

Don't Let The Hurricane Season Catch You Unprepared!

The name of the hurricane game is preparation. Bert I. Smith, JSC Emergency Preparedness Officer said.

"Advance planning and preparation will help to save lives and minimize property damage and should be accomplished by individuals, families, and organizations. JSC has a Hurricane Plan ready for implementation if required. This plan is developed and managed by the Center Op-

erations Directorate," Smith said.

When a tropical disturbance is identified which may eventually threaten this area, Smith maintains close contact with the Spaceflight Meteorology Group onsite for latest weather information and advisories. This information is utilized by Senior Management in deciding when to implement the Hurricane Plan, when to dismiss employees, and when to

close the site.

If a hurricane becomes a threat to JSC, the Center's Hurricane Plan will be implemented and a Command Post will be opened in Building 30. All preparations will be directed from this Command Post, and the senior members of the rideout crew will be located there during a storm. Personnel in the Command Post will maintain contact with Senior Management, the Weather Office, and

local civilian agencies, and will conduct post-storm damage assessment if required.

During imminent hurricane conditions, employees will be able to obtain information on storm status and JSC preparations by dialing 483-6281 for a code-a-phone message relative to hurricane conditions. The onsite closed circuit TV systems will also transmit a Gulf Coast area map with pertinent information such as hurricane location, wind velocities, rate and direction of movement, estimated time and point of landfall, etc.

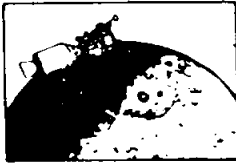
Smith says when the threat to this area warrants, the Center

will be closed and all personnel except those with predesignated hurricane-related duties will be released. A plan for release of employees at staggered time intervals has been developed to avoid traffic jams.

It is imperative that supervisors and employees observe assigned release time intervals and follow guidance of traffic patrolmen on exit routes in order that the evacuation be accomplished rapidly and with minimum traffic tieups. Prior to departure each employee should protect his or her immediate work area by unplugging all noncritical electrical

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ROUNDUP



NASA LYNDON B JOHNSON SPACE CENTER

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RECEIVING AWARD—Kenneth S. Kleinknecht, Director of Flight Operations presents the Decoration For Exceptional Civilian Service to JSC employee Donald Griggs. The award was presented on behalf of the U. S. Air Force in recognition of Griggs' distinguished performance as Chief, Zero G Section, 4950th Test Wing, Air Force Systems Command, from April 1961 through December 1972. Also pictured is Joseph Aligranti, Acting Chief of the Aircraft Operations Division.

Center Initiates New Method For Guided Tours

JSC has initiated a new method of providing guided tours for the general public, John W. King, Public Affairs Officer announced recently.

The daily bus tours—currently four per day—will be discontinued. Public Affairs escorts will be assigned to the facilities normally visited by the daily bus tours, including the Mission Control Center, the Space Environment Simulation Laboratory and the Skylab 1-g Trainers.

Briefings will be given in these facilities every 30 minutes throughout the day, beginning at 9 a.m., Monday through Friday.

Visitors will be provided a pass, indicating the times of briefings in each building. The passes will be issued at the Information Desk in the lobby of Building 1.

Groups attending each briefing will be limited to approximately 50 persons. This plan will enable the Public Affairs Office

to provide briefings for a greater number of visitors than has previously been possible, King said.

Reservations will be accepted under the new program from individuals, and from convention and other organized groups who arrive at the Center by charter bus. If reservations are not desired, passes will be issued on a space available basis.

Visitors currently holding reservations for one of the daily bus tours will be given passes to briefings at a time closely corresponding to the time of the bus tour previously scheduled.

Because the escorts will be assigned to the buildings on the tour route, the number of "specially arranged" tours will be necessarily limited. Only bonafide VIP tours will be conducted by the Public Affairs Office.

Center personnel are requested to encourage their guests visiting JSC to take advantage of the pre-arranged tours. JSC employees desiring to conduct their own tours should coordinate in advance with the Special Events Office and secure proper authorizations (JSC Form 1813).

The present system of "walk through" tours on Saturdays and Sundays will continue unchanged.

Construction On Schedule

Work on the new Integration and Mockup Laboratory, Building 9-A, is progressing and should be completed on schedule. Projected date is September 1974.

The walls are nearly all up on the building which provides for an addition to the Technical Services facility (Bldg 9) of 30,500 square foot high bay mockup area as well as a 8,300 square foot, two-story connecting wing.

When completed the facility will be used for systems integration and mockup studies of the various components of the Space Shuttle. Mockups of the Orbiter cabin sections and payload bay

will be housed in the building.

The high bay addition is steel frame with exterior wall of pre-cast exposed aggregate facing panels. Two large access doors, sufficient to accommodate Orbiter full scale mockups, are included.

