JULY 1996: A persistent upper-level trough of low pressure located over the East brought repeated intrusions of cool Canadian air, yielding an unusually cool but comfortable July across the Washington/Baltimore area. The three major airports reported the coolest July since 1984. There were very few days with 90°F+ readings (only 9 at DCA – the least since 1984) and no prolonged periods of heat and humidity. Monthly temperature departures were more than 2°F below normal across the area, and the monthly averages were only a few tenths of a degree above those recorded in June. There were several days with cool and comfortable conditions, including Independence Day when highs remained in the upper 70's and lows dipped into the 50's in many of the suburbs. There were 21 days with below normal temperatures at DCA, including the last 14 days of the month.

Precipitation was frequent and heavy across most of the area with four of the five airports recording more than 5 inches of rain. BWI observed the third wettest July on record and the wettest such month since 1960. There were numerous days with measurable precipitation (13 at DCA), but two events that stood out. These included the passage of Tropical Storm Bertha, and a line of severe thunderstorms that spawned an F3 tornado (winds up to 206 mph) in Carroll County, MD and two weaker tornadoes in Washington and Frederick Counties, MD. Hurricane Bertha made landfall in the U.S. just east of Wilmington, NC about 5 p.m. EDT on the 12th with maximum sustained winds estimated around 105 mph, but one island just off the North Carolina coast unofficially reported a wind gust of 144 mph. Bertha began to lose its intensity after making landfall and moved rapidly north-northeastward up the Eastern Seaboard. By the time Bertha moved through the Washington/Baltimore area it had been downgraded to a Tropical Storm, but still provided strong wind gusts and heavy rain on the 12th and 13th. Southeastern North Carolina was most severely affected by the storm, particularly along the coast just east of Wilmington, where rainfall totals of 4 to 6 inches and a storm surge of 4 to 6 feet were reported (see cover graphic). Moderate wind damage and lowland flooding was widespread across much of eastern North Carolina, including the Outer Banks. Heavy rains and windy conditions accompanied the storm as it quickly moved through the local area, causing some brief, localized flooding. The other significant event during July was a strong tornado that touched down in Gambers, MD (Carroll County), west of Baltimore. The twister generated powerful winds that damaged and/or destroyed over 60 homes. It was the second tornado of F2 or F3 strength in as many months, the other in Centreville. VA on June 24th. Monthly precipitation totals of 8-11 inches were observed north and west of Washington and across parts of the western shore of the Chesapeake Bay. For the January-July period, some areas have already recorded over 30" of precipitation, including both BWI (33.64") and IAD (33.28"), with both locations about 10 inches above normal for the seven month period.

JULY 1996 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

Station		Temp	erature	s (°F)		Extrem	e/Day		Precipita	ation (In)	
Location	<u>AvMx</u>	<u>AvMn</u>	<u>AvgT</u>	<u>NmiT</u>	<u>DepNm</u>	MaxT	<u>MinT</u>	<u>Total</u>	Norm	<u>DepNm</u>	Yr-Date
National (DCA)	85.5	69.7	77.6	80.0	-2.4	94/9	61/4	5.60	3.80	+1.80	27.90
Baltimore (BWI)	83.9	64.6	74.3	77.0	-2.7	92/8	53/11	7.38	3.69	+3.69	33.64
Dulles (IAD)	82.5	63.3	72.9	75.6	-2.7	90/8*	50/5	5.89	3.49	+1.60	33.28
Ft. Belvoir (DAA)	86.3	67.3	76.8	N/A	N/A	95/8	56/5	7.51	3.8	+3.7	36.38
Andrew AFB (ADW) 84.6	67.2	75.9	N/A	N/A	93/9	<u>55/4</u>	3.97	4.3	-0.3	28.38

Other occurrences: * July 17th.

LOOKING AHEAD TO AUGUST: Checking out the 90's.

Thus far, the summer of 1996 has produced relatively few days with 90°F+ readings in Washington. The total for the June–July period this year was only 15 at DCA (6 in June and 9 in July) the least such days (tied with 1989) since 1984. Now the question arises whether such a small number of 90°F+ readings in July necessarily means a similar total in August. Below is a list of the last ten Julys with less than 10 days with readings at or above 90°F and the corresponding August total.

<u>Year</u>	Total July Days w/ 90°F+ Readings	Total August Days w/ 90°F+ Readings
1989	9	7
1984	4	4
1979	8	12
1976	7	8
1971	9	6
1967	7	6
1962	6	6
1960	5	9
1959	6	16
1956	5	5