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U.S. Weather Bureau.

Hurricane Flora, Sept. 10-12, 1959, a
preliminary report...

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U. S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

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National Oceanic &
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U. S. Dept. of Commerce

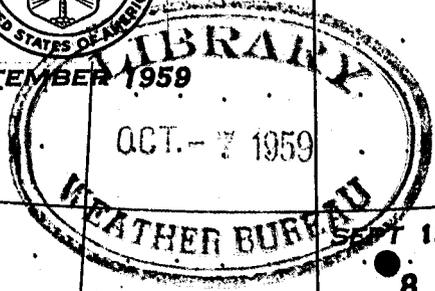
HURRICANE FLORA

SEPTEMBER 10-12, 1959

PRELIMINARY REPORT WITH THE ADVISORIES ISSUED

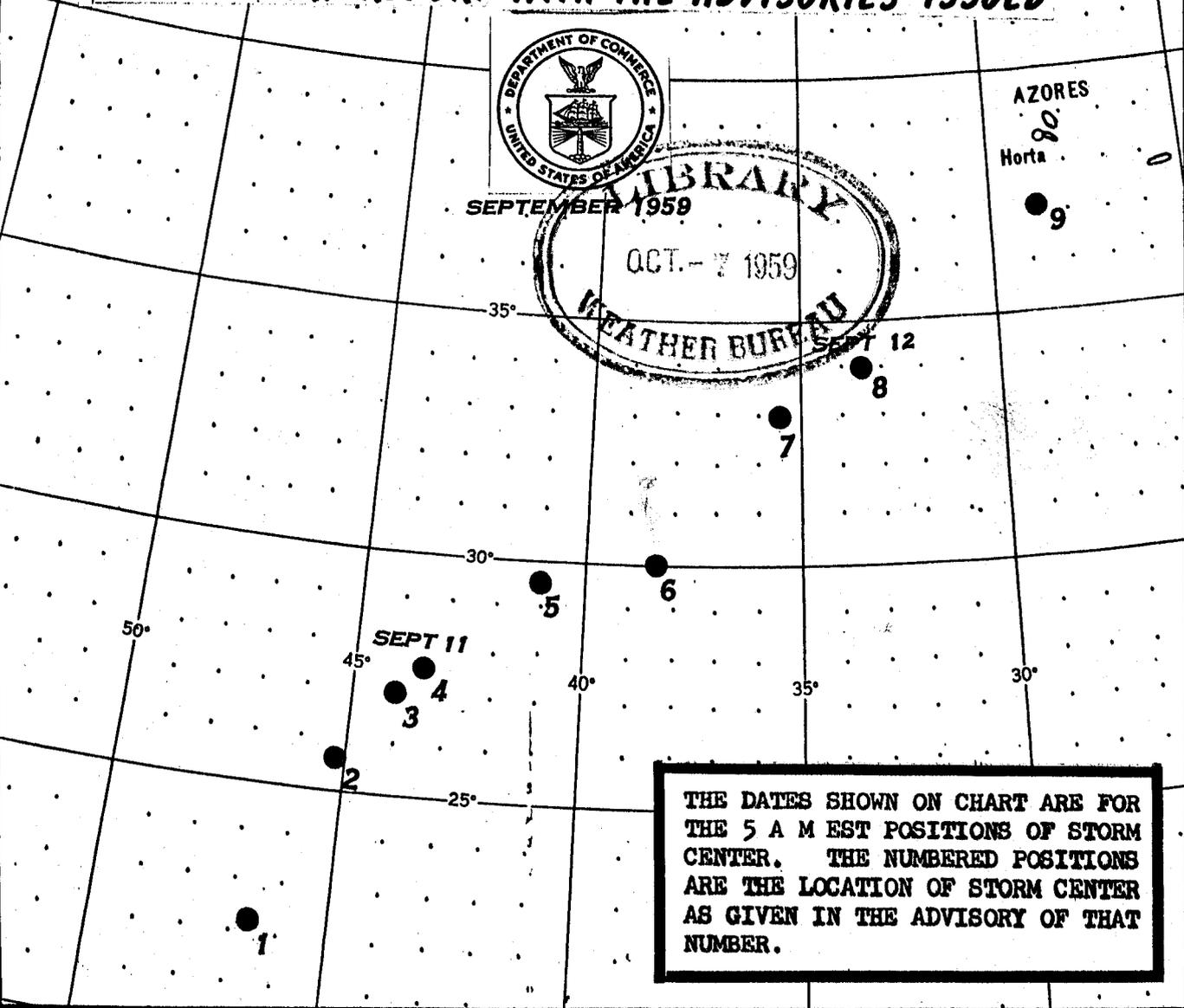


SEPTEMBER 1959



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THE DATES SHOWN ON CHART ARE FOR THE 5 A M EST POSITIONS OF STORM CENTER. THE NUMBERED POSITIONS ARE THE LOCATION OF STORM CENTER AS GIVEN IN THE ADVISORY OF THAT NUMBER.

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National Oceanic and Atmospheric Administration Weather Bureau Hurricane Series

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PRELIMINARY REPORT ON HURRICANE "FLORA"
SEPTEMBER 10-12, 1959

The tropical cyclone which developed into Hurricane "Flora" formed in the southern North Atlantic about 1500 miles east of Puerto Rico. The existence of a tropical storm on September 10, 1959 at about 22°N, 46°W was established on the basis of reports from both surface vessels and reconnaissance aircraft. A suspicious area in that location was analyzed on the weather map at noon GCT on September 10. A weather report from the S. S. Brandenburg, whose position was 22.8 N, 45.0 W at that time, indicated southerly winds with a speed of 37 knots, thundershowers, and heavy seas. A Navy reconnaissance flight into the suspicious area encountered a closed circulation with a surface pressure of 1008 millibars centered near 22.1 N, 46.0 W at 1600 GCT on September 10.

