

*HURRICANE INEZ SEPTEMBER 21ST-OCTOBER 11T H
(PRELIMINARY REPORT)

INEZ ORIGINATED AS A POSSIBLE WEAK TROPICAL DEPRESSION MOVING OFF THE WEST COAST OF AFRICA ON THE MORNING OF SEPTEMBER 18TH. GENESIS WAS DETERMINED ON THE BASIS OF SPARSE LAND AND SHIP REPORTS AND AN ESSA 2 SATELLITE PHOTOGRAPH. FOR THE NEXT THREE DAYS THE ASSOCIATED CLOUD MASS WAS TRACKED WEST-SOUTHWESTWARD WITH THE AID OF SATELLITE PICTURES UNTIL THE MORNING OF THE 21ST AT WHICH TIME THE CLOUD MASS WAS CENTERED NEAR 10N 35W BY AN ESSA 2 PHOTOGRAPH. ON THE BASIS OF THIS PHOTOGRAPH REFERENCE WAS MADE IN THE TROPICAL OUTLOOK, ISSUED DAILY BY THE NATIONAL HURRICANE CENTER DURING THE HURRICANE SEASON, TO A STRONG TROPICAL DEPRESSION. NO SATELLITE OR SHIP INFORMATION WAS RECEIVED DURING THE NEXT 48 HOURS BUT ON THE MORNING OF THE 23RD ESSA 2 AND THE NIMBUS SATELLITE SHOWED THAT THE DEPRESSION HAD MOVED WEST-NORTHWESTWARD TO APPROXIMATELY 13N 45W. A RECONNAISSANCE AIRCRAFT WAS ABLE TO REACH THE AREA ON THE MORNING OF THE 24TH AND FOUND THAT ONLY SLIGHT INTENSIFICATION HAD TAKEN PLACE DURING THE PAST SIX DAYS. BY AFTERNOON, HOWEVER, SIGNIFICANT INTENSIFICATION APPEARED UNDERWAY AND THE FIRST ADVISORY ON TROPICAL STORM INEZ, LOCATED ABOUT 800 MILES EAST OF MARTINIQUE IN THE FRENCH WEST INDIES, WAS ISSUED BY THE SAN JUAN WEATHER BUREAU OFFICE.

AFTER REACHING TROPICAL STORM INTENSITY INEZ TOOK A MORE WESTERLY COURSE AT A SOMEWHAT SLOWER FORWARD SPEED AND CONTINUED TO INTENSIFY UNTIL THE MORNING OF THE 26TH WHEN HURRICANE INTENSITY WAS ATTAINED ABOUT 330 MILES EAST OF GUADELOUPE IN THE FRENCH WEST INDIES. INEZ CONTINUED ON A WEST TO WEST-NORTHWEST COURSE WHILE INTENSIFYING RAPIDLY. ONLY SLIGHT

*PORTIONS OF THIS REPORT ARE TAKEN FROM THE NEW ORLEANS AND SAN JUAN PRELIMINARY REPORTS.

INTENSIFICATION OF THE TROPICAL DEPRESSION OCCURRED AS IT MOVED WEST-SOUTHWESTWARD. RATHER RAPID INTENSIFICATION OCCURRED AFTER TURNING WEST-NORTHWESTWARD ON THE SOUTHWESTERN PERIPHERY OF THE SUB-TROPICAL HIGH PRESSURE R. THIS IS IN GOOD AGREEMENT WITH CLIMATOLOGY AND STUDIES BY MILLER (1) AND OTHERS ON INTENSIFICATION.

THE CENTER OF THE HURRICANE MOVED ALMOST DIRECTLY OVER GUADELOUPE DURING THE EARLY AFTERNOON OF THE 27TH WITH THE ISLAND REPORTING WINDS OF 80 MPH BEFORE COMMUNICATIONS FAILED. RECONNAISSANCE AIRCRAFT DURING THE MORNING, HOWEVER, HAD REPORTED A CENTRAL PRESSURE OF 961 MB OR 28.38 INCHES AND MAXIMUM WINDS OF 120 MPH. INEZ WAS A SMALL STORM AT THIS TIME WITH HURRICANE FORCE WINDS EXTENDING OUTWARD ONLY 50 MILES FROM THE CENTER. THE CENTRAL PRESSURE INCREASED TO 970 MB OR 28.64 INCHES AFTER THE HURRICANE HAD PASSED OVER THE GUADELOUPE ISLANDS WHERE THE CONTACT OF THE CIRCULATION WITH THE OCEAN SURFACE WAS PARTIALLY LOST.

AS THE CENTER MOVED WESTWARD INTO THE EASTERN CARIBBEAN SEA, INEZ RESUMED INTENSIFICATION AND BY LATE AFTERNOON ON THE 28TH REACHED THE MINIMUM OBSERVED SEA LEVEL PRESSURE OF 927 MB OR 27.38 INCHES. MAXIMUM SURFACE WINDS WERE ESTIMATED TO BE 150 MPH TO 175 MPH NEAR THE CENTER. ESSA RESEARCH FLIGHT FACILITY AIRCRAFT MEASURED WINDS OF 192 MPH AT 8,000 FEET, THE HIGHEST SPEED EVER RECORDED BY THE RESEARCH AIRCRAFT. AT THIS TIME THE CENTER WAS LOCATED ABOUT 160 MILES SOUTHWEST OF SAN JUAN, PUERTO RICO AND 170 MILES SOUTHEAST OF SANTO DOMINGO, DOMINICAN REPUBLIC MOVING WEST ABOUT 16 MPH. THE GREAT DANGER TO THE BARAHONA PENINSULA OF THE DOMINICAN REPUBLIC AND TO SOUTHERN HAITI WAS EMPHASIZED IN THE HURRICANE ADVISORIES.

THE HURRICANE WAS UNDER CONTINUOUS SURVEILLANCE BY LAND BASED RADAR IN PUERTO RICO WITH THE EYE VISIBLE FOR 23 HOURS FROM 9:45 PM AST ON THE 27TH TO 8:45 PM AST ON THE 28TH. THIS WAS MENTIONED FREQUENTLY IN ADVISORIES AND BULLETINS IN ORDER TO RELIEVE UNEASINESS ABOUT ANY SUDDEN CHANGE IN COURSE OF THIS SMALL BUT SEVERE HURRICANE.

INEZ STRUCK THE BARAHONA PENINSULA OF THE DOMINICAN REPUBLIC SHORTLY BEFORE NOON AST ON THE 29TH AND CONTINUED WEST-NORTHWESTWARD ACROSS THE SOUTHWESTERN PENINSULA OF HAITI BETWEEN 2 PM AST AND 4 PM AST. THE EYE ENTERED AT A POINT EAST OF JACMEL ON THE SOUTH COAST OF HAITI AND EMERGED NEAR LEOGANE ON THE NORTH COAST. RECONNAISSANCE AIRCRAFT FOUND A CENTRAL PRESSURE OF 987 MB OR 29.15 INCHES JUST WEST OF PORT AU PRINCE, HAITI ON THE EVENING OF THE 29TH. THIS WAS A RISE OF 60 MB OR 1.80 INCHES FROM THE VALUE REPORTED JUST BEFORE THE EYE STRUCK THE BARAHONA PENINSULA.

AFTER LEAVING HAITI, INEZ CONTINUED NORTHWEST TOWARD EASTERN CUBA AND STRUCK GUANTANAMO CITY, A SHORT DISTANCE WEST OF GUANTANAMO BAY, ON THE MORNING OF THE 30TH. WINDS OF 138 MPH WERE REPORTED AS THE CENTER MOVED ASHORE. THEREFORE, RATHER RAPID REINTENSIFICATION MUST HAVE TAKEN PLACE OVER THE WINDWARD PASSAGE.

FORECASTING THE FUTURE PATH OF THE HURRICANE BECAME A REAL CHALLENGE AS INEZ MOVED OVER CUBA. THE HURRICANE WAS INFLUENCED BY THE TERRAIN OF THE ISLAND AS WELL AS THE SYNOPTIC STEERING CURRENTS. IT APPEARED THAT INEZ WOULD RECURVE NORTHWESTWARD OVER EASTERN CUBA THEN CONTINUE NORTHWARD EAST OF THE UNITED STATES MAINLAND BY BREAKING THROUGH A WEAKNESS IN A HIGH PRESSURE RIDGE ALOFT TO THE NORTH OF THE STORM. THE CENTER OF THE

STORM BECAME DISORGANIZED OVER THE RUGGED TERRAIN, HOWEVER, AND THE WEAK STEERING CURRENTS WERE NOT SUFFICIENT TO ALLOW THE EYE TO CROSS CUBA. INSTEAD, IT REORGANIZED ALONG THE SOUTH COAST AND MOVED SLOWLY WEST-NORTHWESTWARD FOR ABOUT 36 HOURS ENTERING CENTRAL CUBA JUST ABOUT DUE SOUTH OF MIAMI. A SLOW NORTHWARD MOVEMENT OF ABOUT 5 MPH BROUGHT THE CENTER ACROSS CENTRAL CUBA WHERE IT BRIEFLY LOST HURRICANE FORCE. SLOW INTENSIFICATION OCCURRED AS INEZ MOVED NORTH-NORTHEASTWARD INTO THE WESTERN BAHAMAS ON THE NIGHT OF OCTOBER 2ND AND MORNING OF THE 3RD. A SMALL TORNADO OCCURRED IN NASSAU, BAHAMAS ON THE 2ND KILLING A FIFTEEN MONTH OLD CHILD. THIS WAS THE ONLY TORNADO REPORTED DURING INEZ. THE HIGHEST WIND REPORTED THUS FAR IN THE BAHAMAS WAS A GUST TO 80 MPH AT CARTER CAY JUST NORTH OF GRAND BAHAMA. NASSAU HAD A PEAK GUST OF 60 MPH AND RECORDED OVER FIFTEEN INCHES OF RAIN IN THE THREE DAY PERIOD OCTOBER 1-3. ALTHOUGH NASSAU DID NOT RECEIVE HURRICANE FORCE WINDS AS A PART OF THE STRONG WINDS NEAR THE CENTER OF INEZ, AN ANEMOMETER IN THE VICINITY OF THE TORNADO SHOWED A RAPID INCREASE TO 100⁺MPH IN 10-15 SECONDS AS THE TORNADO APPROACHED.

AT THIS TIME THE LOCATION OF THE CENTER OF INEZ WAS IN CLOSE PROXIMITY TO THE ORIGINALLY ANTICIPATED FORECAST POSITION AFTER RECURVATURE. THE DELAY OF APPROXIMATELY 24 HOURS CAUSED BY THE EYE RE-ORGANIZING ALONG THE SOUTH COAST OF CUBA HAD ALLOWED THE WEAK PRESSURE RIDGE TO THE NORTH TO BUILD. THIS CAME ABOUT BY THE EXTENSION NORTHEASTWARD OF THE WARM UPPER LEVEL ANTICYCLONE IN THE WESTERN GULF OF MEXICO. A SOMEWHAT SIMILAR OCCURRENCE IN 1965 RESULTED IN THE UNUSUAL PATH TAKEN BY HURRICANE BETSY ALTHOUGH IN THIS CASE THE RIDGE WAS INITIALLY OVER THE NORTHERN GULF OF MEXICO STATES AND MOVED EAST-NORTHEAST

RATHER THAN JUST BUILDING NORTHEASTWARD. FOR A DISCUSSION OF BETSY REFERENCE IS MADE TO THE SUMMARY FOR THE 1965 HURRICANE SEASON (2).

