      |       |       |    |     |      |
| 13675 | 49 |       | 26.6 |       | 281.2 | 49 |     |      |
| 8910  |    |       |      |       |       |    |     |      |
| 13975 | 50 | 19130 | 27.0 | 36800 | 281.4 | 50 | 296 | 3.3  |
| 9090  |    |       |      |       |       |    |     |      |
| 14275 |    |       |      |       |       |    |     |      |

Coded Data for Transmission

|       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7600  | 05451 | 2625  | 27632 | 2734  | 42138 | 2735  | 62846 | 2920  | 82920 |
| 7621  | 02922 | 22915 | 42715 | 62720 | 83021 | 03018 | 33027 | 53029 | 02834 |
| 52835 | 02835 | 52925 | 62724 | 37821 |       |       |       |       |       |
| 63600 | 05911 | 99996 | 03109 | 73506 | 00712 | 80816 | 00820 | 70917 |       |
| 96110 |       |       |       |       |       |       |       |       |       |

|        |       |     |  |
|--------|-------|-----|--|
| 145    | C     |     |  |
|        |       |     |  |
|        |       |     |  |
|        |       |     |  |
| 141418 | 22800 | 712 |  |

Punched Card Data

| Altitude #        | Direction (degrees) | Speed (m.p.s.) | Card columns | Altitude # | Direction (degrees) | Speed (m.p.s.) |
|-------------------|---------------------|----------------|--------------|------------|---------------------|----------------|
| Card No. 1        |                     |                |              | 15         | Card No. 2          |                |
| Type of equipment |                     |                |              | 16         | Type of equipment   |                |
| 8                 |                     |                |              | 16         | 8                   |                |
| sfc.              | 250                 | 7              | 17-21        | 7          | 298                 | 15             |
| 150 M.            | 252                 | 10             | 22-26        | 8          | 288                 | 14             |
| 300 M.            | 255                 | 14             | 27-31        | 9          | 279                 | 16             |
| 0.5               | 258                 | 16             | 32-36        | 10         | 280                 | 15             |
| 1.0               | 268                 | 18             | 37-41        | 11         | 281                 | 18             |
| 1.5               | 270                 | 19             | 42-46        | 12         | 283                 | 18             |
| 2.0               | 280                 | 11             | 47-51        | 13         | 284                 | 21             |
| 2.5               | 288                 | 10             | 52-56        | 14         | 294                 | 17             |
| 3                 | 289                 | 11             | 57-61        | 15         | 277                 | 13             |
| 4                 | 258                 | 5              | 62-66        | 16         | 272                 | 11             |
| 5                 | 257                 | 11             | 67-71        | 17         | 288                 | 10             |
| 6                 | 298                 | 9              | 72-76        | 18         | 302                 | 6              |

Maximum Wind Speed Data

|                                                          |  |  |
|----------------------------------------------------------|--|--|
| Min. alt. wind speed 45 m.p.s. or more (m.)              |  |  |
| Alt. of maximum wind speed (m.)                          |  |  |
| Dir. (degrees) and speed (m.p.s.) of Max. wind           |  |  |
| Max. alt. wind speed 45 m.p.s. or more (m.)              |  |  |
| Enter check if additional levels appear on reverse side. |  |  |



Page

|                                                                                                              |                                                                |      |       |     |      |
|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------|-------|-----|------|
| *Identification<br>Portland, Maine (City Airport)<br>43° 39'N 70° 19'W 75th Mer.<br>Rawin WBRT 60 Elev. 20m. | U.S. DEPARTMENT OF COMMERCE<br>WEATHER BUREAU                  |      |       |     |      |
|                                                                                                              | WINDS-ALOFT COMPUTATION SHEET<br>(LANDSTATION FORM)<br>WBAN-20 |      |       |     |      |
|                                                                                                              | Actual<br>time<br>th mer.                                      | Year | Month | Day | Time |
| Scheduled<br>(G.M.T.)                                                                                        | 1964                                                           | JUL  | 17    | 11  |      |
| Ascension No. 795                                                                                            |                                                                |      |       |     |      |