The hurricane warning center at Miami issued the first tropical storm advisory at 1700 GCT on the 10th. The second advisory released at 2200 GCT forecast the path of the storm would be toward the north and therefore would not endanger the coast of the United States.

At 1600 GCT on the 11th, when an Air Force reconnaissance plane reached the storm center, Flora had intensified to barely hurricane force with surface winds of 65 knots and a central pressure of 29.35 inches (994 millibars). From this point the storm kept to a northeast to eastnortheast course and maintained hurricane intensity through the time of the last advisory, 1600 GCT, September 12, when the center was located at 37.1 N, 28.9 W, or about 100 miles southwest of the central Azores.

The storm decreased in strength thereafter, combined with a larger low pressure center, and moved toward the coast of Portugal.

MIAMI WEATHER BUREAU TROPICAL STORM ADVISORY NUMBER 1 FLORA 12 NOON SEPTEMBER 10 1959.

SURFACE SHIP AND RECON AIRCRAFT REPORTS INDICATE A TROPICAL STORM HAS DEVELOPED IN THE ATLANTIC AND AT 12 NOON...1700Z...TODAY WAS CENTERED AT LATITUDE 22.3 N LONGITUDE 46.6 W OR 1280 STATUTE MILES SOUTH-EAST OF BERMUDA. IT IS MOVING TOWARD THE NORTHWEST AT 17 MPH. HIGHEST WINDS ESTIMATED 45 MPH NORTH-EAST OF CENTER AND WINDS OF 35 TO 45 MPH EXTEND 150 MILES IN NORTHEASTERN SEMICIRCLE. ONLY LIGHT WINDS HAVE BEEN REPORTED IN THE SOUTHWEST SEMICIRCLE.

PROBABLE SLOW INTENSIFICATION IS EXPECTED DURING THE NEXT 24 HOURS.

THE NEXT ADVISORY WILL BE ISSUED AT 5 PM TODAY BY THE MIAMI WEATHER BUREAU.

DAVIS WEATHER BUREAU MIAMI

MIAMI WEATHER BUREAU TROPICAL STORM ADVISORY NUMBER 2 FLORA 5 PM EST SEPTEMBER 10 1959.