IT IS INTERESTING AT THIS POINT TO COMPARE INEZ WITH HURRICANE CLEO OF 1964. AS INDICATED IN FIG. 1, THE PATHS OF THE TWO HURRICANES, BOTH OF WHICH WERE SMALL INTENSE STORMS PRIOR TO STRIKING CUBA, ARE VERY SIMILAR UNTIL THEY LEAVE THE NORTH COAST OF CUBA. CLEO MOVED GENERALLY NORTHWARD AT AN ACCELERATED RATE AND INTENSIFIED RAPIDLY JUST PRIOR TO STRIKING MIAMI. A DISCUSSION OF CLEO CAN BE FOUND IN THE SUMMARY FOR THE 1964 HURRICANE SEASON (3). INEZ ON THE OTHER HAND INTENSIFIED VERY SLOWLY AS IT MOVED NORTH-NORTHEASTWARD AND MAINTAINED A RATHER LARGE DIFFUSE EYE OF 30-40 MILES. LACK OF INTENSIFICATION IN SPITE OF FAIRLY FAVORABLE LOW LEVEL CONDITIONS APPEARS TO BE TIED IN TO THE WEAK UPPER LEVEL TROUGH IN WHICH INEZ WAS SITUATED WITH LITTLE OUTFLOW AT HIGH LEVELS. THIS WAS BORNE OUT IN PART AT THIS TIME BY SATELLITE PICTURES WHICH INDICATED LITTLE CIRRUS OUTFLOW.

LATE ON THE 3RD OF OCTOBER A TREND TOWARDS THE WEST-SOUTHWEST WAS INDICATED BY RADAR AND AIRCRAFT RECONNAISSANCE AND THIS WAS FAIRLY WELL ESTABLISHED DURING THE EARLY MORNING HOURS OF THE 4TH. ONCE THIS COURSE WAS ESTABLISHED IT WAS MAINTAINED WITH ONLY MINOR FLUCTUATIONS UNTIL LATE ON THE 7TH. DURING THIS TIME THE STRONG UPPER LEVEL ANTICYCLONE OVER THE WESTERN GULF OF MEXICO REMAINED NEARLY STATIONARY AND INEZ MOVED AROUND THE SOUTHEASTERN PERIPHERY GRADUALLY ENCOUNTERING MORE FAVORABLE UPPER AIR CONDITIONS FOR HIGH LEVEL OUTFLOW.

THE EYE OF INEZ MOVED RIGHT OVER ALL OF THE KEYS FROM KEY LARGO TO KEY WEST WITH THE EYE PASSAGE OVER KEY WEST THE FIRST OCCURRENCE IN 47 YEARS. THE NAVY WEATHER OFFICE THERE WAS ABLE TO OBTAIN A RATHER RARE HURRICANE EYE SOUNDING WHICH IS SHOWN IN FIG. 2. THE HIGHEST WIND REPORTED ON THE FLORIDA MAINLAND WAS A GUST TO 80 MPH AT HOMESTEAD AIR FORCE BASE. ALL OF THE KEYS REPORTED WINDS OF HURRICANE FORCE RANGING UP TO 100-125 MPH IN GUSTS. SEE TABLE 1 FOR METEOROLOGICAL DATA FOR A FEW SELECTED STATIONS. INEZ CONTINUED WEST-~~WEST~~^{SOUTH}WESTWARD JUST SOUTH OF DRY TORTUGAS AND BRUSHED THE NORTHERN COAST OF YUCATAN, MEXICO WITH HURRICANE CONDITIONS ON OCTOBER 7TH.

AT THIS POINT INEZ ONCE AGAIN TRIED TO RECURVE INTO A WEAKNESS IN THE HIGH PRESSURE RIDGE OVER THE WESTERN GULF OF MEXICO. THE HURRICANE ALSO REACHED ITS MAXIMUM INTENSITY IN THE GULF AT THIS TIME WITH A PRESSURE OF 948 MB OR 28.00 INCHES REPORTED BY RECONNAISSANCE AIRCRAFT AT OOOZ ON THE 9TH. THE WEAKENING OF THE RIDGE PERMITTED INEZ TO DRIFT ON A NORTHWESTWARD COURSE ON THE 9TH. THIS INCREASED THE THREAT TO THE TEXAS COAST FOR ABOUT 24 HOURS. RISING SURFACE PRESSURES TO THE NORTH IN TEXAS BEGINNING LATE ON THE 9TH FINALLY FORCED INEZ WEST-SOUTHWESTWARD INTO MEXICO JUST NORTH OF TAMPICO ON THE MORNING OF THE 10TH. NUMEROUS STORMS IN THE PAST HAVE VEERED SOUTHWEST WHEN VERY CLOSE TO THE MEXICAN COAST, PROBABLY RELATED IN SOME WAY TO THE MOUNTAINOUS TERRAIN, AND THIS TYPE OF MOTION POSSIBLY AUGMENTED THAT INDUCED BY STEERING FORCES. TAMPICO REPORTED GUSTS TO 126 MPH BEFORE COMMUNICATIONS WERE LOST AS THE CENTER WAS MOVING INLAND. TORRENTIAL RAINS LATER CAUSED WIDESPREAD FLOODS IN THE AREA.

SUMMARY. THE 65 ADVISORIES ON INEZ WERE THE MOST EVER ISSUED FOR A HURRICANE AND THE TOTAL OF 151 BULLETINS PLUS ADVISORIES ALSO EXCEEDED ANY PREVIOUS ADVICES ON A HURRICANE. IN ADDITION LOCAL STATEMENTS WERE MADE BY VARIOUS WEATHER BUREAU OFFICES WHEN INEZ WAS IN CLOSE PROXIMITY TO LAND AREAS. EXCEPT FOR A BRIEF PERIOD WHILE CROSSING CUBA, INEZ WAS OF HURRICANE FORCE FOR 14 DAYS, A DURATION WHICH HAS BEEN EXCEEDED BY SEVERAL HURRICANES IN PAST YEARS (4).

INEZ WAS UNDER ALMOST CONSTANT SURVEILLANCE BY SATELLITES, RECONNAISSANCE AIRCRAFT AND/OR LAND BASED RADAR AFTER NEARING THE ANTILLES. WARNINGS OF HURRICANE CONDITIONS WERE ISSUED AT LEAST 24 HOURS IN ADVANCE FOR ALL AREAS EXCEPT THE SOUTHEAST FLORIDA COAST WHERE THE ERRATIC MOVEMENT AND MINIMAL HURRICANE FORCE WINDS PRECLUDED SUCH ADVANCE NOTICE. OTHER HURRICANES SUCH AS GINNY IN 1963 AND GRACIE IN 1959 PRESENTED SERIOUS FORECASTING PROBLEMS FOR THE UNITED STATES MAINLAND AS A RESULT OF LOOPS AND SLOW MOVEMENT. INEZ, HOWEVER, PROBABLY BECAME NEARLY STATIONARY CLOSER TO THE UNITED STATES MAINLAND THAN ANY OTHER STORM ALTHOUGH THE HURRICANE OF SEPTEMBER 1929 TOOK THREE DAYS TO MOVE SLOWLY WEST-SOUTHWESTWARD THROUGH THE WESTERN BAHAMAS AND FLORIDA STRAITS (4).

THE UNUSUAL PATH OF INEZ MADE HER THE FIRST SINGLE STORM OF RECORD TO AFFECT THE WEST INDIES, THE BAHAMAS, FLORIDA AND MEXICO. SHE WAS ALSO THE FIRST STORM OF RECORD SO LATE IN THE SEASON TO CROSS THE ENTIRE GULF OF MEXICO WITHOUT RECURVATURE.

ESTIMATED TOTAL DEATHS ARE APPROXIMATELY 1000, BUT THE ACTUAL TOLL IS QUITE UNCERTAIN DUE TO POOR COMMUNICATIONS IN HISPANIOLA AND MEXICO. DAMAGE TO CROPS AND PROPERTY WAS RELATIVELY SMALL COMPARED TO OTHER

HURRICANES WHICH HAVE STRUCK SO MANY LAND AREAS, PROBABLY BECAUSE OF THE SMALL SIZE OF THE STORM AND LATENESS OF THE SEASON. CROP DAMAGE IN COUNTRIES SUCH AS CUBA, HAITI, DOMINICAN REPUBLIC AND MEXICO AND THE ISLAND OF GUADELOUPE IS ALWAYS OF SEVERE ECONOMIC IMPACT. TABLE 2 GIVES THE LATEST ESTIMATES OF DEATHS, INJURIES AND DAMAGE ATTRIBUTABLE TO INEZ.

THE MINIMUM CENTRAL PRESSURE OF 927 MB OR 27.38 INCHES, MAXIMUM ESTIMATED WINDS OF 150-175 MPH AND LARGE NUMBER OF DEATHS, APPROXIMATELY 1000, CLASSIFY INEZ AS A GREAT HURRICANE. AS INDICATED ABOVE, THE PATH WILL HAVE TO BE CONSIDERED SOMEWHAT UNUSUAL AT THE VERY LEAST.

TABLE 2

DEATHS, INJURIES AND DAMAGE FROM HURRICANE INEZ 1966

| | DEATHS | INJURIES | DAMAGE (DOLLARS) |
|--------------------|-----------------|----------|--------------------|
| MEXICO | 65 | 250 | 100,000,000 |
| DOMINICAN REPUBLIC | 74-100 | 450(a) | 12,000,000 |
| GUADELOUPE | 27 | 600 | 50,000,000 |
| HAITI | 750(b) | 1000 | 10,000,000 |
| CUBA | 5 | 30 | 20,000,000 |
| BAHAMAS | 5 | -- | 15,500,000 |
| FLORIDA | 3 | 11 | 5,000,000 |
| LOUISIANA | 11(c) | -- | -- |
| TEXAS | -- | -- | MINOR |
| PUERTO RICO | -- | -- | MINOR |
| MARINE | 45(d) | -- | -- |
| TOTALS: | 1011-985 | | 212,500,000 |

- (a) SERIOUSLY INJURED
 (b) AVERAGE OF RATHER WIDELY VARYING ESTIMATES
 (c) HELICOPTER CRASH EVACUATING OIL RIG
 (d) CUBAN REFUGEES CROSSING FLORIDA STRAITS