| Type of balloon            |                                                     | 600    |                                       | 600               |          | Orientation,                                  |                       | 360° = South |                          | Rawinsonde Time-Altitude Data |              |                   |                          |                       |
|----------------------------|-----------------------------------------------------|--------|---------------------------------------|-------------------|----------|-----------------------------------------------|-----------------------|--------------|--------------------------|-------------------------------|--------------|-------------------|--------------------------|-----------------------|
| Slant range<br>(m.) (yds.) | Pibal<br>ht. above<br>sfc. (m.)<br>30 gram 100 gram | Minute | Rawin<br>ht. above<br>surface<br>(m.) | Elevation angle ° |          | Distance from<br>observation<br>point<br>(m.) | Azimuth<br>angle<br>° | Minute       | Wind                     |                               | Con-<br>tact | Pressure<br>(mb.) | Altitude<br>(m., m.s.l.) | Elapsed<br>time (min) |
|                            |                                                     |        |                                       | Observed          | Smoothed |                                               |                       |              | Direction °<br>360° = N. | Speed<br>(m.p.s.)             |              |                   |                          |                       |
|                            | 210<br>350                                          | 1      | 300                                   | 24.1              |          | 670                                           | 212.0                 | 1            | 205                      | 9.9                           | 5            | 974               | 400                      | 1.3                   |
|                            | 414<br>670                                          | 2      | 600                                   | 24.0              |          | 1170                                          | 204.8                 | 2            | 213                      | 7.5                           | 10           | 985               | 1240                     | 4.1                   |
|                            | 612<br>980                                          | 3      | 900                                   | 20.2              |          | 1540                                          | 211.2                 | 3            | 239                      | 7.0                           | 15           | 801               | 2090                     | 7.0                   |
|                            | 801<br>1285                                         | 4      | 1190                                  | 31.4              |          | 1940                                          | 217.8                 | 4            | 242                      | 7.3                           | 20           | 724               | 2460                     | 9.9                   |
|                            | 900<br>1505                                         | 5      | 1480                                  | 31.3              |          | 2370                                          | 221.9                 | 5            | 239                      | 7.7                           | 25           | 653               | 2790                     | 12.8                  |
|                            | 1170<br>1980                                        | 6      | 1780                                  | 31.9              |          | 2840                                          | 224.2                 | 6            | 241                      | 5.7                           | 30           | 589               | 4620                     | 15.6                  |
|                            | 1350<br>2170                                        | 7      | 2080                                  | 34.4              |          | 3030                                          | 226.2                 | 7            | 225                      | 2.6                           | 35           | 530               | 5430                     | 18.3                  |
|                            | 1530<br>2455                                        | 8      | 2360                                  | 36.6              |          | 3150                                          | 225.8                 | 8            | 212                      | 2.0                           | 40           | 477               | 6260                     | 21.2                  |
|                            | 1710<br>2740                                        | 9      | 2650                                  | 38.9              |          | 3260                                          | 224.7                 | 9            | 208                      | 2.0                           | 45           | 424               | 7180                     | 24.0                  |
|                            | 1860<br>3020                                        | 10     | 2930                                  | 40.8              |          | 3370                                          | 224.7                 | 10           | 226                      | 1.6                           | 50           | 385               | 7940                     | 26.7                  |
|                            | 2070<br>3300                                        | 11     | 3210                                  | 42.7              |          | 3450                                          | 225.8                 | 11           | 243                      | 1.8                           | 55           | 345               | 8680                     | 29.5                  |
|                            | 2250<br>3580                                        | 12     | 3530                                  | 45.3              |          | 3470                                          | 226.1                 | 12           | 268                      | 1.1                           | 60           | 309               | 9470                     | 31.7                  |
|                            | 2430<br>3855                                        | 13     | 3800                                  | 47.5              |          | 3450                                          | 227.7                 | 13           | 298                      | 1.0                           | 65           | 277               | 10220                    | 34.1                  |
|                            | 2610<br>4130                                        | 14     | 4100                                  | 49.7              |          | 3500                                          | 227.8                 | 14           | 248                      | 1.3                           | 70           | 248               | 10950                    | 36.4                  |
|                            | 2790<br>4400                                        | 15     | 4400                                  | 51.0              |          | 3600                                          | 227.4                 | 15           | 252                      | 1.9                           | 75           | 222               | 11700                    | 38.6                  |
|                            | 2970<br>4675                                        | 16     | 4700                                  | 52.1              |          | 3700                                          | 227.4                 | 16           | 254                      | 1.8                           | 80           | 200               | 12360                    | 40.8                  |
|                            | 3150<br>4945                                        | 17     | 5010                                  | 53.0              |          | 3800                                          | 227.8                 | 17           | 265                      | 1.6                           | 85           | 179               | 13060                    | 43.0                  |
|                            | 3330<br>5215                                        | 18     | 5310                                  | 53.0              |          | 3850                                          | 231.1                 | 18           | 292                      | 1.7                           | 90           | 161               | 13710                    | 44.0                  |
|                            | 3510<br>5485                                        | 19     | 5600                                  | 54.8              |          | 3900                                          | 232.4                 | 19           | 269                      | 2.6                           | 95           | 140               | 14430                    | 47.1                  |
|                            |                                                     |        |                                       |                   |          |                                               |                       |              |                          |                               | 100          | 129               | 15110                    | 49.7                  |
|                            |                                                     |        |                                       |                   |          |                                               |                       |              |                          |                               | 105          | 115               | 15810                    | 51.1                  |

Stamp the  
following:

- Name of  
Station
- Lat. and  
long.
- Local  
Standard  
time, \_\_\_\_\_  
meridian
- El. of Station
- Method of  
obs., e.g.,  
rawinsonde,  
rawin, pibal
- Type of  
equip., e.g.,  
WBRT-57,  
GMD-1A,  
GMD-1,  
SCR-650,  
theodolite







|                                                                                                             |                                                     |                   |                        |       |     |      |    |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------|------------------------|-------|-----|------|----|
| *Identification<br>Portland, Maine (City Airport)<br>43° 39'N 70° 19'W 75th Mer.<br>Rawin WBRT 60 Eol. 20m. | U.S. DEPARTMENT OF COMMERCE,<br>WEATHER BUREAU      |                   | Year                   | Month | Day | Time |    |
|                                                                                                             | WINDS-ALOFT COMPUTATION SHEET<br>(LANDSTATION FORM) |                   | Actual time<br>th mer. | 1964  | JUL | 18   | 06 |
|                                                                                                             | WBAN-20                                             |                   | Scheduled<br>(G.M.T.)  | 1964  | JUL | 18   | 06 |
|                                                                                                             |                                                     | Ascension No. 796 |                        |       |     |      |    |