Two 20-ton capacity traveling cranes will be installed to assist in handling and manipulation of the Orbiter payload modules and multidisciplinary models.

Included in the plans are provisions for a 70-foot air bearing floor to be used in testing of the Orbiter manipulator arm. It is planned to use some of the mockups as crew trainers when systems testing is completed.

JSC Scientists To Receive 1974 Memorial Award

Three food and nutrition scientists at JSC will receive the 1974 Underwood-Prescott Memorial Award at the Massachusetts Institute of Technology (MIT) for "their contributions to the field of food science through their research in space feeding and nutrition which resulted in making possible the food supply and nutrition for space missions to the Moon and in Skylab."

Receiving the awards are Dr. Malcolm C. Smith, Jr., Chief of the Food and Nutrition Branch; Dr. Norman D. Heidelbaugh, Chief of Food Science; and Dr. Paul C. Rambaut, Chief of Nutrition.

These three scientists were responsible for developing food programs for both the Apollo and Skylab missions. They have also developed food systems for the Shuttle and for the Apollo-Soyuz Test Project.

They were selected for the award by an MIT Department of

Nutrition and Food Science faculty committee.

Presented annually, the award is in memory of William Lyman Underwood and Dr. Samuel Cate Prescott—the industry-university team who in 1895 established that bacteria caused food spoilage in cans and who subsequently developed the temperature and time guides necessary to destroy the spore-forming organism responsible for the spoilage.

The awards will be presented by MIT on Tuesday, October 1, 1974, at a luncheon in the MIT Student Center. Following the luncheon, a symposium on "Feeding and Nutrition of Man in Space" will be presented by the awardees.

More than 300 scientists, food industry executives, representatives of the aerospace industry and students are expected to attend the luncheon and symposium.

MTF Renamed NSTL: Becomes Permanent NASA Facility

The Mississippi Test Facility, Bay St. Louis, Mississippi, has been renamed the National Space Technology Laboratories (NSTL) and will become a permanent NASA field installation reporting directly to Headquarters in Washington, D.C.

The new status of the facility reflects the growing importance of the activities at NSTL to current and future programs of NASA and of other agencies taking advantage of the capabilities available at NSTL.

Designed and created by NASA in 1961 as part of Marshall Space Flight Center, the \$350 million facility was first established and used for static testing of the large rocket engines used in the Apollo program.

As the Apollo program drew to a close, NASA and several other agencies moved a variety of research and technical activities, primarily related to earth resources and the environment, in-

to the modern facilities available at the 141,000 acre site. Present contractor and civil service employment totals over 1,000.

"NSTL has developed into an installation where highly qualified capabilities exist for conducting remote sensing, environmental, and related research and technical activities." Dr. Fletcher, NASA Administrator said. "These capabilities have been enhanced in recent years by the location at NSTL of research and technical activities of several other government agencies. The success of this experiment in the co-location of these mutually supporting activities has led me to decide that NSTL will have a permanent role in NASA's space applications and technology," he continued.

NASA activities at NSTL include developmental testing of the main engine for the new space shuttle, and an Earth Resources Laboratory.

Terms You Should Know

By international agreement, Tropical Cyclone is the general term for all cyclonic circulations originating over tropical waters, classified by form and intensity as follows:

Tropical Disturbance: Rotary circulation slight or absent at surface but sometimes better developed aloft, no closed isobars (lines of equal atmospheric pressure) and no strong winds, a common phenomenon in the tropics.

Tropical Depression: One or more closed isobars and some rotary circulation at surface, highest wind speed 39 mph (34 knots).

Tropical Storm: Closed isobars, distinct rotary circulation, highest wind speed 39-73 mph (34-63 knots).

Hurricane: Closed isobars, strong and very pronounced rotary circulation, wind speed of 74 mph (64 knots) or more.

Hurricane Watch: Issued when a hurricane threatens coastal and inland regions, the watch covers a specified area and time period. A hurricane watch indicates that hurricane conditions are a real possibility; it does not mean they are imminent. When the watch is issued, everyone in the area covered by the watch should listen for further advisories and be prepared to act quickly if hurricane warnings are issued.

Hurricane Warning: When hurricane conditions are expected within 24 hours a hurricane warning is issued. Hurricane warnings identify coastal areas where winds of at least 74 mph are expected to occur. A warning may also describe coastal areas where dangerously high water or exceptionally high waves are forecast, even though winds may be less than hurricane force. When the hurricane warning is issued, all precautions should be taken immediately. Hurricane warnings are seldom issued more than 24 hours in advance. If the hurricane's path is unusual or erratic, the warnings may be issued only a few hours before the beginning of hurricane conditions.