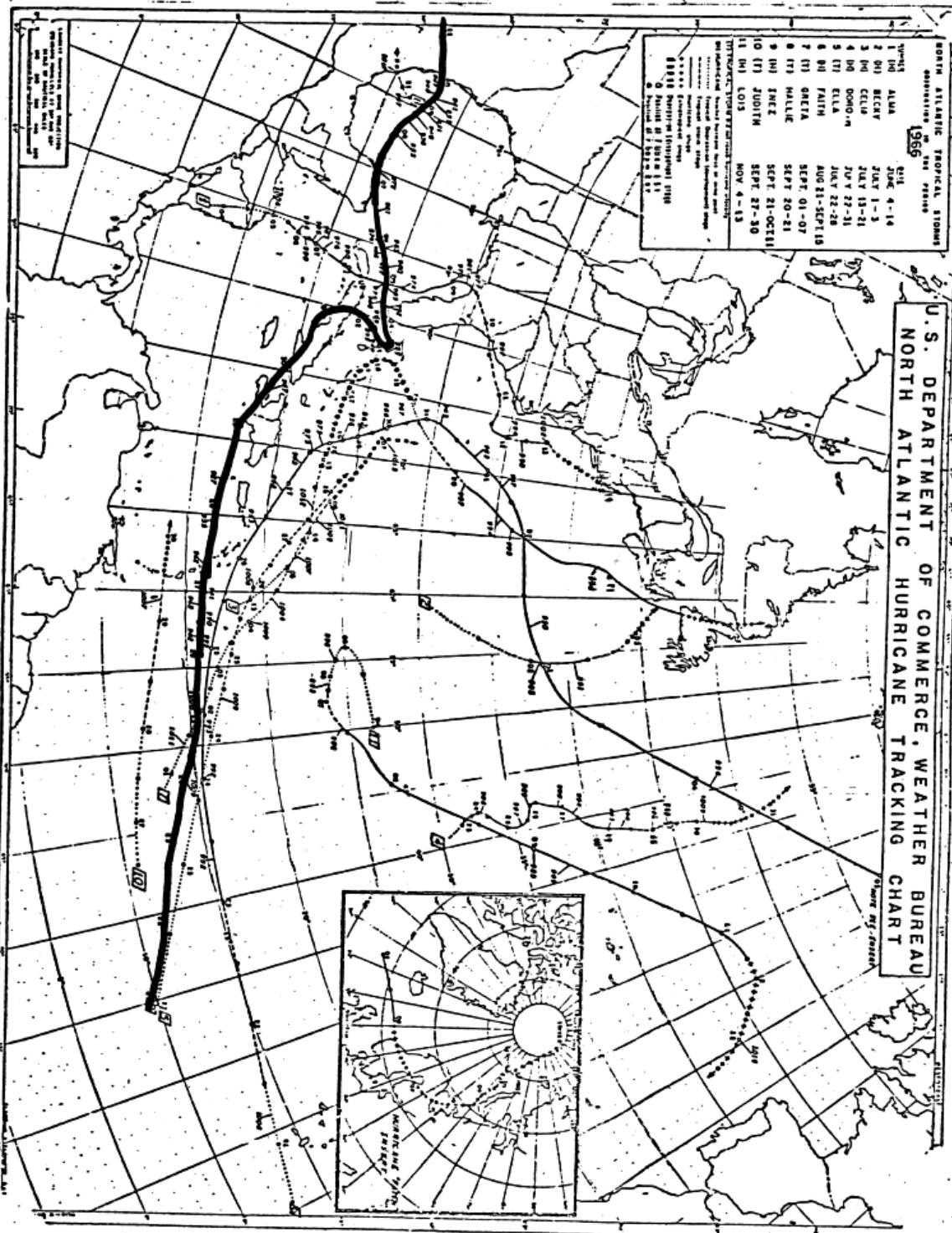
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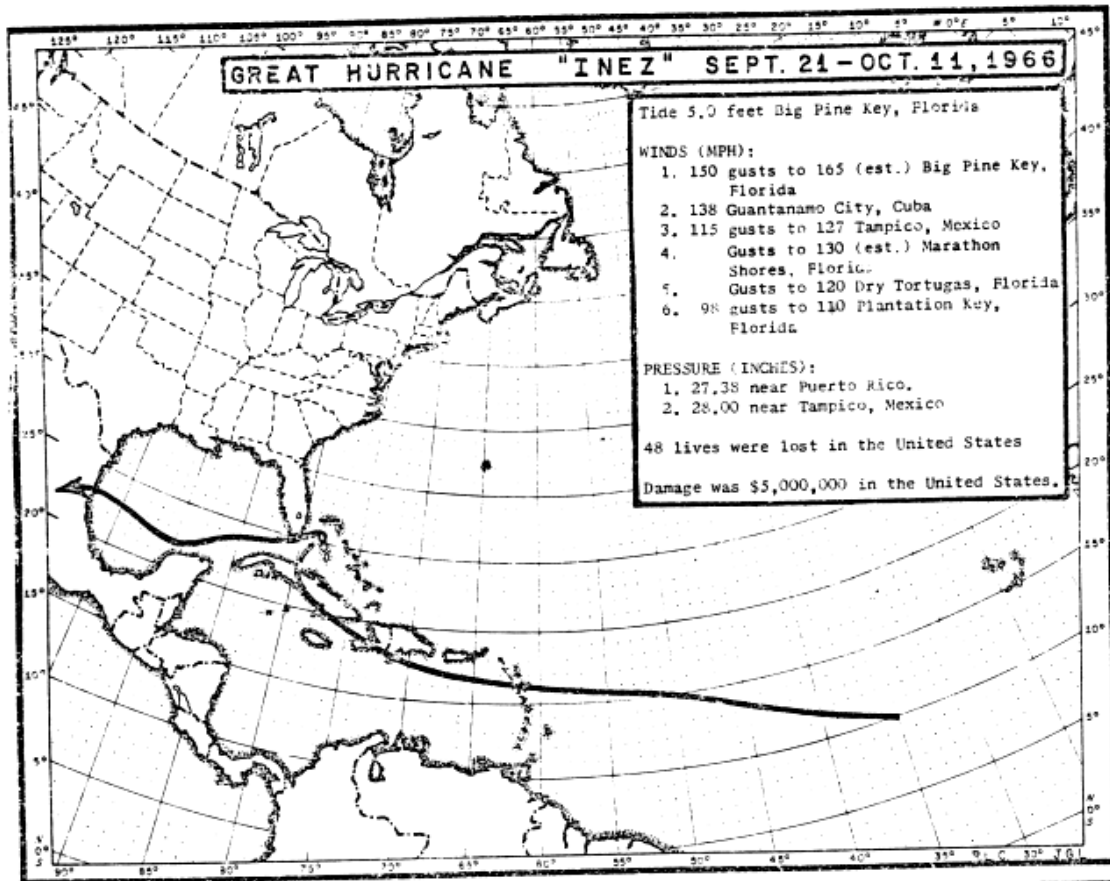
**U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
NORTH ATLANTIC HURRICANE TRACKING CHART**

1965

| Year | Storm | Start | End |
|------|--------|----------------|-----|
| 1965 | ALBA | JUNE 4-14 | |
| 290 | BECKY | JULY 1-3 | |
| 300 | CELIA | JULY 13-21 | |
| 400 | OSMO | JULY 22-31 | |
| 500 | ELLA | AUG 21-28 | |
| 600 | FAITH | SEPT 01-07 | |
| 700 | GRETA | SEPT 20-21 | |
| 800 | HALLIE | SEPT 21-OCT 01 | |
| 900 | IRIE | SEPT 27-30 | |
| 1000 | JUDITH | NOV 4-13 | |
| 1100 | LOIS | | |



SYMBOLS:
 (1) Hurricane
 (2) Tropical Storm
 (3) Tropical Depression
 (4) Subtropical Storm
 (5) Subtropical Depression
 (6) Tropical Storm (Intensity 1118)
 (7) Hurricane (Intensity 131)
 (8) Hurricane (Intensity 151)



The insert map on figure 1 indicates an extension of the track¹ into the Arctic Ocean. The entire track of Faith represents one of the longest, if not the longest, hurricane track of record.

Highest winds in Faith, while in the southwestern North Atlantic, were estimated at 120 m.p.h. The lowest pressure recorded during the hurricane's life history was 950 mb. (28.05 in.). The center of the hurricane passed within 25 mi. of St. Maarten, Leeward Islands. There were gale force winds in the northern islands of the Leewards, the Virgin Islands, and along the northern coast of Puerto Rico, but there was only minor damage reported.

Prior to reaching Scandinavia, Faith passed over the Faeroe Islands. There was no known loss of life on the Islands or in Scandinavia and only minor damage was reported, similar to the usual autumn storms.

One crewman lost his life when high seas battered the *Alberto Benati* in the western Atlantic, one person was missing and assumed drowned while abandoning a Norwegian ferryboat off the coast of Denmark, and two men were lost attempting to cross the Atlantic in a rowboat.

TROPICAL STORM GRETA, SEPTEMBER 1-7.—The circulation which developed into Greta was first indicated by the weather report from the SS *San Marcial* and a cloud mass photographed by the Nimbus 2 satellite some 600 mi. east of Barbados on September 1. Air Force reconnaissance aircraft investigated the area the same day and found a circulation and an area of showers but no strong winds. The depression remained weak with maximum winds of about 35 m.p.h. as it moved northwestward during the next two days. Moderate intensification occurred on September 4 and Navy reconnaissance aircraft reports indicated maximum surface winds of 58 m.p.h. and a central pressure of 1004 mb. (29.65 in.), the lowest reported during the life of the storm. However, by the next day, the trend had reversed and reconnaissance aircraft reported that Greta was very poorly organized. Highest reported surface winds were only about 35 m.p.h. in a few squalls. The system became even weaker as it continued northwestward to a point some 300 mi. northeast of the central Bahamas on September 7 and then turned northward. The cloud area associated with the dying surface circulation remained identifiable in satellite photographs through September 8 when it merged with a prefrontal cloud mass between the United States east coast and Bermuda.

The intensity changes in Greta presented difficult forecasting problems. The storm acquired a warm core and wall cloud in a climatologically favored area for hurricane development, yet failed to progress beyond the storm stage. On September 4, when the most active intensification occurred, the center had moved out from beneath an upper-tropospheric trough and under the southern portion of an upper-level anticyclone, a favorable factor for intensification from an empirical standpoint.

¹ Based upon communication with Dr. Olov Lönnqvist of the Swedish Meteorological Service.

In addition, at this point, a trough extending southward from hurricane Faith to the area north of Greta had receded, allowing the surface ridge to build and providing another favorable indication. However, the deepening failed to persist, and within 24 hours after reaching its maximum intensity, the system had weakened to a minor depression. A dropsonde at 0530 GMT, September 6, showed that the temperature in the center of the storm from the surface to above the 800-mb. level was about 2° C. higher than the average for a weak hurricane and there was no front or source of cool or dry air in the vicinity. A possible clue to the weakening is the fact that the current in which the vortex was embedded was basically divergent. Surface wind reports indicated that there was no low-level inflow. Outflow apparently prevailed in the area of the depression during this period. It is interesting that both Celia and Ella lost tropical storm intensity in the same general area in July.

Tropical Storm Greta did not affect any land area and resulted in no casualties or property losses.

TROPICAL STORM HALLIE, SEPTEMBER 20-21.—A tropical depression located just to the south of a weakening stationary front in the extreme southwestern Gulf of Mexico developed into tropical storm Hallie on September 20. On the previous two days, ESSA 2 satellite photographs indicated a large disorganized cloud mass in the southwestern Gulf merging into a frontal cloud band extending to the northeast. Early on the 20th, shower activity along the Mexican coast from Tampico southward increased as a cut-off surface Low developed off the coast. At about the same time, satellite pictures revealed that the cloud pattern in the area was becoming dissociated from that of the front and showed evidence of a developing circulation.

On the afternoon of the 20th, Navy reconnaissance reported that the central pressure had fallen to 997 mb. (29.44 in.) and that winds were 50 m.p.h.

After remaining nearly stationary during this intensifying process, Hallie commenced a southwestward drift during the night. The Mexican coastal town of Nautla experienced gusts to 40 m.p.h. with heavy rain during the early morning hours and the pressure fell to 1002.4 mb. (29.60 in.) at 1300 GMT September 21.

As the storm entered the coast, relatively cool, dry air was introduced, and this, together with the frictional effect of the coastal hills, caused the storm to weaken rapidly. By 1600 GMT the pressure at Nautla had risen to 1010.5 mb. (29.84 in.) and the wind and rain had subsided. Although the satellite photograph at 1522 GMT showed fairly good organization of the clouds, a reconnaissance flight could find little evidence of circulation.

There were no reports of damage or loss of life from the

HURRICANE INEZ, SEPTEMBER 21-OCTOBER 11.—Inez originated as a weak tropical depression moving off the west coast of Africa on the morning of September 18. Genesis was determined on the basis of sparse land and ship reports and an ESSA 2 satellite photograph. For

Next three days the associated cloud mass was tracked southwestward with the aid of satellite pictures until morning of the 21st at which time the cloud mass was centered near 10° N., 35° W. No satellite or ship information was received during the next 48 hours but on the morning of the 23d ESSA 2 and the Nimbus satellite pictures showed that the depression had moved westward to approximately 13° N., 45° W. A reconnaissance aircraft was able to reach the area on the morning of the 24th and found that only slight intensification had taken place during the six days. By afternoon, important intensification appeared underway and the advisory on tropical storm Inez, located about 800 miles east of Martinique in the French West Indies, was

After reaching tropical storm intensity Inez took a more westerly course at a somewhat slower forward speed and failed to intensify until the morning of the 26th when maximum intensity was attained about 330 mi. east of Guadeloupe in the French West Indies. Inez continued on a west to west-northwestward course while intensifying rapidly. This rather rapid intensification that occurred with Inez turned west-northwestward on the southwestern edge of the subtropical high pressure ridge is in good agreement with climatology and studies by Miller [7] concerning others on intensification.

