HURRICANE BLANCHE

Preliminary report

The season's first hurricane spent her entire life at sea and maintained hurricane intensity for only about twenty-four hours.

Blanche in embryonic form can be traced back to a tropical disturbance which was spotted about 1300 miles east of the Lesser Antilles on August 6. It is believed that this was the same system which caused pressure falls and a wind-shift as it passed Dakar on July 31.

The disturbance was tracked westnorthwestward at 15 mph as a tropical wave in the easterlies with a typical cloud pattern as seen on satellite pictures, for the next four days.

As the crest of the wave rounded the western end of the Bermuda high and passed into a region of light tropospheric wind shear, a circulation formed about 500 miles east of Florida late on August 10. The depression accelerated northward under the influence of a trough over the eastern United States.

Ships reported winds up to 45 mph east of the center and Tropical Storm Blanche was christened at midday on August 11. Navy reconnaissance indicated rapid deepening and the storm was upgraded to a hurricane in the 6 p.m. advisory.

Blanche was embedded in a strong southwesterly current and attained a forward speed of 40 mph. The hurricane passed just to the northwest of Sable Island and skirted Cape Race, Newfoundland on August 12. The rapid forward speed distorted the storm's winds field into a very asymmetric pattern. Although Sable Island experienced winds of 50 mph with gusts to 70 mph, no strong winds were observed at any of the stations in the Canadian Maritimes.

The hurricane filled rapidly as it passed Newfoundland and became absorbed into a frontal zone on August 13.

Blanched probably reached her maximum intensity during the night of August 12 while she traversed the well-travelled New York-to-Europe shipping lanes. The Swedish ship, S.S. Luossa, reported 90 mph winds and the lowest pressure is estimated at 992 millibars.

No casualties or damage was reported and Blanche proved to be a threat only to shipping.

JMP

HURRICANE BLANCHE

August, 1969

OFFICIAL TRACK

DATE	TIME	LATITUDE	LONGITUDE	PRESSURE	INTENSITY
Aug	(Z)			(mbs.)	
06	12	13.0	43.0		T. Dist.
06	18	13.0	44.8		
07	00	13.0	46.5		
07	06	13.0	48.2		
07	12	13.0	50.0		
07	18	13.3	51.7		
08	00	13.8	53.3		
08	06	14.7	55.0		
08	12	15.4	56.4		
08	18	16.2	58.1		
09	00	17.1	59.7		
09	06	18.0	61.3		
09	12	18.9	63.0		
09	18	19.7	64.9		
10	00	21.0	66.7		
10	06	22.4	68.3		
10	12	24.0	70.0		
10	18	26.0	71.2		
11	00	28.1	71.7		Trop. Dep.
11	06	30.2	71.6		
11	12	32.5	71.1		Trop. Stm.
11	18	35.5	69.9	997	Hurricane
12	00	38.6	68.0		
12	06	41.7	65.0		
12	12	44.3	60.4	998	
12	18	46.0	54.9		Extratropical
13	00	47.1	49.0		
13	06	48.0	43.0		

TABLE 3.—*Compilation of meteorological statistics and estimated damages and casualties for hurricane season 1969*

Tropical cyclone	Intensity	Pressure	Wind	Deaths	Missing	Damages
		(mb)	(kt)			*Dollars*
Anna	T	1002	60			—
Blanche	H	*992	80			—
Camille	H	905	175	†259	68	1,420,750,000
Debbie	H	950	110			—
Eve	T	995	50			—
Francelia	H	973	100	‡100		§4,700,000
Gerda	H	979	125			—
Holly	H	984	75			—
Inga	H	964	90			—
Jenny	T	1001	35			—
Kara	H	978	80			—
Laurie	H	973	95			—
Martha	H	980	80	5		30,000,000
Grand total				364	68	1,455,450,000

*Estimated from ship's wind
†Includes three in Cuba
‡All in Guatemala floods
§United Fruit $3.2 million and taxes on these losses in Honduras $1.5 million

had to traverse for an extended period. The result was a gradual weakening and contraction in size, with a turn to a more northwesterly heading.