| Type of balloon            |                                                     | Orientation, |                                       | 360° = South      |          | Rawinsonde Time-Altitude Data                 |                       |         |                                  |                   |              |                   |                          |                       |
|----------------------------|-----------------------------------------------------|--------------|---------------------------------------|-------------------|----------|-----------------------------------------------|-----------------------|---------|----------------------------------|-------------------|--------------|-------------------|--------------------------|-----------------------|
| Slant range<br>(m.) (yds.) | Pibal<br>ht. above<br>sfc. (m.)<br>30 gram 100 gram | Minutes      | Rawin<br>ht. above<br>surface<br>(m.) | Elevation angle ° |          | Distance from<br>observation<br>point<br>(m.) | Azimuth<br>angle<br>° | Minutes | Wind                             |                   | Con-<br>tact | Pressure<br>(mb.) | Altitude<br>(m., m.s.l.) | Elapsed<br>time (min) |
|                            |                                                     |              |                                       | Observed          | Smoothed |                                               |                       |         | Direction °<br>360° = N.<br>sfc. | Speed<br>(m.p.s.) |              |                   |                          |                       |
|                            |                                                     |              |                                       |                   |          |                                               |                       |         |                                  |                   |              |                   |                          |                       |
|                            | 216<br>350                                          | 1            | 380                                   | 23.0              |          | 890                                           | 228.7                 | 1       | 226<br>12.6                      |                   | 5            | 979               | 370                      | 14                    |
|                            | 414<br>670                                          | 2            | 710                                   | 29.0              |          | 1510                                          | 226.2                 | 2       | 232<br>10.0                      |                   | 10           | 903               | 1070                     | 30                    |
|                            | 812<br>980                                          | 3            | 1050                                  | 26.6              |          | 2090                                          | 229.5                 | 3       | 243<br>9.6                       |                   | 15           | 831               | 1770                     | 5.2                   |
|                            | 601<br>1235                                         | 4            | 1370                                  | 27.9              |          | 2570                                          | 233.5                 | 4       | 254<br>9.5                       |                   | 20           | 766               | 2470                     | 7.4                   |
|                            | 990<br>1585                                         | 5            | 1690                                  | 28.0              |          | 3160                                          | 238.4                 | 5       | 267<br>9.1                       |                   | 25           | 703               | 3170                     | 9.5                   |
|                            | 1170<br>1380                                        | 6            | 2010                                  | 27.7              |          | 3540                                          | 243.5                 | 6       | 284<br>5.1                       |                   | 30           | 647               | 3850                     | 11.5                  |
|                            | 1355<br>2170                                        | 7            | 2330                                  | 32.5              |          | 3620                                          | 245.5                 | 7       | 292<br>2.9                       |                   | 35           | 593               | 4570                     | 13.5                  |
|                            | 1530<br>2455                                        | 8            | 2650                                  | 35.2              |          | 3770                                          | 247.5                 | 8       | 292<br>3.1                       |                   | 40           | 544               | 5250                     | 15.5                  |
|                            | 1710<br>2740                                        | 9            | 3000                                  | 37.4              |          | 3890                                          | 249.4                 | 9       | 288<br>3.3                       |                   | 45           | 498               | 5940                     | 17.5                  |
|                            | 1890<br>3020                                        | 10           | 3330                                  | 37.0              |          | 4080                                          | 251.1                 | 10      | 264<br>2.7                       |                   | 50           | 456               | 6620                     | 19.5                  |
|                            | 2070<br>3300                                        | 11           | 3670                                  | 41.0              |          | 4200                                          | 250.5                 | 11      | 261<br>2.7                       |                   | 55           | 417               | 7290                     | 21.7                  |
|                            | 2250<br>3580                                        | 12           | 4020                                  | 42.7              |          | 4400                                          | 252.0                 | 12      | 274<br>2.7                       |                   | 60           | 381               | 7970                     | 23.0                  |
|                            | 2430<br>3955                                        | 13           | 4350                                  | 44.0              |          | 4560                                          | 252.1                 | 13      | 253<br>2.8                       |                   | 65           | 347               | 8650                     | 25.5                  |
|                            | 2610<br>4130                                        | 14           | 4730                                  | 44.9              |          | 4750                                          | 252.0                 | 14      | 231<br>2.8                       |                   | 70           | 317               | 9250                     | 27.5                  |
|                            | 2790<br>4405                                        | 15           | 5040                                  | 46.4              |          | 4800                                          | 250.8                 | 15      | 183<br>3.3                       |                   | 75           | 288               | 9930                     | 29.5                  |
|                            | 2970<br>4675                                        | 16           | 5370                                  | 47.4              |          | 4900                                          | 247.5                 | 16      | 194<br>4.1                       |                   | 80           | 262               | 10600                    | 31.0                  |
|                            | 3150<br>4945                                        | 17           | 5680                                  | 48.0              |          | 5100                                          | 245.1                 | 17      | 233<br>3.3                       |                   | 85           | 237               | 11270                    | 32.5                  |
|                            | 3330<br>5215                                        | 18           | 6000                                  | 48.6              |          | 5200                                          | 245.6                 | 18      | 276<br>3.8                       |                   | 90           | 214               | 11920                    | 34.7                  |
|                            | 3510<br>5485                                        | 19           | 6350                                  | 49.2              |          | 5500                                          | 248.6                 | 19      | 292<br>5.1                       |                   | 95           | 192               | 12640                    | 36.5                  |
|                            |                                                     |              |                                       |                   |          |                                               |                       |         |                                  |                   | 100          | 171               | 13350                    | 38.7                  |
|                            |                                                     |              |                                       |                   |          |                                               |                       |         |                                  |                   | 105          | 151               | 14100                    | 40.9                  |

Stamp the following:  
Name of Station  
Lat. and long.  
Local Standard time, \_\_\_\_\_th meridian  
El. of Station  
Method of obs., e.g., rawinsonde, rawin, pibal  
Type of equip., e.g., WBRT-57, GMD-1A, GMD-1, SCR-658, theodolite