The center of the hurricane moved almost directly over Guadeloupe during the early afternoon of the 27th; winds of 120 m.p.h. were reported on the island before communications failed. Reconnaissance aircraft during the morning, however, had reported a central pressure of 961 mb. (29.15 in.) and maximum winds of 120 m.p.h. Inez was a full storm at this time with hurricane force winds extending outward only 50 mi. from the center. The central pressure increased to 970 mb. (28.64 in.) after the storm had passed over the Guadeloupe Islands where contact between the circulation and the ocean surface was partially lost.

The center moved westward into the eastern Caribbean Sea, Inez resumed intensification and by late afternoon of the 28th reached its lowest observed sea level pressure of 927 mb. (27.38 in.). Maximum surface winds were estimated to be 150 to 175 m.p.h. near the center.

ESSA Research Flight Facility aircraft measured winds of 197 m.p.h. at 8,000 ft., the highest speed recorded by the research aircraft. At this time the storm was located about 160 mi. southwest of San Juan, Puerto Rico and 170 mi. southeast of Santo Domingo, Dominican Republic moving west about 16 m.p.h. The danger to the Barahona Peninsula of the Dominican Republic and to southern Haiti was emphasized in the advisory advisories.

The hurricane was under continuous surveillance by Doppler radar in Puerto Rico, with the eye visible for the first time from 9:45 a.m. AST on the 27th to 8:45 a.m. AST on the 28th. This was mentioned frequently in advisories and bulletins in order to relieve uneasiness about any change in course of this small but severe hurricane.

Inez struck the Barahona Peninsula of the Dominican Republic shortly before noon AST on the 29th and continued west-northwestward across the southwestern peninsula of Haiti between 2 p.m. and 4 p.m. AST. The eye entered at a point east of Jacmel on the southern coast of Haiti and emerged near Leogane on the northern coast. Reconnaissance aircraft found a central pressure of 987 mb. (29.15 in.) just west of Port au Prince, Haiti on the evening of the 29th. This was a rise of 60 mb. or 1.80 in. from the value reported just before the eye struck the Barahona Peninsula.

After leaving Haiti, Inez continued northwestward toward eastern Cuba and struck Guantanamo City, a short distance west of Guantanamo Bay, on the morning of the 30th. Winds of 138 m.p.h. were reported as the center moved ashore. Therefore, rather rapid reintensification must have taken place over the Windward Passage.

Forecasting the future path of the hurricane became a real challenge as Inez moved over Cuba. The hurricane was influenced by the terrain of the island as well as by the synoptic steering currents. It appeared that Inez would recurve northwestward over eastern Cuba and then continue northward east of the United States mainland by breaking through a weakness in a high pressure ridge aloft to the north of the storm. The center of the storm became disorganized over the rugged terrain, however, and the weak steering currents were not sufficient to allow the eye to cross Cuba. Instead, it reorganized along the southern coast and moved slowly west-northwestward for about 36 hours, entering central Cuba just about due south of Miami. A slow northward movement of about 5 m.p.h. brought the center across central Cuba where it briefly lost hurricane force. Slow intensification occurred as Inez moved north-northeastward into the western Bahamas on the night of October 2 and morning of the 3d. A small tornado occurred in Nassau, Bahamas, on the 2d killing a 15-month-old child. This was the only tornado reported during Inez. Nassau had a peak gust of 64 m.p.h. and recorded nearly 15 in. of rain in the three-day period October 2-4. Although Nassau did not receive hurricane force winds as a part of the strong winds near the center of Inez, an anemometer in the vicinity of the tornado showed a rapid increase to over 100 m.p.h. in 10-15 sec. as the tornado approached. The highest wind reported in the Bahamas was 90 m.p.h. at West End, Grand Bahama.

At this time the location of the center of Inez was in close proximity to the position originally anticipated and forecast for it after recurvature. The delay of approximately 24 hours caused by the reorganization of the eye along the southern coast of Cuba had allowed the weak pressure ridge to the north to build. This came about by the extension northeastward of the warm upper-level anticyclone in the western Gulf of Mexico. A somewhat similar occurrence in 1965 resulted in the unusual path taken by hurricane Betsy although in that case the ridge was initially over the northern Gulf of Mexico and moved

east-northeastward rather than just building northeastward.

It is interesting at this point to compare Inez with hurricane Cleo of 1964. The paths of the two hurricanes, both of which were small intense storms prior to striking Cuba, were very similar until they left the northern coast of Cuba. Cleo moved generally northward at an accelerated rate and intensified rapidly just prior to striking Miami. Inez, on the other hand, intensified very slowly as it moved north-northeastward and maintained a rather large diffuse eye of 30-40 mi. diameter. Lack of intensification in spite of fairly favorable low-level conditions appears to be tied-in to the weak upper-level trough in which Inez was situated with little outflow at high levels. This was borne out in part at this time by satellite pictures which indicated little cirrus outflow.

Late on October 3, a trend toward the west-southwest was indicated by radar and aircraft reconnaissance and this was fairly well established during the early morning hours of the 4th. Once this course was established it was maintained with only minor fluctuations until late on the 7th. During this time the strong upper-level anticyclone over the western Gulf of Mexico remained nearly stationary and Inez moved around its southeastern periphery gradually encountering more favorable upper-air conditions for high-level outflow.

The eye of Inez moved directly over all of the Keys from Key Largo to Key West and the U.S. Navy Weather Office at Boca Chica was able to obtain a rather rare hurricane eye sounding which is shown in figure 2. The highest wind reported on the Florida mainland was a gust to 92 m.p.h. at Flamingo. All of the Keys reported winds of hurricane force. See table 4 for other meteorological data.

Inez continued west-southwestward just south of Dry Tortugas and brushed the northern coast of Yucatan, Mexico, with hurricane conditions on October 7. At this point Inez once again began to recurve into a weakness in the high pressure ridge over the western Gulf of Mexico. The hurricane also reached its maximum intensity in the Gulf of Mexico at this time with a pressure of 948 mb. (28.00 in.) reported by reconnaissance aircraft at 0000 GMT on the 9th. The weakening of the ridge permitted Inez to drift on a northwestward course on the 9th and this increased the threat to the Texas coast for about 24 hours. Rising surface pressures to the north in Texas beginning late on the 9th finally forced Inez west-southwestward into Mexico just north of Tampico on the morning of the 10th. Numerous storms in the past have veered to the southwest when very close to the Mexican coast. This is probably related in some way to the mountainous terrain, and this type of motion possibly augments that induced by steering forces. Tampico reported gusts to 127 m.p.h. before communications were lost as the center was moving inland. Torrential rains later caused widespread floods in the area.

Inez was under almost constant surveillance by satellites, U.S. Navy, Air Force, and ESSA reconnaissance

aircraft, and/or land-based radar after it neared the Antilles. Warnings of hurricane conditions were issued at least 24 hours in advance for all areas except the southeastern Florida coast where the erratic movement and minimal hurricane force winds precluded such advance notice. Other hurricanes such as Ginny in 1958 and Gracie in 1959 presented serious forecasting problems for the United States mainland as a result of loops and slow movement. Inez probably became nearly stationary closer to the United States mainland than any other storm, although the hurricane of September 1929 took three days to move slowly west-southwestward through the western Bahamas and Florida Straits.

Estimated total deaths are approximately 1,000. Damage to crops and property was relatively small compared to other hurricanes which have struck many land areas, probably because of the size of the storm and the lateness of the season. Crop damage in countries such as Cuba, Haiti, Dominican Republic, Mexico, and the Island of Guadeloupe is always of severe economic impact.

The minimum central pressure of 927 mb. (27.38 in.) and maximum estimated winds of 150-175 m.p.h. class Inez as a great hurricane and it has been added to the list prepared by Kraft [6]. As indicated above, the pressure will have to be considered somewhat unusual at the very least.

TROPICAL STORM JUDITH, SEPTEMBER 29-30.—This was a minimal storm. Ship reports and satellite photographs on the 26th and 27th of September gave some indications of circulation in the south-central North Atlantic. On the 28th the ESSA 2 photograph showed an area of cloudiness larger than that associated with hurricane Inez, but with only slight indications of circulation. The following day reconnaissance aircraft reported the central pressure as 1007 mb. (29.74 in.) and the maximum flight-level wind speed 50 m.p.h. Judith was centered a short distance north of Barbados and was apparently decreasing in intensity at that time. After passing through the island chain Judith was no longer of storm intensity. It continued to weaken and was downgraded to easterly wave status on the 30th. It is interesting to note that during the period of decreasing intensity Judith was under the area of expanding outflow from hurricane Inez.

The strongest surface winds reported in the island chain during the passage of Judith were 37 m.p.h. at Martinique and 40 m.p.h. on a ship near the west coast of Martinique.

KENDRA, OCTOBER.—The name Kendra was given to a low pressure system in the extreme eastern Atlantic. Post analysis indicates that Kendra was not a tropical storm.

HURRICANE LOIS, NOVEMBER 4-13.—Lois first revealed itself as a small cloud vortex on the ESSA satellite photograph on the morning of November 4. Weather charts showed a low pressure area in the region extending from the surface up through the middle level

September 27, 1966 - Tuesday

Winds increased from 90 to 120 MPH. Inez moved west 10 to 15 MPH. At 9 A.M. AST Emergency Hurricane Warnings were in effect for the Islands from Marie Galante to Antigua including Guadeloupe, Desirade, and Montserrat. Gale Warnings were in effect for Dominica and for the Leeward Islands from St. Kitts to St. Maarten. Hurricane Watch remained in effect for the area from St. Kitts to St. Maarten and were placed in effect for the Virgin Islands and Puerto Rico. At 12 noon AST Hurricane Warnings were extended to include the Islands of Nevis, St. Kitts, St. Eustatius, and Saba. Gale Warnings were in effect for Dominica and for the Northern Leeward Islands from Barbuda to St. Maarten. Hurricane Watch was in effect for Puerto Rico and the Virgin Islands.

3 P.M. AST...Hurricane Inez over Guadeloupe. Hurricane Warnings were in effect for Southern Leeward Islands from Guadeloupe to St. Kitts. Gale Warnings were in effect for Dominica and Northern Leeward Islands from Barbuda to St. Maarten. Gale Warnings for winds 50 to 60 MPH were in effect for the Island of St. Croix. A Hurricane Watch continued in effect for the Virgin Islands and Puerto Rico.

6 P.M. AST...Hurricane Warnings continued for the Leeward Islands from Montserrat to St. Kitts. Hurricane Warnings were discontinued for the rest of the Leeward Islands. Gale Warnings were maintained for the Leeward Islands from Guadeloupe to Antigua and for the Northern Leeward Islands from Barbuda to St. Maarten. Gale Warnings were extended to cover the whole Virgin Islands and also the Island of Puerto Rico.

8 P.M. AST...Hurricane Warnings were continued in effect for the Leeward Islands from Montserrat to St. Kitts and Gale Warnings over the rest of the Leeward Islands, the Virgin Islands, and Puerto Rico. 10 P.M. AST...Hurricane Warnings were continued in effect for the Leeward Islands from Montserrat to St. Kitts and Gale Warnings over the rest of the Leeward Islands, the Virgin Islands and Puerto Rico. Hurricane Watch remained in effect for the Virgin Islands and Puerto Rico. Midnight AST...Hurricane Warnings remained in effect from Montserrat to St. Kitts but were expected to be lowered at 6 A.M. AST. Gale Warnings were in effect for the whole Virgin Islands and Puerto Rico, St. Maarten, and St. Barthelemy. A Hurricane Watch remained in effect for the whole Virgin Islands and Puerto Rico.

September 28, 1966 - Wednesday

Inez became an extremely severe hurricane with winds increasing to 150-175 MPH and with lowest pressure of 930 millibars or 27.46 inches at 9 P.M. AST.

