AUGUST 1996: The final month of the meteorological summer commenced in the midst of a streak of 14 consecutive days with subnormal temperatures in Washington. These conditions persisted for nearly three more weeks, yielding an abnormally cool 31 consecutive days in what is normally the hottest time of the year in the local area. Even more incredible may be the 35 consecutive days during the peak of summer (July 18-August 21) when the mercury failed to reach 90°F at DCA. This streak was just 6 days shy of the all-time summer record for such days (41; June 1-July 11, 1979). Highs of 90°F or above were observed on only two days, the fewest such occurrences in August (tied with 4 other years) since 1927. Once again, highs during the month failed to reach 95°F. In addition, there were numerous cool and comfortable evenings as lows mostly remained below 70°F (and below normal) and even dropped into the upper fifties in many suburban areas on the 11th. Monthly temperature departures of -1.5°F and lower were reported at the three major airports.

Unlike July, precipitation totals across parts of the local area, including 3 of the 5 airports, were more than an inch below normal. Only BWI and IAD recorded slightly above normal amounts. Most of the precipitation fell during the first half of the month and mainly on the 12th-13th as a coastal storm dumped up to 2.5" at IAD and nearly 2 inches at DCA, BWI, and DAA. Thunderstorms on the 16th and again on the 27th produced significant rainfall and damaging wind gusts across portions of Prince Georges and Howard counties, MD while other

areas recorded little or no precipitation. After the 16th, DCA recorded no measurable precipitation.

AUGUST 1996 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

Station	Temperatures (°F)				Extreme/Day			Precipitation (In)		
Location	AvMx	AvMn	AvgT	NmlT	<u>DepNm</u>	MaxT	<u>Mìn</u> T	Total	Norm	<u>DepNm</u>
National (DCA)	85.0	68.0	76.5	78.5	-2.0	93/23	63/14	2.63	3.91	-1.28
Baltimore (BWI)	84.0	62.2	73.1	75.6	- 2.5	92/23	56/11	4.17	3.92	+0.25
Dulles (IAD)	83.2	62.2	72.7	74.2	-1.5	91/23	56/31	4.17	3.94	+0.23
Ft. Belvoir (DAA)	87.1	65.6	76.4	М	М	95/23	61/11*	2.93	4.4	-1.5
Andrew AFB (ADW) 82.1	63.0	72.6	75	–2	90/22#	57/31	3.28	4.4	-1.1

Other occurrences: * August 31st; # August 23rd.

SUMMER (June-August) 1996: The summer of 1996 was highlighted by below normal temperatures and several severe weather events. The summer got off to a warm start in June (fifth warmest on record at DCA, 7th overall in Washington) with monthly departures of almost +2°F at both DCA (only the second warmer than normal month since November 1995) and IAD. The warm conditions combined with high humidity created oppressive conditions at times. In July, a persistent upper-level trough of low pressure located over the East allowed repeated intrusions of cool Canadian air to infiltrate the region, providing abnormally cool but comfortable weather locally. In fact, it was the coolest July since 1984 at DCA, BWI and IAD. There were only 9 July days at or above 90°F at DCA and no prolonged periods of heat. The final two weeks of the month featured subnormal temperatures which continued through August 18th, a stretch of 31 consecutive days with cooler than normal conditions. Like most of the summer, there were very few August days (2 at DCA) with 90°F+ readings and no readings at or above 95°F. Overall there were only 17 summer days with 90°F+ highs (fewest since 1972) and no days with 95°F+ readings (the first such occurrence since 1971) at DCA.

Seasonal precipitation was above normal across most of the Washington/Baltimore area, with surpluses over 4 inches recorded at BWI. The season began with above normal precipitation at most locations during June, with monthly totals between 6 and 12 inches reported across parts of the northern and western suburbs. On the evening of the 11th, a slow-moving line of thunderstorms generated torrential rains (up to 5 inches), causing localized flooding in portions of Loudoun County, VA and Montgomery County, MD. Another round of strong thunderstorms battered portions of the northern and western suburbs on the 18th and 19th with up to seven inches observed in Frederick. Washington and Carroll counties in Maryland and up to 13 inches fell in Gettysburg, PA. On the 24th, a "supercell" thunderstorm complex, similar to those in the Great Plains, moved through the local area, spawning a tornado (F2) in Centreville, VA, resulting in considerable property damage. After dissipating briefly, a weaker tornado touched down again in Prince Georges County, MD, causing additional damage. Precipitation was frequent in July with monthly totals over 5 inches common across much of the area. In fact, BWI recorded its third wettest July on record with 7.38" observed at the airport. The severe weather continued as a downgraded Tropical Storm Bertha moved just to the east of Washington and Baltimore on the 12th-13th. The storm generated nearly two inches of rain and strong wind gusts across the area. Severe thunderstorms on the 19th, spawned a severe tornado (F3-winds up to 206 mph) in Carroll County, MD (Gambers), destroying and/or damaging dozens of homes. Precipitation was less frequent in August and most fell during the first half of the month. A few locations received slightly above normal amounts, but most of the airports (DCA, DAA and ADW) observed subnormal monthly totals with deficits over one inch. Most of the month's rain fell on the 12th and 13th with up to 2 inches recorded at IAD, but very little precipitation was recorded after the 16th.

SUMMER 1996 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

Station	Temperatures (°F)			Extreme/Day			Precipitation (In)			
<u>Location</u>	<u>AvMx</u>	<u>AvMn</u>	<u>AvgT</u>	NmIT	<u>DepNm</u>	MaxT	<u>MinT</u>	Total	Norm	<u>DepNm</u>
National (DCA)	85.5	68.6	77.1	78.1	-1.0	94/7–9	54/6-1	11.37	11.09	+0.28
Baltimore (BWI)	84.2	62.1	73.6	75.1	-1.5	92/6-15*	45/6-1	15.63	11.28	+4.35
Dulles (IAD)	83.1	62.5	72.8	73.7	-0.9	91/8-23	48/6-1#	14.94	11.35	+3.59
Ft. Belvoir (DAA)	86.7	65.5	76.1	M	М	95/6-22%	45/6-1	14.75	11.9	+2.9
Andrew AFB (ADW)	84.3	65.2	74.7	75	0	93/6-17 [@]	50/6–2	11.77	12.4	-0.6

Other occurrences: * June 16th, July 8th and August 23rd; # June 3rd; % July 8th and August 23rd; @ July 9th.

LOOKING AHEAD TO SEPTEMBER: Another Cool September?

Since November 1995, there have only been two month's (April and June) with warmer than normal conditions at DCA. Also, since 1990 there hasn't been a September with above normal temperatures at DCA. With such a dominant cool weather pattern the question arises whether this will be the seventh consecutive cool September. Below is a list of the September average temperatures since 1990. [Normal September Average Temperature: 71.3°F]

<u>Year</u>	Average Temperature (°F)	Dep. Nml.	Year	Average Temperature (°F)	Dep. Nml.
1995	71.0	-0.3	1992	69.2	-2.1
1994	70.2	-1.1	1991	71.0	-0.3
1993	71.0	-0.3	1990	69. 6	-1.7