Reason for termination *10/16/61*

Computer

Verifier

|       |    |       |      |      |       |    |     |      |
|-------|----|-------|------|------|-------|----|-----|------|
| 5755  | 20 | 6720  | 49.5 | 5750 | 250.8 | 20 | 279 | 4.8  |
| 3870  | 21 | 7070  | 49.6 | 6000 | 251.1 | 21 |     |      |
| 6025  |    |       |      |      |       |    |     |      |
| 4050  | 22 |       | 49.9 |      | 249.9 | 22 | 222 | 38   |
| 6295  |    |       |      |      |       |    |     |      |
| 4230  | 23 | 7160  | 50.4 | 6400 | 249.1 | 23 |     |      |
| 6565  |    |       |      |      |       |    |     |      |
| 4410  | 24 |       | 51.3 |      | 249.1 | 24 | 203 | 2.3  |
| 6835  |    |       |      |      |       |    |     |      |
| 4590  | 25 | 8460  | 52.3 | 6600 | 247.3 | 25 |     |      |
| 7105  |    |       |      |      |       |    |     |      |
| 4770  | 26 |       | 54.1 |      | 246.0 | 26 | 88  | 6.3  |
| 7375  |    |       |      |      |       |    |     |      |
| 4950  | 27 | 9160  | 57.2 | 5900 | 244.6 | 27 |     |      |
| 7645  |    |       |      |      |       |    |     |      |
| 5130  | 28 |       | 59.3 |      | 242.7 | 28 | 88  | 7.3  |
| 7215  |    |       |      |      |       |    |     |      |
| 5310  | 29 | 9850  | 62.5 | 5100 | 240.5 | 29 |     |      |
| 8185  |    |       |      |      |       |    |     |      |
| 5490  | 30 |       | 65.9 |      | 239.6 | 30 | 81  | 10.7 |
| 8455  |    |       |      |      |       |    |     |      |
| 5670  | 31 | 10580 | 69.7 | 3900 | 234.2 | 31 |     |      |
| 8730  |    |       |      |      |       |    |     |      |
| 5850  | 32 |       | 73.8 |      | 228.4 | 32 | 82  | 13.2 |
| 9005  |    |       |      |      |       |    |     |      |
| 6030  | 33 | 11280 | 77.1 | 2600 | 217.6 | 33 |     |      |
| 9285  |    |       |      |      |       |    |     |      |
| 6210  | 34 |       | 80.8 |      | 203.3 | 34 | 65  | 14.3 |
| 9565  |    |       |      |      |       |    |     |      |
| 6390  | 35 | 12000 | 83.7 | 1340 | 180.7 | 35 |     |      |
| 9850  |    |       |      |      |       |    |     |      |
| 6570  | 36 |       | 83.1 |      | 153.7 | 36 | 81  | 13.1 |
| 10185 |    |       |      |      |       |    |     |      |
| 6750  | 37 | 12700 | 81.6 | 1890 | 125.0 | 37 |     |      |
| 10420 |    |       |      |      |       |    |     |      |
| 6930  | 38 |       | 78.6 |      | 101.8 | 38 | 71  | 13.6 |
| 10710 |    |       |      |      |       |    |     |      |
| 7110  | 39 | 13410 | 76.8 | 3150 | 100.3 | 39 |     |      |
| 11005 |    |       |      |      |       |    |     |      |
| 7290  | 40 | 13780 | 76.2 | 3370 | 102.5 | 40 | 126 | 3.5  |
| 11300 |    |       |      |      |       |    |     |      |
| 7470  | 41 | 14100 | 75.9 | 3530 | 103.5 | 41 |     |      |
| 11595 |    |       |      |      |       |    |     |      |
| 7650  | 42 | 14480 | 76.1 | 3600 | 103.1 | 42 | 138 | 14   |
| 11890 |    |       |      |      |       |    |     |      |
| 7830  | 43 |       | 75.9 |      | 103.6 | 43 |     |      |
| 12185 |    |       |      |      |       |    |     |      |
| 8010  | 44 | 15130 | 76.4 | 3650 | 105.7 | 44 | 235 | 1.7  |
| 12480 |    |       |      |      |       |    |     |      |
| 8190  | 45 |       | 77.0 |      | 107.6 | 45 |     |      |
| 12775 |    |       |      |      |       |    |     |      |
| 8370  | 46 | 15780 | 77.9 | 3850 | 108.6 | 46 | 256 | 2.7  |
| 13075 |    |       |      |      |       |    |     |      |
| 8550  | 47 |       | 78.6 |      | 110.9 | 47 |     |      |
| 13375 |    |       |      |      |       |    |     |      |
| 8730  | 48 | 16480 | 79.4 | 3100 | 111.5 | 48 | 235 | 2.3  |
| 13675 |    |       |      |      |       |    |     |      |
| 8910  | 49 |       | 79.8 |      | 112.8 | 49 |     |      |
| 13975 |    |       |      |      |       |    |     |      |
| 9090  | 50 | 17150 | 79.9 | 3650 | 116.6 | 50 | 225 | 1.9  |
| 14275 |    |       |      |      |       |    |     |      |

|      |     |       |      |
|------|-----|-------|------|
| 110  | 131 | 15000 | 43.5 |
| 115  | 113 | 15730 | 46.1 |
| 120  | 94  | 17070 | 49.7 |
| 125  | 76  | 18390 | 53.5 |
| 130  | 58  | 20100 | 58.2 |
| 135  | 46  | 22480 | 64.1 |
| 140  | 23  | 26170 | 73.2 |
|      |     |       |      |
|      |     |       |      |
|      |     |       |      |
|      |     |       |      |
|      |     |       |      |
| 141c | 19  | 27440 | 76.6 |