2 A.M. AST...Hurricane Warnings remained in effect for the Leeward Islands from Montserrat to St. Kitts but were expected to be lowered at 6 A.M. AST. Gale Warnings remained in effect for Puerto Rico, the Virgin Islands, St. Maarten and St. Barthelemy. Gale Warnings were expected to be lowered at 6 A.M. AST for St. Maarten and St. Barthelemy. A Hurricane Watch remained in effect for Puerto Rico and the Virgin Islands.

4 A.M. AST...Gale Warnings continued in effect for Puerto Rico, the Virgin Islands, and the Northwestern Leeward Islands. Hurricane Warnings were still in effect for the Islands from Montserrat to St. Kitts but expected to be lowered at 6 A.M. AST.

6 A.M. AST...Gale Warnings were in effect for the Virgin Islands and Puerto Rico. Hurricane Watch became effective for Haiti and the Dominican Republic. All warnings were discontinued for the Leeward Islands.

8 A.M. AST...Gale Warnings with winds up to 50 MPH were in effect for Puerto Rico and the Virgin Islands and north coastal section of Puerto Rico and up to 60 MPH with gusts to 65 or 70 MPH along the south coast of Puerto Rico. Hurricane Watch continued for Haiti and the Dominican Republic. 10 A.M. AST...Gale Warnings continued for Puerto Rico and the Virgin Islands. Hurricane Watch continued for Haiti and the Dominican Republic.

12 Noon AST...Hurricane Warnings were effective for the south coast of the Dominican Republic from Barahona Peninsula eastward to Punta Este. Gale Warnings were in effect for the remainder of Hispaniola. A Hurricane Watch was continued for Haiti.

2 P.M. AST...Gale Warnings continued for Puerto Rico and the Virgin Islands. Hurricane Warnings were in effect for the south coast of the Dominican Republic from the Barahona Peninsula eastward. Hurricane Watch was in effect for Haiti.

4 P.M. AST...Gale Warnings were maintained for Puerto Rico and the Virgin Islands. Emergency Hurricane Warnings were effective for the south coastal sections of the Dominican Republic especially in the Barahona Peninsula.

6 P.M. AST...Hurricane Warnings were effective for the south coast of the Dominican Republic from the Barahona Peninsula eastward to Punta Este and for the southwestern peninsula of Haiti. Gale Warnings were in effect for the remainder of Hispaniola and continued for the southwestern portions of Puerto Rico.

9 P.M. AST...Emergency Hurricane Warnings continued in effect for the south coast of the Dominican Republic from the Barahona Peninsula eastward to Punta Este and for the southwestern peninsula of Haiti. All warnings were lowered for Puerto Rico.

11 P.M. EST...Hurricane Warnings were in effect for the south coast of the Dominican Republic and southwestern peninsula of Haiti. Gale Warnings were in effect for the remainder of Hispaniola.

September 29, 1966 - Thursday

Inez battered the Barahona Peninsula of the Dominican Republic and pounded Haiti. Winds were as high as 160 MPH, weakened a little to 100 MPH while over Haiti. Lowest pressure 927 mb or 27.38 inches. Movement in west to west-northwest 12-16 MPH.

2 A.M. EST...5 A.M. EST...Hurricane Warnings were in effect for the south coast of the Dominican Republic and the southwestern peninsula of Haiti. Gale Warnings were in effect for the remainder of Hispaniola.

11 A.M. EST...Hurricane Warnings remained in effect for the south coast of the Dominican Republic and the southwest peninsula of Haiti including the Island of Gonave. Hurricane force winds were indicated as possibly extending as far north as the peninsula on the northwest portion of Haiti. Gale Warnings were in effect for the remainder of Hispaniola. Hurricane conditions were expected over the extreme east portion of Cuba Friday.

2 P.M. EST...Hurricane Warnings were in effect along the southwest portion of the Dominican Republic and the southwest peninsula of Haiti including the Island of Gonave. Hurricane force winds were indicated as extending as far north as the peninsula on the northwest portion of Haiti. All wind warnings were lowered north of the Central Ranges in the Dominican Republic. Gale Warnings were in effect for the remainder of Haiti. Hurricane conditions were expected over the extreme east portion of Cuba Friday.

5 P.M. EST...Hurricane Warnings remained for the southwest peninsula of Haiti including the Island of Gonave. Hurricane winds were indicated as possibly extending as far north as the northwest peninsula of Haiti and Hurricane Conditions were expected over the extreme east portion of Cuba tonight. Gale Warnings were expected for the remainder of Haiti. All wind warnings were lowered for the Dominican Republic.

8 P.M. EST...Hurricane Warnings were in effect for the southwest peninsula of Haiti and the Island of Gonave. Near Hurricane winds were indicated as possibly affecting the extreme northwest portion of Haiti during the night. Gale Warnings were still in effect for the remainder of Haiti. Gale and Hurricane force winds were indicated to begin during the night and to reach the south coast of Cuba in Oriente Province early Friday morning.

10 P.M. EST...Hurricane Warnings were effective for the southwest peninsula of Haiti and the Island of Gonave and Gale Warnings elsewhere over Haiti but indicated they would be discontinued at 5 A.M. EST. Interests in southeastern Cuba were asked to rush preparations against hurricane winds, heavy rains, and high tides.

11 P.M. EST...Hurricane Warnings remained in effect on the southwest peninsula of Haiti and the Island of Gonave and Gale Warnings elsewhere over Haiti but it was indicated they would be discontinued at 5 A.M. EST. Southeastern Cuba was asked to rush preparations against Hurricane winds...heavy rain...with Gales and Hurricane Force winds expected to reach the south coast in Oriente Province by early Friday morning.

September 30, 1966 - Friday

Inez slowly reorganized after leaving Haiti. Winds continued about 100 MPH. The hurricane center reached the coast of Cuba between Guantanamo and Santiago, moved northwest to near the northern coast, then westward to the southern coast near Santa Cruz del Sur. The passage over the mountainous terrain of southeastern Cuba disturbed the circulation resulting in erratic motion and also difficulty in defining the precise center. Winds of 188 MPH were recorded at Guantanamo City.

2 A.M. EST... Gale and Hurricane force winds were expected along the extreme southeast coast of Cuba by late night.

5 A.M. EST... Gale and Hurricane force winds were expected along the southern Cuban coast from Guantanamo to Manzanillo during the day.

11 A.M. EST... Precautions against hurricane conditions continued for the Oriente Province of Cuba and above normal tides were expected to begin in the Central Bahamas by afternoon. Inez was indicated as threatening the Ragged Islands... The Crooked... The Acklins... and all those from San Salvador to Andros.

5 P.M. EST... Precautions against hurricane conditions continued for the Oriente Province of Cuba. Preparations were asked to be continued against Hurricane conditions on the Bahama Islands of Andros and New Providence and for Gale winds elsewhere in the western Bahamas.

11 P.M. EST... Precautions against hurricane conditions were continued in Oriente and Camaguey Provinces of Cuba.

October 1, 1966 - Saturday

Inez became erratic, moved westward, then slowly northeastward along the southern coast of Cuba and then northwestward to central Cuba. Speeds varied from 5 to 15 MPH. Highest winds of 100 MPH dropped to 50 MPH, below hurricane force, over interior Cuba.

2 A.M. EST... Precautions against Gale and Hurricane force winds were in effect for western and central Cuba especially along the south coast but only Gale Warnings were in effect for central Cuba.

5 P.M. EST... Gale Warnings were issued for the southeast Florida coast from Stuart to Marathon. Gale winds were expected to spread northward over Andros Island, New Providence, Eleuthera, Grand Bahama, and Great Abaco by night and Sunday with the greatest threat of Hurricane winds at Bimini and Grand Bahama.

11 P.M. EST... With Inez weakening to below hurricane force all warnings were discontinued for Miami northward. Gale warnings remained in effect on the Florida Keys, Marathon northeastward.

October 2, 1966 - Sunday

Inez moved north out of Cuba and then northeastward to about 95 miles southeast of Miami at speeds ranging from 5 to 10 MPH. From wind speeds of 50 MPH, hurricane strength of 75 MPH winds were attained by 5 P.M. EST.

2 A.M. EST... Gale Warnings were in effect from Key Largo to Marathon in the Florida Keys.

11 A.M. EST... Gales were also expected in the extreme western Bahamas.

2 P.M. EST...Gale Warnings were issued for the southeast Florida coast from Stuart to Key Largo.

5 P.M. EST...Gale Warnings were in effect from Stuart to Marathon, Florida. Gales also were expected in the extreme western Bahamas. Hurricane force winds were expected in the Bimini chain after midnight and around Grand Bahama.

October 3, 1966 - Monday

Inez moved very slowly northeastward reaching to about 115 east of Miami or about 45 east of the Bimini Islands at 1700 EST and then looped very slowly to the southwest. Highest winds were 85 MPH. By afternoon the eye became irregularly shaped and it was difficult to locate the exact center.

2 A.M. EST...Gale Warnings were in effect from Stuart to Marathon. Gales also were expected through the extreme western Bahamas from Andros Island northward and northeastward. Hurricane force winds were expected to pass a little east of Bimini this morning.

5 A.M. EST...Hurricane force winds were indicated to likely occur in portions of the Berry Islands this morning and Abaco area this afternoon and early night.

11 A.M. EST...Precautions against gales were continued in the northern Bahamas. Hurricane force winds were expected to affect portions of the Berry Islands, Great Abaco, and Grand Bahama.

3 P.M. EST...Gale Warnings were issued for the southeast Florida coast from Stuart to Key Largo.

5 P.M. EST...Gale Warnings were continued from Stuart to Key Largo. Precautions against gales and hurricane force winds were continued for extreme northern Bahamas.

9 P.M. EST...A statement from the National Hurricane Center indicated Gale Warnings were extended north of Stuart to Vero Beach and south of Key Largo to Marathon at 9:30 P.M.

11 P.M. EST...Gale Warnings were displayed Vero Beach to Marathon. Precautions against gales were continued for the southeast Florida coast. Precautions were also continued in the extreme northern Bahamas against gales to hurricane force winds.

October 4, 1966 - Tuesday

Inez moved on a west-southwestward course at speeds 5 to 12 MPH and picked up wind speeds from about 85 MPH to 100 MPH with gusts to 115 MPH. It passed within 30 to 40 miles of Miami. All of the Upper Keys experienced portions of the eye. Key West was in the eye for nearly three hours from about 2000 to 2300 EST.

2 A.M. EST...Gale Warnings were in effect from Marathon to Vero Beach.

5 A.M. EST...Hurricane Warnings were placed in effect from Ft. Lauderdale to Marathon. Gale warnings were displayed elsewhere from Vero Beach to Key West.

7 A.M. EST...Flamingo was included in Hurricane Warnings.

11 A.M. EST...Hurricane Warnings were extended west of Marathon to Dry Tortugas.

5 P.M. EST...Hurricane Warnings remained displayed from Key Largo to Dry Tortugas including Flamingo but were lowered north of Key Largo to Ft. Lauderdale. Gale Warnings remained displayed from Vero Beach to Ft. Lauderdale on the Atlantic coast and at Everglades City southward on the southwest Florida coast.

October 5, 1966 - Wednesday

Inez moved westward at about 10 MPH until becoming nearly stationary just south of Dry Tortugas during the morning daylight hours with the eye becoming poorly defined and large varying from 30 to 40 miles in diameter. During the afternoon it again became better organized and moved west southwestward and then south-westward with movement speeds of 7 to 8 MPH. Highest winds remained around 100 MPH.

5 A.M. EST...Hurricane Warnings were in effect from Marathon to Dry Tortugas.

11 A.M. EST...Hurricane Warnings remained displayed west of Big Pine Key to and including Dry Tortugas. All interests in the Keys from Marathon westward were asked to remain on a hurricane watch status. The Hurricane Watch was extended to the southwest Florida coast from Flamingo around Cape Sable to Ft. Myers. Precautions against Gale Winds were continued in the lower Keys from Big Pine Key eastward to and including Marathon.

