DECK 117

NAVY MARINE SURFACE OBSERVATIONS

This Reference Manual was prepared for use with Deck 117 punched from U. S. Navy hourly ship surface observations, recorded on WBNM 11A and 11B. The use of this weather reporting form was initiated June 1951, and is still being used as of this date 9/1/1957.

Mention should be made of the fact that fixed weather ship three-hourly surface observations were initiated on this form in January 1952, and is still in use.

This Reference Manual is an extension of Deck 110 (IBM Card No. 78797).

GENERAL PRACTICES

1. Observations taken while a ship was in or near port were not punched.

2. When an observation was missing or the ship failed to report for the entire month, no identification cards were punched.

3. Columns for which data were missing, or obviously in error, were left blank.

4. Effective 9/1/56, ceiling and height of high clouds were reported as 888, when the ceiling and/or height of the cloud was a cirro type and the height was estimated.

WEATHER ELEMENTS PUNCHED

When available, the weather elements shown in the heading of IBM Card No. 812407 (small WBNM 11) shown below was punched.
### Table 1

<table>
<thead>
<tr>
<th>Degree of Globe (Col. 1)</th>
<th>North Latitude</th>
<th>South Latitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0° N. to 0° S.</td>
<td>0° S. to 0° S.</td>
</tr>
<tr>
<td>1</td>
<td>90° N. to 180° W.</td>
<td>180° W. to 90° W.</td>
</tr>
<tr>
<td>2</td>
<td>180° W. to 90° W.</td>
<td>90° W. to 0° W.</td>
</tr>
<tr>
<td>3</td>
<td>0° W. to 90° W.</td>
<td>90° W. to 0° E.</td>
</tr>
</tbody>
</table>

### Table 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Symbol</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>Clear or no other sky condition.</td>
</tr>
<tr>
<td>1</td>
<td>☁️</td>
<td>Thin scattered, 1/10 thru 5/10 cloudiness.</td>
</tr>
<tr>
<td>2</td>
<td>☁️</td>
<td>Scattered, 1/10 thru 5/10 cloudiness.</td>
</tr>
<tr>
<td>3</td>
<td>☁️</td>
<td>Thick scattered, 1/10 thru 5/10 cloudiness.</td>
</tr>
<tr>
<td>4</td>
<td>☁️</td>
<td>Thin broken, 5/10 thru 9/10 cloudiness.</td>
</tr>
<tr>
<td>5</td>
<td>☁️</td>
<td>Mod. broken, 5/10 thru 9/10 cloudiness.</td>
</tr>
<tr>
<td>6</td>
<td>☁️</td>
<td>Thick broken, 5/10 thru 9/10 cloudiness.</td>
</tr>
<tr>
<td>7</td>
<td>☁️</td>
<td>Very thick broken, 5/10 thru 9/10 cloudiness.</td>
</tr>
<tr>
<td>8</td>
<td>☁️</td>
<td>Thick overcast, 10/10 cloudiness.</td>
</tr>
<tr>
<td>9</td>
<td>☁️</td>
<td>Thick overcast, 10/10 cloudiness.</td>
</tr>
</tbody>
</table>

**Examples:**

- (1) 0000 Clear
- (2) 0100 Thin or partial obscuration alone.
- (3) x000 Thick obscured alone.
- (4) 1200 Blank (X)

### Table 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Cloudless, 0 to 3/8 nautical mile in 1/8 mile increments.</td>
</tr>
<tr>
<td>001</td>
<td>Cloudless, 3/8 thru 7/8 nautical mile in 1/8 mile increments.</td>
</tr>
<tr>
<td>002</td>
<td>Cloudless, 7/8 thru 11/8 nautical mile in 1/8 mile increments.</td>
</tr>
<tr>
<td>003</td>
<td>Cloudless, 11/8 thru 15/8 nautical mile in 1 mile increments.</td>
</tr>
<tr>
<td>004</td>
<td>Cloudless, 15/8 thru 19/8 nautical mile in 5 mile increments.</td>
</tr>
</tbody>
</table>

### Table 4

| Present Weather (Cols. 28-35) |

#### Col. 28

- No thunderstorm or tornado.
- (T) Thunder.
- (T) Heavy thunder.
- (T) Thunderstorm or waterspout.

#### Col. 29

- No precipitation.
- (E) Light rain.
- (E) Heavy rain.
- (E) Light drizzle.
- (E) Heavy drizzle.

#### Col. 30

- No obstruction to vision listed below.
- (E) Light eel.
- (E) Heavy eel.
- (E) Light rain.
- (E) Heavy rain.

#### Col. 31

- No obstruction to vision listed below.
- (F) Fog.
- (F) Smoke.
- (F) Sea fog.
- (F) Blowing dust.

### Table 5

| Wind Direction (Cols. 43-44) |

- Calm
- NE
- NESE
- E
- ESE
- S
- SSE
- SW
- W
- NW
- NWSE

### Table 6

| Cloud Type (Cols. 51, 56, 62, 64) |

- Obscuration phenomena other than fog.
- No fog or less than 1/10.
- Fog.
- Stratus.
- Stratostratus.
- Cumulus.
- Cumulonimbus.
- Altostratus.
- Altocumulus.
- Cirrus.
- Cirrostratus.