## Punched Card Data

| Altitude #        | Direction (degrees) | Speed (m.p.s.) | Card columns | Altitude #        | Direction (degrees) | Speed |
|-------------------|---------------------|----------------|--------------|-------------------|---------------------|-------|
| Card No. 1        |                     |                | 15           | Card No. 2        |                     |       |
| Type of equipment |                     | 8              | 16           | Type of equipment |                     | 6     |
| sfc.              | 240                 | 3              | 17-21        | 7                 | 286                 | 4     |
| 150 M.            | 235                 | 6              | 22-26        | 8                 | 207                 | 3     |
| 300 M.            | 229                 | 9              | 27-31        | 9                 | 289                 | 7     |
| 0.5               | 227                 | 12             | 32-36        | 10                | 82                  | 10    |
| 1.0               | 240                 | 9              | 37-41        | 11                | 80                  | 13    |
| 1.5               | 257                 | 9              | 42-46        | 12                | 71                  | 14    |
| 2.0               | 279                 | 6              | 47-51        | 13                | 74                  | 13    |
| 2.5               | 292                 | 3              | 52-56        | 14                | 130                 | 5     |
| 3                 | 289                 | 3              | 57-61        | 15                | 202                 | 1     |
| 4                 | 271                 | 3              | 62-66        | 16                | 249                 | 2     |
| 5                 | 191                 | 3              | 67-71        | 17                | 228                 | 1     |
| 6                 | 271                 | 4              | 72-76        | 18                | 264                 | 1     |

## Maximum Wind Speed Data

|                                                             |  |  |
|-------------------------------------------------------------|--|--|
| Min. alt. wind speed<br>45 m.p.s. or more (m.)              |  |  |
| Alt. of maximum<br>wind speed (m.)                          |  |  |
| Dir. (degrees) and speed<br>(m.p.s.) of Max. wind           |  |  |
| Max. alt. wind speed<br>45 m.p.s. or more (m.)              |  |  |
| Enter check if additional levels<br>appear on reverse side. |  |  |