5 P.M. EST...Hurricane Warnings remained displayed at Dry Tortugas but were lowered at Key West eastward to Big Pine Key. The Hurricane Watch for the lower Keys and the southwest Florida coast was discontinued.

8 P.M. EST...Hurricane Warnings remained displayed at Dry Tortugas with winds of near hurricane force still occurring there. Gales were expected along northwest coast of Cuba, from Havana west.

October 6, 1966 - Thursday

Inez moved west-southwest to southwest at speeds 7 to 10 MPH with highest wind speeds 100-110 MPH.

2 A.M. EST...It was stated that Hurricane Warnings would be lowered at 5 A.M. Hurricane force winds were indicated for extreme western portion of Cuba this morning.

5 A.M. EST...Interests on the extreme north part of the Yucatan peninsula were advised to take preliminary plans against hurricane force winds.

10 A.M. CST...Precautions against hurricane force winds were advised along the northern Yucatan coast during day.

October 7, 1966 - Friday

Inez became more westerly and moved between west and west-southwest 8-10 MPH with center about 20 miles north and paralleling the Yucatan coast. It brushed the Yucatan peninsula with hurricane winds and then moved into the southwestern Gulf of Mexico.

1 A.M. CST...Precautions against hurricane force winds were continued for the northern Yucatan coast.

10 P.M. CST...Inez was located about 140 miles west northwest of Merida, Mexico.

October 8, 1966 - Saturday

Inez intensified with winds increasing from 115 to 135 MPH with a west to west-northwest movement of 10-12 MPH.

4 A.M. CST...Immediate precautions against hurricane conditions were advised for the Mexican coast in the general area of Tuxpan to 100 miles north of Tampico.

10 A.M. CST...Hurricane Watch was advised for the Texas coast. Precautionary measures against hurricane were advised to be continued along the Mexican coast from Tampico area northward.

4 P.M. CST...Hurricane Watch was in effect for the Texas coast with statement that warnings would probably be issued for parts of Texas coast early tonight. Advice was given to evacuate Padre Island tonight. Precautionary measures were advised against hurricane conditions along the Mexican coast from Tampico northward.

7 P.M. CST...Precautionary measures against hurricane conditions were advised to be continued along the Mexican coast from Tampico northward. Hurricane watch was continued for Texas coast. It was stated that if necessary warnings would be issued for portions of the Texas coast early Sunday. Inez was expected to turn more toward the northwest but if this change did not materialize, the center would move inland near or a little north of Tampico on Sunday.

10 P.M. CST...Precautionary measures against winds in excess of 100 MPH, tides 8 to 12 feet, and torrential rains were continued for the Mexican coast in the area 50 miles south to 100 miles north of Tampico. It was indicated that the present course would move the center of Inez inland near Tampico Sunday morning. The Hurricane Watch was continued for the Texas coast.

October 9, 1966 - Sunday

Inez again slowed, became erratic and almost stationary, but continued a slow northwestward movement of about 5 MPH. Highest winds continued at 135 MPH.

1 A.M. CST...Precautionary measures against winds in excess of 100 MPH, tides 8 to 12 feet, and torrential rains were continued for the Mexican coast in the area of Tampico to 150 miles north. A Hurricane Watch was continued for the Texas coast. It was indicated that the expected course would take the center of Inez into the Mexican coast near or a little north of Tampico Sunday (today).

4 A.M. CST...Hurricane Watch continued for the Texas coast and precautionary measures against hurricane conditions were advised to continue for the Mexican coast from Tampico northward. It was indicated that the expected course would take the center into the Mexican coast between Tampico and Brownsville late today or tonight.

10 A.M. CST...Hurricane Warnings were issued for the Brownsville, Port Isabel area and Gale Warnings northward to Corpus Christi. A Hurricane Watch remained in effect on the Texas Coast...Precautionary measures against severe hurricane conditions were continued on the Mexican coast from Tampico northward. It was indicated that the center of Inez would be nearing the extreme southern Texas coast early Monday.

4 P.M. CST...It was indicated that the center of Inez would be nearing the extreme northeast Mexican coast south of Brownsville early Monday.

10 P.M. CST...It was stated that Inez would be nearing the coast between Tampico and Brownsville early Monday.

October 10, 1966 - Monday

Inez shifted from a west-northwestward to west-southwestward movement and the center moved inland on the Mexican coast 30 to 40 miles north of Tampico around 8 A.M. CST. The Tampico area was battered. After moving inland the winds diminished rapidly from about 135 MPH to 60 MPH by late afternoon.

1 A.M. CST...Precautionary measures were advised against winds in excess of 100 MPH, tides 8 to 12 feet, and torrential rains on the Mexican coast from Tampico area to 175 miles north of Tampico. Hurricane Warnings were continued for the Brownsville-Port Isabel area and Gale Warnings northward to Corpus Christi. A Hurricane Watch was continued elsewhere on the Texas Coast. The center of Inez was expected to move inland Monday morning 25 to 100 miles north of Tampico and 150 to 225 miles south of Brownsville.

10 A.M. CST...Hurricane and Gale Warnings were discontinued for the Texas coast. Winds, seas, and tides were expected to diminish south of Brownsville to Tampico through tonight.

SAN JUAN (MJSJ) RADAR EYE POSITIONS

September 28, 1966

| | | | | |
|-------|-----|-------|-------|--|
| 0315Z | EYE | 1630N | 6334W | |
| 0340Z | EYE | 1630N | 6340W | D12, 0914 |
| 0440Z | EYE | 1632N | 6358W | D10, 0916 |
| 0540Z | EYE | 1636N | 6416W | D13, 0917 139/135 |
| 0610Z | EYE | 1636N | 6422W | D12, 0915 142/128 |
| 0710Z | EYE | 1636N | 6434W | D10, 0912 146/123 |
| 0810Z | EYE | 1636N | 6446W | D10, 0912 150/116 |
| 0910Z | EYE | 1636N | 6458W | D8, EYE WELL DEFINED; RAIN SHIELD EXTENDS 90 MI N. 0912 155/108 |
| 1010Z | EYE | 1638N | 6412W | D8, 0913 162/102 |
| 1040Z | EYE | 1640N | 6519W | D8, 0813 165/98 |
| 1110Z | EYE | 1644N | 6526W | D10, 1013 168/94 |
| 1140Z | EYE | 1646N | 6532W | D9, 1313 172/90 |
| 1210Z | EYE | 1650N | 6539W | D8, 1613 176/88 |
| 1410Z | EYE | 1651N | 6611W | |
| 1610Z | EYE | 1653N | 6645W | |
| 1640Z | EYE | 1653N | 6650W | D10, 0914 |
| 1840Z | EYE | 1702N | 6715W | D9, 1114 |
| 2040Z | EYE | 1659N | 6759W | D10, 1014 EYE Diffused |
| 1940Z | EYE | 1657N | 6731W | D10, 1014 |

September 29, 1966

| | | | | |
|-------|-----|-------|-------|--------------------|
| 0010Z | EYE | 1704N | 6840W | |
| 0040Z | EYE | 1703N | 6854W | D14, 0916 CIRCULAR |

AGUADILLA/RAMEY, PUERTO RICO

September 29, 1966

| | | | | |
|-------|-----|-------|-------|-----|
| 0010Z | EYE | 1659N | 6826W | D16 |
| 0240Z | EYE | 1658N | 6903W | D15 |

GRAN PIEDRA EYE POSITIONS

Hurricane Inez

September 1966

| | | | | |
|--------|-----|------------|---------------|------------|
| 29 23Z | EYE | 118/255 KM | 19.9N - 75.6W | DIAM 50 KM |
| 30 00Z | EYE | 120/235 KM | | DIAM 50 KM |
| 30 01Z | EYE | 120/230 KM | | |

MIAMI (MIAC) RADAR EYE POSITIONS

Hurricane Inez

October 2, 1966 EST

| | | | | |
|-------|----------|-------|-------|-----------------|
| 1610Z | PSBL EYE | 2344N | 7938W | |
| 1640Z | PSBL EYE | 2354N | 7933W | D10 OPEN S |
| 1710Z | PSBL EYE | 2348N | 7933W | |
| 1740Z | PSBL EYE | 2354N | 7928W | D10 2109 |
| 1815Z | PSBL EYE | 2403N | 7932W | |
| 1840Z | PSBL EYE | 2411N | 7933W | D12 1718 OPEN S |
| 1915Z | PSBL EYE | 2413N | 7936W | |
| 1940Z | PSBL EYE | 2415N | 7935W | D18 1603 |
| 2010Z | PSBL EYE | 2416N | 7935W | |
| 2040Z | PSBL EYE | 2406N | 7930W | |
| 2140Z | EYE | 2412N | 7921W | D28 |
| 2210Z | EYE | 2412N | 7917W | |
| 2240Z | EYE | 2415N | 7914W | D30 |
| 2315Z | EYE | 2423N | 7918W | |

October 3, 1966

| | | | | |
|-------|---------------------|-------|-------|----------------------------------|
| 0010Z | EYE | 2426N | 7914W | (143/99) |
| 0106Z | EYE | 2433N | 7916W | |
| 0140Z | EYE | 2436N | 7916W | D29 Poorly Organized |
| 0210Z | EYE | 2438N | 7915W | (140/91) |
| 0240Z | EYE | 2440N | 7914W | D15, Poorly defined |
| 0348Z | EYE | 2443N | 7911W | D26, Very poorly defined |
| 0410Z | EYE | 2444N | 7910W | |
| 0440Z | EYE | 2443N | 7909W | D35, poorly defined |
| 0510Z | EYE | 2439N | 7902W | |
| 0540Z | EYE | 2440N | 7858W | D38, Eye Poorly defined |
| 0640Z | EYE | 2444N | 7858W | D35, Eye poorly defined; Open SW |
| 0710Z | EYE | 2445N | 7846W | 2610 Open S |
| 0739Z | EYE | 2459N | 7851W | D30 |
| 0840Z | EYE | 2502N | 7840W | D35 |
| 1040Z | EYE | 2505N | 7838W | D35 |
| 1140Z | EYE | 2508N | 783-W | |
| 1240Z | EYE | 2509N | 7834W | D35 OPEN W |
| 1310Z | EYE | 2509N | 7834W | OPEN W |
| 1345Z | EYE | 2512N | 7834W | |
| 1410Z | EYE | 2514N | 7834W | |
| 1440Z | EYE | 2518N | 7836W | |
| 1512Z | EYE | 2517N | 7829W | |
| 1543Z | EYE | 2524N | 7830W | EYE POORLY DEFINED |
| 1640Z | EYE | 2518N | 7832W | EYE POORLY DEFINED |
| 1715Z | EYE NOT DISCERNIBLE | | | |
| 1740Z | EYE NOT DISCERNIBLE | | | |
| 1840Z | EYE | 2543N | 7840W | POORLY DEFINED |
| 1940Z | PSBL EYE | 2525N | 7850W | |
| 2017Z | PSBL EYE | 2522N | 7850W | |
| 2040Z | EYE | 2529N | 7846W | LARGE DIAMETER |