After finally escaping from the upper level cold system, Anna began to regain intensity as she approached the Hatteras area. Navy reconnaissance during the afternoon of August 2 indicated winds of storm intensity, but also showed a turning away from the mainland. No coastal warnings were necessary. Two factors that are believed to be most important in the reintensification of the system were the higher sea-surface temperatures and a minimum wind shear in the vertical just off the Middle Atlantic coastal region.

Climatology and the various National Hurricane Center computations worked very well during most of the forecast days, especially as far as the actual track was concerned. Changes in mean 1000–400-mb layer steering also clearly implied the recurvature, but no technique was able to determine the excessive speeds which Anna maintained over most of the southern Atlantic and up until recurvature took place.

HURRICANE BLANCHE, AUGUST 6–13

The season's first hurricane spent her entire life at sea, but maintained hurricane intensity for only about 24 hr.

Blanche, as a tropical disturbance, can be traced back to about 1,300 mi east of the Lesser Antilles, but it is possible that this was the same wave which passed Dakar on August 3.

Beginning on August 6, the disturbance moved west-northwestward at 15 mi hr^{-1} as a tropical wave in the easterlies. As the crest of the wave rounded the western end of the Bermuda High and passed into a region of light tropospheric wind shear, a circulation formed about 500 mi east of Florida on August 10. The depression accelerated northward under the influence of a trough over the eastern United States.

Ships reported winds up to 40 kt east of the center, and Blanche was christened at midday on August 11. Navy reconnaissance indicated rapid deepening, and the storm was upgraded to a hurricane by early evening.

Blanche was imbedded in a strong southwesterly current and obtained a forward speed of 40 mi hr^{-1}. The hurricane passed just to the northwest of Sable Island and skirted Cape Race, Newfoundland, on the 12th. The rapid forward speed distorted the storm's wind field into a very asymmetric pattern. Although Sable Island experienced winds of 45 kt with gusts to 60 kt, no strong winds were observed at any of the stations in the Canadian Maritime Provinces.

The hurricane filled rapidly as it passed Newfoundland and became absorbed into a frontal zone on the 13th. Blanche probably reached its maximum intensity during the night of August 12 while it traversed the well-traveled New York-to-Europe shipping lanes. The Swedish ship, SS *Iuossa*, reported winds to 80 kt and a sea-level pressure of 992 mb.

HURRICANE CAMILLE, AUGUST 5–22

Camille formed near the island of Grand Cayman in the Caribbean on August 14 from a tropical wave which had been tracked from the African coast where it emerged on August 5. This wave, of the inverted "V" type, described by Frank (1969) was clearly identified on satellite pictures through August 9. On that day, cloudiness associated with the wave began to aggregate into a discrete circular area about 500 mi east of the Leeward Islands. This disturbance passed the Leeward Islands on August 10 without a closed circulation and proceeded to the western Caribbean without evidences of a pressure center. However, on August 13 the wave increased in amplitude and extended its influence into the eastern Bahamas.

On the morning of August 14, reconnaissance aircraft were dispatched to investigate both the possibility of circulation near the southwestern Bahamas and near the vicinity of Grand Cayman Island. The report from the Bahamas was negative; however, from the Caribbean a Navy reconnaissance plane flying back and forth across the wave reported that a circulation was forming, and in late afternoon advised that the pressure center had been identified with a minimum of 991 mb and with maximum winds of 50 kt. It was apparent almost from the outset that Camille would be an explosively deepening storm; and as it approached the western tip of Cuba on the afternoon of August 15, the central pressure had fallen to 964 mb with a maximum wind of 100 kt.

During the transit over Cuba, Camille (as a young hurricane) was tracked by Havana radar, and reports were supplied by the Cuban weather service to the Director, National Hurricane Center. Southeast winds of 80 kt were reported at Guane as the eye passed over western Cuba. Camille was tracked by land-based and aircraft radar during the remainder of August 15 and 16, and indications of further intensification were noted as the eye