SUMMARY of the August 1997 WEATHER ON THE MONTEREY PENINSULA

General: August 1997 temperatures were record/near record warm while the number of fog days established a record low. August rainfall was well above normal while wind speeds were below seasonal values, on the average.

Temperature: Plants and people thrived on August 1997 temperatures -- warm by day, very mild by night, nearly without exception!

The 72.4F average high, 3.0F above the 46-year average, is only topped by 73.5F in August 1993 and 72.9F in 1983. 23 August days were above normal; the 5th, with 81F, was 12 above normal. The average night-time minimum temperature anomaly was even more significant. 56.2F (3.4 above normal) is an August record for the 46 years! There were 28 nights with above normal minimums!! 5 August, with 52F (low for the month), was the only day with a below-normal reading. Minimums for the remaining two nights were exactly normal. August 1983 is the closest competitor to August 1997, with 55.8oF as the average minimum.

The overall August 1997 average, 64.3F (3.2F above normal), ties the 1993 August average, but both are a mere 0.1F below the standing warm record of 64.4F in August 1983. This past month is the area's ninth consecutive month with above normal temperatures.

The month of August is not normally the warmest month of the year, September holds that honor. However, August 1997, along with August 1993 and October 1992, is the warmest month since 67.7F in September 1984, which is the warmest month on record in at least 46 years, based on National Weather Service Climate Station data.

The warm temperatures and generally light winds relate closely to the continuation of anomalously warmer ocean temperatures west of the Central Coast. Near-shore sea-surface temperatures in the Bay are running 61-63F (or higher), and an ocean buoy, located about 25 miles northwest of the Peninsula outside Monterey Bay, is reporting temperatures near 65F at month's end. The sea-surface temperature anomaly (i.e., relative to normal) in Central California coastal waters has been running 3F to 6F above normal, increasing toward the end of August.

Several night-time minimums equaled or topped the record, as follows:

<table>
<thead>
<tr>
<th>August date</th>
<th>Prior Record</th>
<th>New record</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>57F/1992*</td>
<td>tie</td>
</tr>
<tr>
<td>9</td>
<td>57F/1990</td>
<td>59F</td>
</tr>
<tr>
<td>10</td>
<td>58F/1990</td>
<td>59F</td>
</tr>
<tr>
<td>11</td>
<td>57F/1984</td>
<td>58F</td>
</tr>
<tr>
<td>12</td>
<td>57F/1993</td>
<td>tie</td>
</tr>
<tr>
<td>24</td>
<td>60F/1959</td>
<td>62F</td>
</tr>
<tr>
<td>27</td>
<td>58F/1961</td>
<td>tie</td>
</tr>
</tbody>
</table>

*and earlier year(s)

Precipitation: The August 1997 rainfall was well above average, thanks to the moisture laden remnants of an eastern North Pacific tropical storm that made its way north to affect almost all of California. 0.23" fell in a 12-h period late 19th into 20 August. The amount is significant enough to qualify as the sixth highest August rainfall in at least 46 years. South of Monterey, Big Sur recorded over an inch, and as much as 2 inches or more was measured in the higher Santa Lucia mountains in southern Monterey County.

Normal rain-year rainfall (from 1 Jul through 31 August) is 0.18". Thus far, 0.26" has fallen.
Wind: Except for two windy afternoons, 8 and 9 August 1997, winds were generally below seasonal values. The airport average hourly wind, 6.2 miles per hour (mph) is 1.2 mph below the average for the last ten August's (this year included).

Fog: Nine of August's twelve fog-days occurred in the first half of August. Only twelve days with fog, vs. 22 expected, is a record August low for the last 34 years of adequate fog records. Closest competitor is 13 in 1987, while on the high side there were 29 fog-days in the August's of 1986 and 1994.

90-Day Temperature and Precipitation Outlook for the Central Coast:

The National Weather Service 90-day outlook for September through November indicates above normal temperatures will continue, especially toward the latter half of the three-month period, September-November. The rainfall outlook is for near normal rainfall, with less relative to normal north and more relative to normal south of the Central Coast -- statistically typical of an El Nino rainfall pattern. Following are normals for the National Weather Service Climate Station (46-year data base).

<table>
<thead>
<tr>
<th>Rainfall</th>
<th>Normal Max/Min Temps (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>0.29&quot;</td>
</tr>
<tr>
<td>October</td>
<td>0.78&quot;</td>
</tr>
<tr>
<td>November</td>
<td>2.27&quot;</td>
</tr>
</tbody>
</table>

Comparative Weather Data for Stations on/near the Monterey Peninsula and Salinas August 1997

Following are comparative figures from seven local observation sites:
1) the National Weather Service Climate Station (NWSCS), (elevation 385') located in the western hilly section of Monterey; 2) the National Weather Service Forecast Office (NWSFO) site (elevation 122'), located in the flat area of eastern Monterey, on the NPS Annex grounds adjacent to Airport; 3) the Naval Postgraduate School Campus (NPS), Monterey; 4) the Ft. Ord site (Ft. Ord (NPS)) (elevation 167') located just northwest of the Marina Municipal Airport (formerly Fritschie Field). This is the site of the Naval Postgraduate School's wind profiler (managed by Department of Meteorology); 5) Site SE end of Marina, located about 2 miles ESE of Monterey Bay (elevation 80'); 6) Carmel Valley site (CV) near Village (elevation 500'); south facing slope; 7) SW Salinas (SAL) vicinity of W. Blanco Rd. within 1 mile of S. Main St.

<table>
<thead>
<tr>
<th>Location</th>
<th>Temperature (°F)</th>
<th>Precipitation (inches)</th>
<th>Wind (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg. Highest</td>
<td>Avg. Lowest</td>
<td>Max</td>
</tr>
<tr>
<td></td>
<td>Max.</td>
<td>Min.</td>
<td></td>
</tr>
<tr>
<td>1) NWSCS:</td>
<td>72.4</td>
<td>56.2</td>
<td>a0.23</td>
</tr>
<tr>
<td></td>
<td>81</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>2) NWSFO:</td>
<td>74.8</td>
<td>57.7</td>
<td>b0.45</td>
</tr>
<tr>
<td>3) NPS:</td>
<td>72.2</td>
<td>56.7</td>
<td>c0.12</td>
</tr>
<tr>
<td>4) Ft. Ord (NPS):</td>
<td>70.2</td>
<td>53.7</td>
<td>d0.04</td>
</tr>
<tr>
<td>5) Marina:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
observations for precipitation:
a, e = 6 PM     b, d = midnight c = 4 PM  f, g = 8 AM
(NOTE: for f, g: 24-h rainfall measured 8 AM, first day of the month counts for previous month)
* = average hourly Airport winds in period 6 AM to 11 PM.
@ = 46-year average      # = 39-year average
% = 10-year average      & = 14-year average