THE ILL-DEFINED CENTER OF TROPICAL STORM FLORA HAS BEEN RELOCATED ON THE BASIS OF SURFACE SHIP REPORTS. AT 5 PM EST...2200Z...IT WAS LOCATED AT LATITUDE 25.6 N LONGITUDE 45.1 W OR 1240 STATUTE MILES SOUTH-EAST OF BERMUDA MOVING IN A NORTHERLY DIRECTION ABOUT 17 MPH. HIGHEST WINDS ARE 45 MPH AND WINDS OF 33 TO 45 MPH EXTEND OUTWARD 150 MILES TO THE NORTH AND EAST OF THE CENTER. ONLY LIGHT WINDS ARE REPORTED SOUTHWEST OF THE CENTER.

THERE ARE NO INDICATIONS THAT ANY APPRECIABLE INTENSIFICATION WILL OCCUR. THE STORM IS EXPECTED TO CONTINUE ON A NORTHERLY COURSE AT ABOUT THE SAME SPEED OF 17 MPH FOR THE NEXT 12 HOURS AND TURN TOWARDS THE NORTH NORTHEAST THEREAFTER. THIS COURSE WOULD KEEP THE STORM FAR OUT OVER THE ATLANTIC AND OFFER NO THREAT TO THE UNITED STATES. THE NEXT ADVISORY WILL BE ISSUED BY THE MIAMI WEATHER BUREAU AT 11 PM EST TONIGHT.

DAVIS WEATHER BUREAU MIAMI

MIAMI WEATHER BUREAU TROPICAL STORM ADVISORY NUMBER 3 FLORA 11 PM EST SEPTEMBER 10 1959.

TROPICAL STORM FLORA WAS LOCATED BY SURFACE SHIP REPORTS TONIGHT AT 11 PM EST..0400Z...NEAR LATITUDE 27.0 N LONGITUDE 44.0 W OR 1260 STATUTE MILES EAST SOUTHEAST OF BERMUDA MOVING IN A NORTHERLY DIRECTION ABOUT 17 MPH. HIGHEST WINDS ARE ESTIMATED 45 MPH IN SQUALLS IN THE NORTHEASTERN SEMICIRCLE AND WINDS OF 35 TO 45 MPH EXTEND 150 MILES TO THE NORTH AND EAST OF THE CENTER. ONLY LIGHT WINDS HAVE BEEN REPORTED SOUTHWEST OF THE STORM CENTER.

LITTLE IF ANY INTENSIFICATION IS EXPECTED AS THE STORM MOVES ON A COURSE BETWEEN NORTH AND NORTH-NORTHEAST AT ABOUT THE SAME SPEED OF 17 MPH DURING THE NEXT 12 HOURS. IT SHOULD TURN MORE TOWARDS THE NORTHEAST THEREAFTER.

THE NEXT ADVISORY WILL BE ISSUED BY THE MIAMI WEATHER BUREAU AT 5 AM EST.

DAVIS WEATHER BUREAU MIAMI

MIAMI WEATHER BUREAU TROPICAL STORM ADVISORY NUMBER 4 FLORA 5 AM EST SEPTEMBER 11 1959.

AT 5 AM EST...1000Z...TROPICAL STORM FLORA WAS LOCATED BY SHIP REPORTS AT LATITUDE 27.5 N LONGITUDE 43.5 W OR ABOUT 1300 STATUTE MILES EASTSOUTHEAST OF BERMUDA. THE STORM IS MOVING NORTHNORTHEAST AT 14 MPH.

HIGHEST WINDS ARE 35 TO 45 MPH NEAR THE CENTER AND EXTENDING 150 MILES OUT IN THE NORTHEASTERN SEMICIRCLE. ONLY LIGHT WINDS HAVE BEEN REPORTED IN THE SOUTHWEST SEMICIRCLE.

LITTLE IF ANY INTENSIFICATION IS EXPECTED AS THE STORM MOVES ON A NORTHEASTERLY COURSE AROUND 15 MPH DURING THE NEXT 12 HOURS. THE SAME COURSE WITH POSSIBLY SOME INCREASE IN FORWARD SPEED IS LIKELY THEREAFTER.