Miami Eye Positions, Continued

-2-

| | | | | |
|-----------------|------------------------------------|-------|-------|--|
| 2110Z | EYE | 2535N | 7843W | LARGE DIAMETER |
| 2140Z | PSBL EYE | 2532N | 7828W | |
| 2210Z | EYE BY SPIRAL OVERLAY 15 DEGS | 2543N | 7829W | |
| 2240Z | EYE 15 DEGREE SPIRAL OVERLAY | 2535N | 7834W | |
| 2315Z | EYE BY SPIRAL OVERLAY 15 DEGREE | 2536N | 7828W | |
| 2340Z | EYE 15 DEGREE SPIRAL OVERLAY | 2530N | 7833W | |
| October 4, 1966 | | | | |
| 0013Z | EYE NOT DISCERNIBLE | | | |
| 0042Z | EYE 15 DEGREE SPIRAL OVERLAY | 2527N | 7846W | |
| 0115Z | EYE | 2528N | 7846W | |
| 0140Z | EYE | 2528N | 7846W | |
| 0210Z | EYE | 2526N | 7843W | |
| 0240Z | EYE | 2528N | 7846W | POORLY DEFINED |
| 0315Z | EYE | 2528N | 7836W | POORLY DEFINED |
| 0335Z | EYE 15 DEGREE SPIRAL OVERLAY | 2528N | 7846W | |
| 0415Z | EYE 15 DEGREE SPIRAL OVERLAY | 2525N | 7847W | |
| 0440Z | EYE | 2524N | 7848W | 15 DEGREE SPIRAL OVERLAY |
| 0510Z | EYE | 2524N | 7851W | EYE POORLY DEFINED |
| 0545Z | EYE | 2527N | 7857W | EYE POORLY DEFINED |
| 0640Z | EYE | 2522N | 7905W | D38, POORLY DEFINED |
| 0740Z | EYE | 2516N | 7911W | D40, POORLY DEFINED |
| 0810Z | EYE | 2522N | 7911W | POORLY DEFINED |
| 0838Z | EYE | 2520N | 7919W | POORLY DEFINED |
| 0912Z | EYE | 2521N | 7922W | POORLY DEFINED |
| 0935Z | EYE | 2522N | 7923W | D35, EYE POORLY ORGANIZED |
| 1012Z | EYE | 2521N | 7925W | D35, 0804 POORLY ORGANIZED |
| 1040Z | EYE | 2519N | 7927W | D38, 0704 POORLY ORGANIZED |
| 1112Z | EYE | 2512N | 7935W | POORLY DEFINED 04 |
| 1139Z | EYE | 2506N | 7939W | EYE ELIPTICAL NE/SW AXIS D45 0416 NW/SE AXIS, D20 POORLY DEFINED. |
| 1212Z | EYE | 2504N | 7943W | EYE ELIPTICAL NE/SW AXIS D45. NW/SE AXIS D22 0512 OPEN NE POORLY DEFINED |
| 1255Z | EYE | 2504N | 7954W | D30 0712 POORLY DEFINED |
| 1345Z | EYE NOT DISCERNIBLE | | | |
| 1440Z | EYE | 2500N | 7954W | D23 |
| 1540Z | EYE | 2452N | 8009W | D25, Poorly Defined Wall Cloud STRONGEST S |
| 1615Z | EYE | 2459N | 8013W | D25; OPEN W POORLY DEFINED |

Miami Eye Positions, continued

-3-

| | | | | |
|-------|-----|-------|-------|-----------------------------|
| 1640Z | EYE | 2458N | 8020W | D27, OPEN NW POORLY DEFINED |
| 1740Z | EYE | 2500N | 8030W | POORLY DEFINED |
| 1815Z | EYE | 2457N | 8039W | POORLY DEFINED; OPEN W - NW |
| 1840Z | EYE | 2455N | 8046W | POORLY DEFINED |
| 1914Z | EYE | 2455N | 8052W | POORLY DEFINED; OPEN W-N |
| 1940Z | EYE | 2455N | 8053W | POORLY DEFINED |
| 2015Z | EYE | 2450N | 8053W | POORLY DEFINED; OPEN W-NW |
| 2040Z | EYE | 2451N | 8100W | POORLY DEFINED; OPEN WNW |
| 2115Z | EYE | 2443N | 8105W | POORLY DEFINED; OPEN W-NW |
| 2140Z | EYE | 2442N | 8116W | POORLY DEFINED |
| 2210Z | EYE | 2438N | 8109W | ELONGATED NE-SW |
| 2240Z | EYE | 2437N | 8113W | |
| 2320Z | EYE | 2431N | 8113W | |
| 2340Z | EYE | 2434N | 8118W | D32, 0608 |

October 5, 1966

| | | | | |
|-------|------------------|-------|-------|-----------------------|
| 0010Z | EYE | 2439N | 8118W | D29 |
| 0040Z | EYE | 2441N | 8124W | |
| 0240Z | EYE | 2429N | 8146W | ELONGATED N-S |
| 0310Z | EYE | 2429N | 8151W | ELONGATED NNW-SSE |
| 0340Z | EYE | 2431N | 8153W | |
| 0410Z | EYE | 2433N | 8157W | |
| 0440Z | EYE | 2431N | 8204W | |
| 0510Z | EYE | 2428N | 8207W | 0709 |
| 0540Z | EYE | 2428N | 8212W | D45, 0608 |
| 0640Z | EYE | 2436N | 8232W | 15 DEG SPIRAL OVERLAY |
| 0745Z | SPIRAL BAND ONLY | | | |
| 0845Z | RAIN SHIELD | | | |
| 0945Z | RAIN SHIELD | | | |
| 1012Z | EYE | 2430N | 8256W | 15 DEG SPIRAL OVERLAY |
| 1040Z | EYE | 2430N | 8300W | 15 DEG SPIRAL OVERLAY |
| 1112Z | EYE | 2435N | 8302W | 15 DEG SPIRAL OVERLAY |
| 1140Z | EYE | 2438N | 8306W | 15 DEG SPIRAL OVERLAY |
| 1240Z | EYE | 2432N | 8303W | 15 DEG SPIRAL OVERLAY |
| 1345Z | RAIN SHIELD AREA | | | |
| 1440Z | RAIN SHIELD AREA | | | |
| 1540Z | RAIN SHIELD AREA | | | |
| 1605Z | EYE | | | |
| 1645Z | RAIN SHIELD AREA | | | |
| 1740Z | RAIN SHIELD AREA | | | |
| 1845Z | RAIN SHIELD AREA | | | |
| 1945Z | RAIN SHIELD AREA | | | |
| 2045Z | RAIN SHIELD AREA | | | |

KEY WEST (EYW) RADAR EYE POSITIONS

October 1, 1966

2325Z CENTER SELECTION is
120/174 D50 at least

October 2, 1966

| | | | | |
|-------|-----------------|-------|-------|---|
| 0112Z | POSSIBLE CENTER | 2304N | 7946W | D20 SELECTION FAIR |
| 1640Z | PSBL EYE | 2346N | 7936W | 16D, OPEN 9 |
| 1711Z | EYE | 2352N | 7934W | D4, 2007 |
| 1740Z | PSBL EYE | 2336N | 7955W | D12, 1907 OPEN S |
| 1840Z | PSBL EYE | 2411N | 7934W | D13, OPEN S |
| 1912Z | PSBL EYE | 2416N | 7934W | D14, OPEN S |
| 1940Z | PSBL EYE | 2417N | 7934W | D14, 1806 |
| 2040Z | PSBL EYE | 2415N | 7931W | D13, OPEN NESE |
| 2111 | EYE | 2422N | 7926W | D15, OPEN SE |
| 2141Z | EYE | 2408N | 7926W | D20, OPEN ESE; EYE APPEARS TO BE INCRG SIZE AND STRENGTH PAST 30 MIN. |
| 2209Z | EYE | 2407N | 7921W | D24, LTL MOVMT, OPEN ESE |
| 2239Z | EYE | 2410N | 7919W | D26, LTL MOVMT, OPEN ESE |
| 2309Z | EYE | 2413N | 7918W | D29, LTL MOVMT, OPEN E QUADS |
| 2315Z | EYE | 2423N | 7918W | |
| 2339Z | EYE | 2424N | 7913W | D30, LTL MOVMT |

October 3, 1966

| | | | | |
|-------|---------------------------------|-------|-------|--|
| 0039Z | EYE | 2430N | 7916W | D29, 1707 POORLY DEFINED, E QUADS |
| 0111Z | | 2427N | 7918W | D31, POORLY DEFINED, E QUDS |
| 0115Z | EYE | 2434N | 7914W | D26, EYE POORLY DEFINED |
| 0139Z | EYE | 2437N | 7916W | D25, 1707 VERT POORLY DEFINED |
| 0209Z | EYE | 2439N | 7920W | D22, VERT POORLY DEFINED |
| 0237Z | EYE | 2441N | 7914W | D16, 1806 FAIRLY DEFINED; OPEN S QUADS. |
| 0338Z | EYE | 2446N | 7912W | D16, 1805 VERY POORLY DEFINED |
| 0413Z | EYE | 2448N | 7910W | D18, VERY POORLY DEFINED; OPEN SE TO S QUADS. |
| 0441Z | EYE | 2446N | 7912W | D20, LTL MOVMT POORLY DEFINED OPEN ENE TO SEE QUADS |
| 0511Z | EYE | 2455N | 7907W | D15, VERY POORLY DEFINED; OPEN SE-S QUAD |
| 0540Z | EYE RELOCATED | 2433N | 7856W | D35, EYE ELONGATED 50D N-5 POORLY DEFINED |
| 0640Z | EYE | 2433N | 7845W | D48, 2710 POORLY DEFINED; OPEN N-E QUAD |
| 0710Z | | 2450N | 7840W | D38, POORLY DEFINED; OPEN N-S |
| 0740Z | AREA...CAN NO LONGER DEFINE EYE | | | |

Key West Eye Positions, continued

-2-

October 4, 1966

| | | | | |
|-------|---------|-------|-------|--|
| 0445Z | GARBLED | | | |
| 0545Z | GARBLED | | | |
| 0645Z | GARBLED | | | |
| 0745Z | GARBLED | | | |
| 0841Z | EYE | 2517N | 7912W | ELONGATED NE-SW 40W 50 LONG. POORLY DEFINED CLOSED FULL AGAIN |
| 0910Z | EYE | 2511N | 7922W | ELONGATED NE-SW 40W 53 LONG. POORLY DEFINED, CLOSED FULL AGAIN |
| 0939Z | EYE | 2514N | 7926W | ELONGATED NE-SW |
| 1039Z | EYE | 2508N | 7932W | D34, ELONGATED NE-SW ALMOST CLOSED STGST BANDS S QUAD OF EYE |
| 1109Z | Eye | 2509N | 7935W | ELONGATED NE-SW ALMOST CLOSED. MOVMT PAST 2 HOURS 0806 |
| 1140Z | EYE | 2508N | 7938W | ELONGATED NE-SW ALMOST CLOSED. STGST WALL ON S OF EYE |
| 1208Z | EYE | 2503N | 7942W | D28, 0707 - SLIGHTLY ELONGATED NE-SW |
| 1238Z | EYE | 2458N | 7945W | D20, 0607 - CIRCULAR OPEN W TO NNW |
| 1339Z | Eye | 2458N | 7948W | D24, 0306; CIRCULAR OPEN NW WALL |
| 1411Z | EYE | 2455N | 7949W | TOPS WALL CLOUD 300 ELONGATED NE-SW POORLY DEFINED. CLOSED WK W TO NNW QUAD. |
| 1441Z | EYE | 2456N | 7955W | D22, 0705 - CIRCULAR CLOSED. POORLY DEFINED. STG FEEDER BANDS INTO EYE ENTIRE S QUAD. |
| 1509Z | EYE | 2457N | 8000W | D26, CIRCULAR POORLY DEFINED; WALL CLD TOPS 310. STG FEEDER BANDS S QUAD |
| 1538Z | EYE | 2458N | 8000W | D28; VERY POORLY DEFINED CIRCULAR OPEN W GOOD STG FEEDER. QUADS WALL TOPS 320 BANDS S QUADS. |
| 1639Z | EYE | 2458N | 8013W | D30, 0908 - VERY POORLY DEFINED; OPEN N QUAD CIRCULAR TOPS S SIDE OF WALL CLOUD 350 |
| 1737Z | EYE | 2454N | 8032W | D35, 0715, TOPS WALL CLD E QUAD 450 W QUAD 310 |
| 1842Z | EYE | 2501N | 8052W | D35, VERY POORLY DEFINED |
| 1939Z | EYE | 2457N | 8053W | D29; ELONGATED NNW TO SSE OPEN NW TO SE |
| 2008Z | EYE | 2453N | 8057W | D33; OPEN NW TO NE CIRCULAR |
| 2039Z | EYE | 2447N | 8058W | D34, 0310; OPEN NNW-NE |
| 2115Z | EYE | 2443N | 8105W | POORLY DEFINED; OPEN WNW |
| 2138Z | EYE | 2437N | 8108W | D18, 0412; ELONGATED NE-SW |
| 2208Z | EYE | 2438N | 8114W | D18, 0612 |
| 2240Z | EYE | 2436N | 8119W | D27, 0810; OPEN N ELONGATED NNW-SSE |
| 2310Z | EYE | 2434N | 8121W | D21, 0705; OPEN N |
| 2338Z | EYE | 2434N | 8122W | D26, 0704 |