### Coded Data for Transmission



| *Identification                |                                               |        |                              | U.S. DEPARTMENT OF COMMERCE<br>WEATHER BUREAU                   |          |                                      |                 | Year Month Day Time                |                       |                |           |                |                       |                    |
|--------------------------------|-----------------------------------------------|--------|------------------------------|-----------------------------------------------------------------|----------|--------------------------------------|-----------------|------------------------------------|-----------------------|----------------|-----------|----------------|-----------------------|--------------------|
| Portland, Maine (City Airport) |                                               |        |                              | WINDS-ALOFT COMPUTATION SHEET<br>(LAND STATION FORM)<br>WBAN-20 |          |                                      |                 | Actual time th mer. 1964 JUL 18 06 |                       |                |           |                |                       |                    |
| 43° 39'N 70° 19'W 75th Mer.    |                                               |        |                              |                                                                 |          |                                      |                 | Scheduled (G.M.T.) 1964 JUL 18 17  |                       |                |           |                |                       |                    |
| Rawin WDRT 60 Elev. 20m        |                                               |        |                              |                                                                 |          |                                      |                 | Ascension No. 797                  |                       |                |           |                |                       |                    |
| Type of balloon 600 G-24M      |                                               |        |                              | Orientation, 360° = South                                       |          |                                      |                 | Rawinsonde Time-Altitude Data      |                       |                |           |                |                       |                    |
| Slant range (m.) (yds.)        | Pibal ht. above sfc. (m.)<br>30 gram 100 gram | Minute | Rawin ht. above surface (m.) | Elevation angle °                                               |          | Distance from observation point (m.) | Azimuth angle ° | Minute                             | Wind                  |                | Con- tact | Pressure (mb.) | Altitude (m., m.s.l.) | Elapsed time (min) |
|                                |                                               |        |                              | Observed                                                        | Smoothed |                                      |                 |                                    | Direction ° 360° = N. | Speed (m.p.s.) |           |                |                       |                    |
|                                | 216                                           | 1      | 280                          | 84.2                                                            |          | 420                                  | 275.1           | 1                                  | 276                   | 8.2            | 5         | 983            | 320                   | 1.2                |
|                                | 350                                           |        |                              |                                                                 |          |                                      |                 |                                    |                       |                | 10        | 999            | 1100                  | 4.2                |
|                                | 414                                           | 2      | 550                          | 29.1                                                            |          | 1000                                 | 276.5           | 2                                  | 269                   | 9.0            | 15        | 871            | 1830                  | 7.1                |
|                                | 670                                           |        |                              |                                                                 |          |                                      |                 |                                    |                       |                | 20        | 749            | 2660                  | 10.0               |
|                                | 612                                           | 3      | 800                          | 28.3                                                            |          | 1490                                 | 271.1           | 3                                  | 248                   | 7.0            | 25        | 681            | 3400                  | 15.0               |
|                                | 880                                           |        |                              |                                                                 |          |                                      |                 |                                    |                       |                | 30        | 619            | 4220                  | 16.4               |
|                                | 801                                           | 4      | 1080                         | 29.8                                                            |          | 1760                                 | 262.9           | 4                                  | 242                   | 7.0            | 35        | 560            | 5000                  | 19.6               |
|                                | 1285                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                | 40        | 507            | 5790                  | 22.6               |
|                                | 990                                           | 5      | 1340                         | 30.5                                                            |          | 2230                                 | 258.4           | 5                                  | 244                   | 6.0            | 45        | 459            | 6550                  | 25.4               |
|                                | 1595                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                | 50        | 413            | 7320                  | 28.2               |
|                                | 1170                                          | 6      | 1570                         | 32.1                                                            |          | 2480                                 | 257.6           | 6                                  | 276                   | 3.5            | 55        | 372            | 8100                  | 31.1               |
|                                | 1880                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                | 60        | 335            | 8560                  | 33.7               |
|                                | 1350                                          | 7      | 1700                         | 34.0                                                            |          | 2620                                 | 260.5           | 7                                  | 296                   | 3.6            | 65        | 302            | 9580                  | 36.2               |
|                                | 2170                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                | 70        | 271            | 10300                 | 38.6               |
|                                | 1530                                          | 8      | 2050                         | 35.5                                                            |          | 2800                                 | 263.5           | 8                                  | 300                   | 4.0            | 75        | 243            | 11100                 | 40.7               |
|                                | 2455                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                | 80        | 218            | 11720                 | 42.9               |
|                                | 1710                                          | 9      | 2290                         | 36.6                                                            |          | 3050                                 | 266.1           | 9                                  | 304                   | 4.1            | 85        | 195            | 12480                 | 45.2               |
|                                | 2740                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                | 90        | 174            | 13200                 | 47.3               |
|                                | 1690                                          | 10     | 2540                         | 38.3                                                            |          | 3170                                 | 269.5           | 10                                 | 326                   | 4.2            | 95        | 145            | 13900                 | 49.4               |
|                                | 3020                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                | 100       | 137            | 14700                 | 51.5               |
|                                | 2070                                          | 11     | 2700                         | 38.9                                                            |          | 3310                                 | 274.1           | 11                                 | 338                   | 4.6            | 105       | 170            | 15510                 | 53.6               |
|                                | 3300                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                |           |                |                       |                    |
|                                | 2260                                          | 12     | 2920                         | 41.0                                                            |          | 3400                                 | 278.3           | 12                                 | 330                   | 4.6            |           |                |                       |                    |
|                                | 3580                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                |           |                |                       |                    |
|                                | 2430                                          | 13     | 3280                         | 41.5                                                            |          | 3630                                 | 281.2           | 13                                 | 312                   | 5.3            |           |                |                       |                    |
|                                | 3885                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                |           |                |                       |                    |
|                                | 3010                                          | 14     | 3560                         | 41.6                                                            |          | 3950                                 | 283.2           | 14                                 | 299                   | 4.8            |           |                |                       |                    |
|                                | 4130                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                |           |                |                       |                    |
|                                | 2790                                          | 15     | 3800                         | 42.2                                                            |          | 4200                                 | 285.4           | 15                                 | 288                   | 4.3            |           |                |                       |                    |
|                                | 4495                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                |           |                |                       |                    |
|                                | 2970                                          | 16     | 4070                         | 41.3                                                            |          | 4500                                 | 283.3           | 16                                 | 287                   | 5.0            |           |                |                       |                    |
|                                | 4675                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                |           |                |                       |                    |
|                                | 3150                                          | 17     | 4370                         | 41.5                                                            |          | 4800                                 | 285.3           | 17                                 | 285                   | 4.1            |           |                |                       |                    |
|                                | 4915                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                |           |                |                       |                    |
|                                | 3330                                          | 18     | 4620                         | 41.1                                                            |          | 5000                                 | 284.0           | 18                                 | 295                   | 2.9            |           |                |                       |                    |
|                                | 5215                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                |           |                |                       |                    |
|                                | 3510                                          | 19     | 4870                         | 41.5                                                            |          | 5100                                 | 284.8           | 19                                 | 293                   | 4.0            |           |                |                       |                    |
|                                | 5455                                          |        |                              |                                                                 |          |                                      |                 |                                    |                       |                |           |                |                       |                    |

- \* Sample the following:
1. Name of Station
  2. Lat. and long.
  3. Local Standard time, \_\_\_\_\_ th meridian
  4. El. of Station
  5. Method of obs., e.g., rawinsonde, rawin, pibal
  6. Type of equip., e.g., WBR-57, GMD-1A, GMD-1, SCR-65B, theodolite



Reason for termination

[illegible]

Verifier.