NEXT ADVISORY WILL BE ISSUED BY THE MIAMI WEATHER BUREAU AT 11 AM EST.

SUGG WEATHER BUREAU MIAMI

MIAMI WEATHER BUREAU HURRICANE ADVISORY NUMBER 5 FLORA 11 AM EST SEPTEMBER 11 1959.

FLORA HAS INTENSIFIED SOMEWHAT DURING THE NIGHT AND SQUALLS OF JUST ABOUT HURRICANE FORCE ARE NOW OCCURRING OVER A SMALL AREA NEAR THE CENTER. AT 11 AM EST...1600Z...HURRICANE FLORA WAS LOCATED BY AIRCRAFT RECONNAISSANCE AT LATITUDE 29.5 NORTH LONGITUDE 41.0 WEST OR ABOUT APPROXIMATELY 1400 STATUTE MILES EAST OF BERMUDA. THE STORM IS NOW MOVING ON A NORTHEASTWARD COURSE AT ABOUT 20 MPH. CENTRAL PRESSURE IS 994 MBS OR 29.3 INCHES.

HIGHEST WINDS ARE OF BARELY HURRICANE FORCE OR 75 MPH IN SQUALLS NEAR THE CENTER WITH GALE WINDS EXTENDING 150 STATUTE MILES IN THE NORTHEAST SEMICIRCLE AND 100 MILES TO THE SOUTHWEST. LITTLE FURTHER INTENSIFICATION IS INDICATED WITH THE STORM CONTINUING ON A NORTHEASTWARD COURSE WITH FORWARD SPEED GRADUALLY ACCELERATING DURING THE NEXT 12 TO 24 HOURS.

SHIPS IN THE VICINITY OF HURRICANE FLORA AND PARTICULARLY ALL SMALL CRAFT BETWEEN THE STORM AND THE AZORES SHOULD EXERCISE CAUTION.

THE NEXT ADVISORY WILL BE ISSUED BY THE MIAMI WEATHER BUREAU AT 5 PM EST.

CLARK WEATHER BUREAU MIAMI

MIAMI WEATHER BUREAU HURRICANE ADVISORY NUMBER 6 FLORA 5 PM EST SEPTEMBER 11 1959.

AT 5 PM EST...2200Z...HURRICANE FLORA WAS ESTIMATED NEAR LATITUDE 30.0 NORTH LONGITUDE 38.4 WEST OR APPROXIMATELY 1500 STATUTE MILES EAST OF BERMUDA BASED ON RECONNAISSANCE AIRCRAFT PENETRATION OF THE STORM AROUND NOON TODAY. THE STORM IS NOW MOVING ON AN EASTNORTHEAST COURSE AT ABOUT 20 MPH.

HIGHEST WINDS ARE AROUND 75 MPH IN SQUALLS NEAR THE CENTER WITH GALE WINDS EXTENDING 150 STATUTE MILES IN THE NORTHEAST SEMICIRCLE AND 100 MILES TO THE SOUTHWEST. LITTLE FURTHER INTENSIFICATION IS INDICATED WITH THE STORM CONTINUING ON AN EASTNORTHEAST COURSE WITH FORWARD SPEED GRADUALLY ACCELERATING DURING THE NEXT 12 TO 24 HOURS.

SHIPS IN THE VICINITY OF HURRICANE FLORA AND PARTICULARLY ALL SMALL CRAFT BETWEEN THE STORM AND THE AZORES SHOULD EXERCISE CAUTION.

THE NEXT ADVISORY WILL BE ISSUED BY THE MIAMI WEATHER BUREAU AT 11 PM EST.

CLARK WEATHER BUREAU MIAMI

MIAMI WEATHER BUREAU HURRICANE ADVISORY NUMBER 7 FLORA 11 PM EST SEPTEMBER 11 1959.

AT 11 PM EST...0400Z...HURRICANE FLORA WAS ESTIMATED AT LATITUDE 33.0 NORTH LONGITUDE 35.5 WEST OR NEAR 1600 STATUTE MILES EAST OF BERMUDA. THE HURRICANE IS MOVING NORTHEASTWARD ABOUT 28 MPH.