October 5, 1966

| | | | | |
|-------|-----|-------|-------|-----------|
| 0010Z | EYE | 2437N | 8125W | D28, 0904 |
| 0038Z | EYE | 2439N | 8131W | D21, 1008 |
| 0108Z | EYE | 2439N | 8138W | D21, 1011 |
| 0239Z | EYE | 2441N | 8150W | D22, 0907 |

Key West Eye Positions, continued

-3-

| | | | | |
|-------------|-----|-------|-------|--|
| 0310Z | EYE | 2439N | 8158W | |
| 0513Z | EYE | 2434N | 8124W | D23, MOVG 0913 |
| 0342Z | EYE | 2436N | 8159W | D24, 0609 |
| 0412Z | EYE | 2434N | 8212W | D28, 0912; ELONGATED N-S |
| 0438Z | EYE | 2434N | 8218W | D30, 0915; ELONGATED NE-SW |
| (MOB) 0513Z | EYE | 2434N | 8124W | D23, 0913 |
| (MOB) 0541Z | EYE | 2436N | 8233W | D28, 0913 |
| (TLH) 0614Z | EYE | 2431N | 8240W | |
| (TLH) 0640Z | EYE | 2433N | 8244W | D26, 0712 |
| (TLH) 0741Z | EYE | 2436N | 8241W | D26, 1805 |
| (TLH) 0810Z | EYE | 2435N | 8248W | D30, 1105 |
| (TLH) 0845Z | EYE | 2433N | 8248W | D30, 1104 |
| (MOB) 0908Z | EYE | 2428N | 8254W | D30, 0510 |
| 1208Z | EYE | | | |
| (WNA) 1244Z | EYE | 2422N | 8303W | D27; STNRY |
| (WNA) 1310Z | EYE | 2422N | 8303W | D26; STNRY |
| (MIA) 1338Z | EYE | 2428N | 8307W | D26 |
| (MIA) 1410Z | EYE | 2431N | 8314W | D44, 1208 |
| (MIA) 1438Z | EYE | 2434N | 8320W | D38, 1312; OPEN NNW |
| (MIA) 1508Z | EYE | 2433N | 8324W | D36, 1110; OPEN NW AZRAN 270/90 |
| 1537Z | EYE | 2435N | 8324W | D34; AZRAN 272/91 |
| 1639Z | EYE | 2431N | 8333W | D35, 0807 |
| 1707Z | | 2430N | 8338W | D38, POORLY DEFINED 080/07 |
| 1738Z | | 2429N | 8339W | D40, LTL MOVMT POORLY DEFINED ELONGATED NNE-SSW |
| 1839Z | | 2417N | 8341W | D44, WELL DEFINED 262/108 |
| 1937Z | | 2425N | 8350W | D44; WELL DEFINED 08/08 K |
| 2008Z | | 2420N | 8352W | D45; FAIRLY WELL DEFINED. ELONGATED NE-SW |
| 2038Z | | 2422N | 8356W | D42, 070/7K; CIR OPEN NE SOUTH WALL STRONG |
| 2108Z | | 2417N | 8400W | D40, POORLY DEFINED |
| 2143Z | | 2415N | 8412W | D40, 0509; OPEN NE POORLY DEFINED |
| 2224Z | | 2411N | 8405W | D46, EYE OPEN NORTH |
| 2339Z | | 2401N | 8413W | D31, 0307; ELONG NE-SW OPEN N |

October 6, 1966

| | | | | |
|-------|--|------------------|-------|---|
| 0038Z | | 2401N | 8424W | D25, 0809; ELONG NNE-SSW 250/149 |
| 0137Z | | 2353N | 8428W | D35, NE-SW ORIENTED AZRAN 255 154NM STNRY |
| 0109Z | | 2353N | 8428W | D35, BEARING FROM KEY WEST 255/155 |
| 0209Z | | 2346N | 8433W | D47; MOV 030/08 STG WELL DEFINED CLD NE-SW |
| 0239Z | | 2341N | 8438W | D40; EYE OPEN NW, STRG WHIRL CLD |
| 0307Z | | 2338N | 8440W | D47, 040/9KTS; OPEN W QUAD. STG WALL CLD E THRU S. AZRAN 251/169 |
| 0338Z | | 2331N | 8436W | D35 |
| 0445Z | | 2324N | 8439W | D43, 350/7; OPEN N AND NW |
| 0515Z | | 2324N | 8439W | |
| 0542Z | | 2325N | 8440W | OEPN W POORLY DEFINED |

Key West Eye Positions, continued

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| | | | | |
|-------|-----|-------|-------|----------------------------|
| 0716Z | EYE | 2340N | 8452W | D37, POORLY DEFINED |
| 0747Z | EYE | 2341N | 8455W | D41, 10/07; POORLY DEFINED |
| 0818Z | EYE | 2342N | 8451W | D29; POORLY DEFINED |
| 0845Z | EYE | 2341N | 8455W | D32; STNRY POORLY DEFINED |
| 0915Z | | 2333N | 8500W | POORLY DEFINED |
| 0945Z | | 2331N | 8504W | D36, 0812; POORLY DEFINED |

TAMPA (TPA) EYE POSITIONS

October 5, 1966

| | | | | |
|------------|---------------------|-------|-------|-----------------------------|
| 0038Z | EYE | 2442N | 8127W | 40D, OPEN SW |
| 0113Z | EYE | 2448N | 8134W | |
| 0242Z | EYE | 2432N | 8145W | 55D, OPEN SW |
| 0315Z | EYE | 2432N | 8149W | |
| COR: 0310Z | EYE | | | SHOULD BE 2439 TYPING ERROR |
| 0341Z | EYE | 2434N | 8157W | 50D |
| 0415Z | EYE NOT DISCERNIBLE | | | |

Brownsville (BRO) Radar Eye Positions

October 8, 1966

| | | | | |
|-------|------------------|-------|-------|---------------------------------|
| 2345Z | | | | |
| 0045Z | | | | |
| 0145Z | RAIN SHIELD AREA | | | |
| 0245Z | SPRL BAND AREA | | | 125/210 150/245 168/190 152/140 |
| 0345Z | SPRL BAND AREA | | | 90/150 135/235 160/245 105/115 |
| | | | | NEGATIVE ON RECENT EYE ESTIMATE |
| | | | | ACCOUNT OF INSUFFICIENT LENGTH |
| | | | | OF ARC. |
| 0442Z | SPRL BAND AREA | | | 114/166 128/224 148/216 175/197 |
| | | | | 177/17 |
| 0515Z | EYE | 2225N | 9506W | 15 DEG SPIRAL OVERLAY |
| 0543Z | EYE | 2221N | 9529W | 15 DEG SPIRAL OVERLAY |

October 9, 1966

| | | | | |
|-------|------------------|-------|-------|---------------------------------|
| 0642Z | SPRL BAND AREA | | | 125/100 124/200 |
| 0742Z | SPRL BAND AREA | | | 128/190 155/225 170/160 142/110 |
| | | | | DETECTED ONLY AT MAX GAIN |
| 0845Z | RAIN SHIELD AREA | | | |
| 0942Z | RAIN SHIELD AREA | | | |
| 1045Z | RAIN SHIELD AREA | | | |
| 1145Z | RAIN SHIELD AREA | | | |
| 1245Z | RAIN SHIELD AREA | | | |
| 1345Z | RAIN SHIELD | | | |
| 1444Z | EYE | 2239N | 9539W | 15 DEG SPIRAL OVERLAY |
| 1545Z | SPIRAL BAND AREA | | | 107/140 120/170 155/180 179/170 |
| | | | | 160/85 TOPS 250 |
| 1643Z | EYE | 2300N | 9603W | 15 DEG SPIRAL OVERLAY |
| 1715Z | EYE | 2306N | 9601W | |
| 1747Z | EYE | 2259N | 9602W | |
| 1815Z | APRNT EYE | 2255N | 9607W | |
| 1842Z | APRNT EYE | 2259N | 9505W | D55 |
| 1913Z | APRNT EYE | 2300N | 9606W | |
| 1940Z | APRNT EYE | 2302N | 9607W | |
| 2040Z | EYE | 2304N | 9618W | D45 |
| 2110Z | EYE | 2308N | 9620W | D40, 1306 |
| 2141Z | EYE | 2302N | 9626W | D50 |
| 2211Z | EYE | 2302N | 9628W | |
| 2253Z | EYE | 2304N | 9626W | |
| 2315Z | EYE | 2307N | 9629W | D40, 1506 |
| 0011Z | EYE | 2304N | 9632W | |
| 0041Z | EYE | 2304N | 9632W | D40, 0304 |
| 0112Z | EYE | 2304N | 9636W | D35, 0904 |
| 0142Z | EYE | 2304N | 9640W | D37, 0907 |
| 0213Z | EYE | 2304N | 9640W | |
| 0241Z | EYE | 2302N | 9644W | 0404, EYE ELLIPTICAL |
| 0341Z | EYE | 2302N | 9653W | D35, 0910 |
| 0412Z | EYE | 2302N | 9653W | D30, 0906 |
| 0441Z | EYE | 2256N | 9659W | D35, 0408 |
| 0511Z | EYE | 2256N | 9656W | D33, 0207 |
| 0541Z | EYE | 2257N | 9702W | D29, 1204 |

Brownsville Eye Positions, cont'd.

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October 10, 1966

| | | | | |
|-------|------------------|-------|-------|------------------------|
| 0641Z | EYE | 2256N | 9702W | D31, LTL MOVMT |
| 0710Z | EYE | 2300N | 9713W | D27, 1110 SW QUAD OPEN |
| 0843Z | EYE | 2255N | 9719W | D28, 1104 |
| 0911Z | EYE | 2255N | 9719W | D36, 1104 |
| 0943Z | EYE INDEFINABLE | | | |
| 1014Z | POSSIBLE EYE | 2243N | 9733W | |
| 1043Z | POSSIBLE EYE | 2244N | 9733W | D24, 0616 |
| 1115Z | POSSIBLE EYE | 2246N | 9734W | |
| 1143Z | POSSIBLE EYE | 2246N | 9733W | D23, MOVMT 1802 |
| 1215Z | EYE | 2246N | 9740W | |
| 1243Z | EYE | 2247N | 9740W | D20, MOVMT 0907 |
| 1314Z | EYE | 2247N | 9751W | |
| 1334Z | EYE | 2244N | 9752W | D20, 0711 |
| 1444Z | APRNT EYE | 2247N | 9801W | D20, 1109 |
| 1511Z | APRNT EYE | 2244N | 9809W | D20 |
| 1544Z | APRNT EYE | 2241N | 9813W | D25, 0614 |
| 1614Z | PSBL EYE | 2240N | 9825W | D17, 0815 |
| 1641Z | PSBL EYE1 | 2234N | 9832W | D20, 0718 |
| 1743Z | SPIRAL BAND AREA | | | |
| 1852Z | SPIRAL BAND AREA | | | |
| 1942Z | SPIRAL BAND | | | |
| 2045Z | AREA | | | |
| 2140Z | AREA | | | |