|      |       |    |       |      |      |       |    |     |     |
|------|-------|----|-------|------|------|-------|----|-----|-----|
| 3697 | 5755  | 20 | 5160  | 42.0 | 5500 | 274.1 | 20 | 274 | 5.9 |
| 3870 | 5825  | 21 | 5380  | 42.0 | 5800 | 282.8 | 21 | 265 | 6.0 |
| 4050 | 6295  | 22 | 5660  | 42.0 | 6200 | 292.0 | 22 | 265 | 6.0 |
| 4230 | 6565  | 23 | 5930  | 41.5 | 6500 | 291.0 | 23 | 253 | 6.0 |
| 4410 | 6835  | 24 | 6200  | 41.2 | 6800 | 290.4 | 24 | 231 | 7.0 |
| 4590 | 7105  | 25 | 6500  | 42.2 | 7000 | 293.5 | 25 | 216 | 8.0 |
| 4770 | 7375  | 26 | 6780  | 42.6 | 7100 | 274.0 | 26 | 241 | 6.0 |
| 4950 | 7645  | 27 | 7040  | 42.8 | 7600 | 272.5 | 27 |     |     |
| 5130 | 7915  | 28 | 7300  | 42.7 |      | 272.6 | 28 | 218 | 5.1 |
| 5310 | 8185  | 29 | 7580  | 43.2 | 8000 | 268.8 | 29 |     |     |
| 5490 | 8455  | 30 |       | 43.5 |      | 267.6 | 30 | 217 | 5.0 |
| 5670 | 8730  | 31 | 8180  | 44.1 | 8400 | 265.1 | 31 |     |     |
| 5850 | 9005  | 32 |       | 44.3 |      | 264.3 | 32 | 218 | 6.0 |
| 6030 | 9285  | 33 | 8860  | 44.3 | 8900 | 262.3 | 33 |     |     |
| 6210 | 9565  | 34 |       | 44.1 |      | 262.8 | 34 | 222 | 6.0 |
| 6390 | 9850  | 35 | 9480  | 44.6 | 9500 | 255.5 | 35 |     |     |
| 6570 | 10135 | 36 |       | 45.7 |      | 258.6 | 36 | 172 | 3.0 |
| 6750 | 10420 | 37 | 10060 | 46.7 | 9500 | 257.5 | 37 |     |     |
| 6930 | 10710 | 38 |       | 47.5 |      | 256.5 | 38 | 121 | 6.0 |
| 7110 | 11005 | 39 | 10680 | 48.6 | 9000 | 254.9 | 39 |     |     |
| 7290 | 11300 | 40 |       | 50.3 |      | 253.7 | 40 | 131 | 4.0 |
| 7470 | 11595 | 41 | 11280 | 51.9 | 8800 | 252.0 | 41 |     |     |
| 7650 | 11890 | 42 |       | 53.4 |      | 250.7 | 42 | 106 | 7.5 |
| 7830 | 12185 | 43 | 11970 | 55.5 | 8000 | 248.4 | 43 |     |     |
| 8010 | 12480 | 44 |       | 57.4 |      | 245.2 | 44 | 131 | 7.0 |
| 8190 | 12775 | 45 | 12580 | 58.8 | 7600 | 241.4 | 45 |     |     |
| 8370 | 13075 | 46 |       | 59.5 |      | 239.5 | 46 | 141 | 4.5 |
| 8550 | 13375 | 47 | 13180 | 59.8 | 7700 | 237.5 | 47 |     |     |
| 8730 | 13675 | 48 | 13500 | 60.7 | 7650 | 235.5 | 48 | 123 | 5.0 |
| 8910 | 13975 | 49 | 13830 | 61.7 | 7400 | 233.3 | 49 |     |     |
| 9090 | 14275 | 50 | 14160 | 61.5 | 7700 | 232.9 | 50 | 195 | 4.6 |

| Coded Data for Transmission |       |       |                     |                     |                     |       |                     |       |                     |
|-----------------------------|-------|-------|---------------------|---------------------|---------------------|-------|---------------------|-------|---------------------|
| 5 <sup>0</sup> 2606         | 12961 | 2816  | 2 <sup>2</sup> 2717 | 2514                | 4 <sup>2</sup> 2413 | 2707  | 6 <sup>2</sup> 3008 | 3008  | 8 <sup>2</sup> 3308 |
| 3309                        | 03309 | 23009 | 4 <sup>2</sup> 2909 | 6 <sup>2</sup> 2908 | 8 <sup>2</sup> 612  | 02413 | 032311              | 52210 | 02212               |
| 51510                       | 01510 | 51610 | 12310               | 12309               | P                   |       |                     |       |                     |
| 2012                        | 72606 | X1M2  | P                   |                     |                     |       |                     |       |                     |

|     |     |       |      |
|-----|-----|-------|------|
| 110 | 104 |       |      |
| 115 | 87  |       |      |
| 120 | 74  |       |      |
| 125 | 60  |       |      |
| 130 | 44  |       |      |
| 135 | 27  |       |      |
| 140 | 14  |       |      |
|     |     |       |      |
|     |     |       |      |
|     |     |       |      |
|     |     |       |      |
|     |     |       |      |
| 140 | 10  | 14080 | 55.5 |

### Punched Card Data

| Altitude #           | Direction<br>(degrees) | Speed<br>(m.p.s.) | Card<br>columns | Altitude #           | Direction<br>(degrees) | Speed |
|----------------------|------------------------|-------------------|-----------------|----------------------|------------------------|-------|
| Card No. 1           |                        |                   | 15              | Card No. 2           |                        |       |
| Type of<br>equipment |                        |                   | 16              | Type of<br>equipment |                        |       |
| sfc.                 | 270                    | 3                 | 17-21           | 7                    | 230                    | 6     |
| 150 M.               | 272                    | 6                 | 22-26           | 8                    | 246                    | 6     |
| 300 M.               | 279                    | 8                 | 27-31           | 9                    | 253                    | 6     |
| 0.5                  | 272                    | 9                 | 32-36           | 10                   | 148                    | 4     |
| 1.0                  | 245                    | 7                 | 37-41           | 11                   | 133                    | 4     |
| 1.5                  | 270                    | 4                 | 42-46           | 12                   | 124                    | 6     |
| 2.0                  | 300                    | 4                 | 47-51           | 13                   | 153                    | 5     |
| 2.5                  | 335                    | 4                 | 52-56           | 14                   | 176                    | 5     |
| 3                    | 330                    | 5                 | 57-61           | 15                   | 228                    | 6     |
| 4                    | 286                    | 5                 | 62-66           | 16                   |                        |       |
| 5                    | 281                    | 5                 | 67-71           | 17                   |                        |       |
| 6                    | 142                    | 7                 | 72-76           | 18                   |                        |       |

Maximum Wind Speed Data

|                                                             |  |  |
|-------------------------------------------------------------|--|--|
| Min. alt. wind speed<br>45 m.p.s. or more (m.)              |  |  |
| Alt. of maximum<br>wind speed (m.)                          |  |  |
| Dir. (degrees) and speed<br>(m.p.s.) of Max. wind           |  |  |
| Max. alt. wind speed<br>45 m.p.s. or more (m.)              |  |  |
| Enter check if additional levels<br>appear on reverse side. |  |  |



18 Dec 64  
LYNN, Mass

9/19/64

~~████████████████████~~  
Lynn, Mass.