HIGHEST WINDS ARE ABOUT 75 MPH IN SQUALLS NEAR THE CENTER. GALE WINDS EXTEND 170 STATUTE MILES IN THE NORTHEAST SEMICIRCLE AND 100 MILES TO THE SOUTHWEST. THE STORM IS EXPECTED TO MAINTAIN ITS PRESENT INTENSITY AND SIZE DURING THE NEXT 12 TO 24 HOURS BUT IS LIKELY TO INCREASE ITS FORWARD SPEED.

SHIPS NEAR AND IN THE PATH OF THE HURRICANE SHOULD EXERCISE CAUTION.

THE NEXT ADVISORY WILL BE ISSUED BY THE MIAMI WEATHER BUREAU AT 5 AM EST.

MCGEHEE WEATHER BUREAU MIAMI

MIAMI WEATHER BUREAU HURRICANE ADVISORY NUMBER 8 FLORA 5 AM EST SEPTEMBER 12 1959.

AT 5 AM EST...1000Z...HURRICANE FLORA WAS ESTIMATED AT LATITUDE 34.0 N LONGITUDE 33.5 W OR ABOUT 470 STATUTE MILES SOUTHWEST OF LAJES AZORES. FLORA IS MOVING EASTNORTHEAST AROUND 30 MPH.

HIGHEST WINDS ARE ABOUT 75 MPH IN SQUALLS NEAR THE CENTER. GALES EXTEND OUT 170 STATUTE MILES IN THE NORTHEAST SEMICIRCLE AND 100 MILES TO THE SOUTHWEST.

NO INTENSIFICATION IS EXPECTED. FLORA IS EXPECTED TO MOVE ON A EASTNORTHEAST COURSE AT 32 MPH DURING THE NEXT 12 HOURS. SOME INCREASE IN FORWARD SPEED IS EXPECTED THEREAFTER AS THE CENTER PASSES NEAR OR JUST TO THE SOUTH OF SANTA MARIA AZORES EARLY TONIGHT.

SHIPS NEAR THE PATH OF THE HURRICANE SHOULD EXERCISE CAUTION.

THE NEXT ADVISORY WILL BE ISSUED BY THE MIAMI WEATHER BUREAU AT 11 AM EST.

SUGG WEATHER BUREAU MIAMI

MIAMI WEATHER BUREAU HURRICANE ADVISORY NUMBER 9 FLORA 11 AM EST SEPTEMBER 12 1959.

AT 11 AM EST...1600Z...HURRICANE FLORA WAS ESTIMATED AT LATITUDE 37.1 NORTH LONGITUDE 28.9 WEST OR APPROXIMATELY 100 MILES SOUTHWEST OF THE CENTRAL AZORES. THIS POSITION IS UNCERTAIN AND BASED ONLY ON PERIPHERAL SHIP REPORTS. FLORA IS ACCELERATING RAPIDLY IN AN EASTNORTHEAST DIRECTION AT AROUND 40 MPH.

HIGHEST WINDS OF ABOUT 75 MPH ARE PROBABLY STILL OCCURRING IN SQUALLS NEAR THE CENTER AND GALES EXTEND OUTWARD 75 MILES FROM THE CENTER. THE STORM ALREADY APPEARS TO HAVE DECREASED IN SIZE AND IS EXPECTED TO DECREASE RAPIDLY IN INTENSITY DURING THE NEXT 12 TO 18 HOURS AS IT MOVES INTO AND MERGES WITH A NON TROPICAL LOW NORTH OF THE AZORES.

SHIPS IN THE PATH OF THIS DIMINISHING STORM AND INTERESTS IN THE EASTERN AND CENTRAL AZORES SHOULD EXERCISE CAUTION.

THIS IS THE LAST ADVISORY TO BE ISSUED ON FLORA. FURTHER INFORMATION IF AVAILABLE WILL BE INCLUDED IN MARINE BULLETINS.

MCGEEHEE WEATHER BUREAU MIAMI