JULY 1991: The intense heat which has gripped the Washington area since May continued through July. There were 19 days with 90°F or greater readings, including 11 days at or above 95°F, at DCA. On two days (21st and 23rd) the mercury topped the century mark at DCA. Through July, there has been a total of 42 days with highs at 90°F or above, including 21 days with readings of 95°F or higher, recorded at DCA. The all-time record for number of days at or above 90°F in Washington is 67 set in 1980. The most extreme period of heat during the month, occurred from the 17th through the 23rd when seven consecutive days of 95°F or greater readings were recorded at DCA, the most since 1987 when eight eight successive days hit 95°F and above. By the 25th, the jet stream shifted to a moist southerly flow, resulting in more moderate temperatures through the end of the month.

Rainfall was extremely variable, even for a month which averages six thunderstorms. The most dramatic thunderstorms occurred during the early morning hours of the 25th as a line of stationary thunderstorms over Fairfax and Arlington counties and northwest Washington resulted in up to 7 inches of rain as well as flash flooding in Rock Creek Park. Even in areas with little rain from these storms, residents were awakened in the early morning hours by booming thunder and intense cloud to ground lightning. Heavy showers surrounding a stationary front across the region provided welcome rains on the 26th and 27th and again on the 29th with most locations totalling 1"-3" of rain while over 5" fell on parts of Charles County. Severe thunderstorms also struck parts of Montgomery County with 1/4" hail and 1.5" of rain on the 7th. Despite the scattered heavy rains, four of the five airports recorded below normal precipitation during July (see table). In addition, the hot and dry conditions during the last few months (April-July) have produced severe to extreme drought conditions across parts of northern Virginia and Maryland.

JULY 1991 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

| Station | | Temp | erature | s (°F) | | Extreme/Day | | Precipitation (In) | | |
|-------------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|--------------------|-------------|--------------|
| Location | AVMX | <u>AvMn</u> | <u>AvgT</u> | <u>NmIT</u> | <u>DepNm</u> | <u>MaxT</u> | <u>MinT</u> | <u>Total</u> | <u>Norm</u> | <u>DepNm</u> |
| National (DCA) | 90.6 | 72.2 | 81.4 | 78.9 | +2.5 | 101/21* | 65/28 | 3.76 | 3.88 | -0.12 |
| Baltimore (BWI) | 89.5 | 69.5 | 79.5 | 76.8 | +2.7 | 102/23 | 60/28 | 1.76 | 3.89 | -2.13 |
| Dulles (IAD) | 88.7 | 67.1 | 77.9 | 75.5 | +2.4 | 101/21 | 57/16 | 2.65 | 3.75 | -1.10 |
| Ft. Belvoir (DAA) | 90.7 | 68.9 | 79.8 | 76 | +4 | 103/21 | 61/16 | 4.70 | 3.8 | +0.9 |
| Andrews AFB (ADW | 87.3 | 68.4 | 77.8 | 77 | +1 | 100/21* | 60/16 | 3.53 | 4.3 | -0.8 |

Other dates of occurrence: * July 23rd:

LOOKING AHEAD TO AUGUST: Can the record be broken?

Washington's (DCA) longest period of above normal monthly temperatures is eleven, recorded from June 1973 through April 1974. Warmer than usual conditions during the month of August would tie this record. With this in mind, here is a list of the last ten August's average monthly temperatures and the corresponding departures from normal (Normal: 77.6°F):

| <u>Year</u> | Average Temperature(°F) | Departure from Normal(°F) |
|-------------|-------------------------|---------------------------|
| 1991 | ? | ? |
| 1990 | 76.5 | -1.1 |
| 1989 | 77.1 | -0.5 |
| 1988 | 80.7 | +3.1 |
| 1987 | 78.7 | +1.1 |
| 1986 | 74.6 | -3.0 |
| 1985 | 76.7 | -0.9 |
| 1984 | 77.8 | +0.2 |
| 1983 | 81.0 | +3.4 |
| 1982 | 75.4 | -2.2 |
| 1981 | 77.0 | -0.6 |