Dear Major Jacks,

I have received the  
evaluation of the UFO report which  
was submitted by me, and forward-  
ed to Dayton, Ohio, by Major Geo-  
N. Kent of Hanscom AFB. If this  
evaluation is a joke, I'll go along  
with it for laughs, but if it  
represents a serious belief in  
this matter, then there is really  
great cause for concern over the  
intelligence of those responsible  
for such an evaluation. I consider  
this reply a gross affront to the  
intelligence of those involved in  
this sighting. You know better  
than to believe this, and so do I.  
over

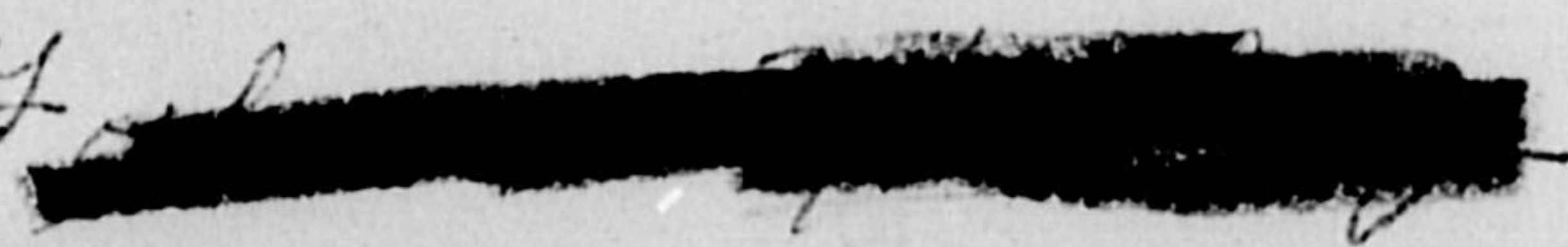


2

As you may be aware, I have been involved in several other U.F.O. cases among which, was a daylight sighting wherein a disc shaped object stopped dead in the sky directly overhead, then reversed. This case was discussed by myself and a person who held the position of Director of Flight Testing on Project SAGE, so I am already aware that these so-called U.F.O. are actually alien spacecraft from elsewhere.

I felt that since several of these craft have appeared and maneuvered over my home over a period of time, that a pattern of interest had perhaps been shown to exist on the part of the occupants of said craft. If so, I feel that some good use could be made of this fact, if it is a fact.

Sincerely,





1964  
[REDACTED]  
Lynn, Mass.  
July 22, 1964

Dear Sir,

On Saturday night at 10.55 P.M. a U.F.O. maneuvered over Lynn, Mass. This object ~~which~~ resembled a star of the same magnitude as the Echo II satellite. My wife and I watched this object as it traveled South-Southwest. It moved at the same apparent speed as Echo 1 or 2 and I thought that it was either one of these. As we watched this object, it slowed down and stopped, then moved backward until it arrived at a point directly overhead, where it stopped again. It remained motionless this time, and could easily have been mistaken for a star, as this is what it looked like to the naked eye. We watch



object in it, so I used my binoculars which my wife had brought out. This time the object continued to move steadily away to the E.N.E. and I watched it until it faded from view.

I was called on the telephone at 10.55 or thereabouts, by my sister who lives about a quarter mile from my home, and she told me she and her husband had watched this object maneuver in the sky for 10 minutes before she called me to go out and see it.

This same object had accelerated very rapidly over her place becoming very bright, lighting up the immediate area and giving the sky a dark blue color. The object also stopped and reversed while they observed it prior to calling me. When my wife and I were observing this object, it stopped and hovered directly over our yard where

<sup>2</sup> I set this object for a couple of minutes and it remained motionless. I told my wife to keep her eyes on it, while I went in to bring out my telescope, a 4" reflector type.

I arrived outside with it and set it up, the object still remaining motionless. As the object was directly overhead, the telescope was pointed straight up, making it very difficult to get my eye to the eyepiece, so I suggest I move to the back of the yard, so I could get an angle shot at it. We walked to the rear of the property and I again set the scope up. This gave me an angle view so I could locate the object in the finder scope. As I was focusing it in the eyepiece ( $\frac{3}{4}$ ") the star-like object again began to move, though this time to the E.N.E. As my scope has a narrow field, it is very difficult if not impossible to locate a moving



I had been to Hayden Planetarium on Tuesday, July 14, 1964, as I had an appointment to talk to Mr. Walter N. Webb, director of the Planetarium. The purpose of this appointment had been to discuss a lunar observation made by myself and a friend. At this time Mr. Webb brought up the subject of the U.F.O. and mentioned a recent reported sighting over the Highlands area of Lynn, in which the object made a near landing. He also said he was interested in getting recent sightings.

Four days after this request is pretty quick service.

I have sent this report to Mr. Webb, and have asked for a meeting with him, to fully discuss the U.F.O. situation.

His policy is to tell the truth and let the chips fall where they may. as Before