Small Craft Warning: When a hurricane moves within a few hundred miles of the coast, advisories warn small craft operators to take precautions and not to venture into the open ocean.

Gale Warning: When winds of 38-55 mph (33-48 knots) are expected, a gale warning is added to the advisory message.

Storm Warning: When winds of 55-74 mph (48-64 knots) are expected, a storm warning is issued. Gale and storm warnings indicate the coastal area to be affected by the warning, the time during which the warning will apply and the expected intensity of the disturbance. When gale or storm warnings are part of tropical cyclone advisories, they may change to hurricane warnings if the storm continues along the coast.

Hurricane Preparedness Checklist

KNOWING HOW AND WHEN TO DO WHAT IS THE KEY TO HURRICANE SURVIVAL.

These checklists have been organized to follow the natural sequence of hurricane season preparations. Working through in sequence insures that vital steps are not omitted.

The items in the pre-season checklist are the most easily overlooked in hurricane survival plans, yet they may be the most crucial. These questions must be answered before the hurricane season while there is time for any remedial action that may be indicated.

The other checklists are self-explanatory. They should be worked through systematically and kept available for last minute countdowns. Waiting until the storm is offshore is playing long odds on short time.

BEFORE HURRICANE SEASON BEGINS, YOU SHOULD KNOW:

THE ELEVATION OF YOUR HOME ABOVE SEA LEVEL

Your local Civil Defense officials can help you obtain information about your elevation. The local Weather Service office can supply floodstage information for local streams and bayous.

THE MAXIMUM STORM SURGE HEIGHT WHICH MIGHT OCCUR IN YOUR AREA

Your nearest Weather Service office can tell you the highest potential storm surge at each point along the coast and the approximate extent of inland flooding.

THE ROUTE YOU WOULD TRAVEL TO SAFETY IF YOU HAVE TO LEAVE

Plan your escape route early, and check with local Civil Defense for the low points and flooding history of your route.

THE LOCATION OF THE NEAREST OFFICIAL SHELTER

Civil Defense or Red Cross can locate the shelter nearest your home and explain what you should bring with you.

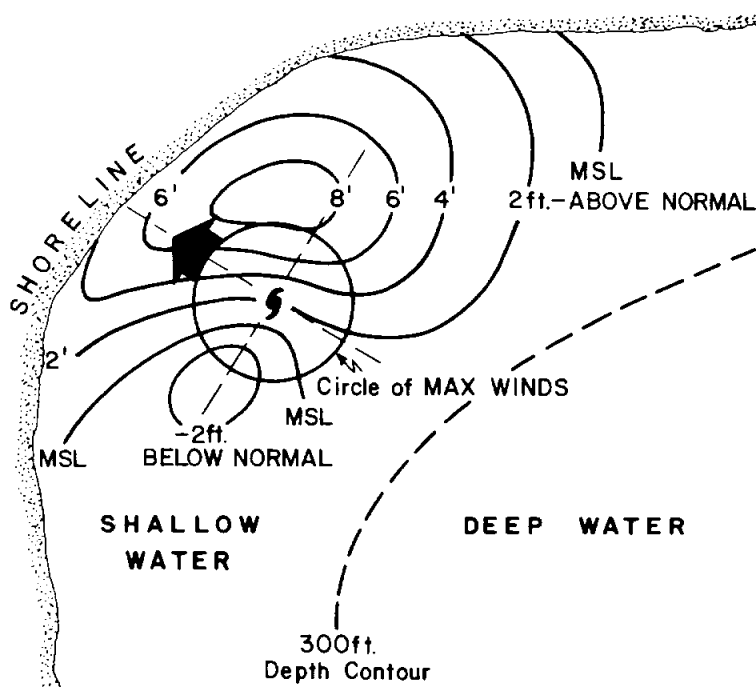
HOW SAFE YOUR HOME IS

If you live near the seashore plan to relocate during a hurricane emergency unless you live in a high-rise above the third floor level. If you live in a mobile home always plan to relocate.

WHEN A HURRICANE WATCH IS ISSUED, CHECK SUPPLIES:

TRANSISTOR RADIO WITH FRESH BATTERIES

Your radio will be your only reliable source of information. Have enough batteries to last several days. There may be no electricity.



THIS IS A plan view of the hurricane storm surge while the hurricane center is offshore in shallow water. The peak surge heights occur to the right and slightly ahead of the hurricane's pressure center. To the left of the track, the water surface may be depressed below sea level. This mounding process sets up strong water currents in advance of the hurricane center. These currents move from the right to the left side of the track and are called "alongshore currents."

Storm Surge: The rise in sea level due to the accumulation of wind driven water as a storm system moves over coastal shallows, combined with the rise due to low pressure at the storm center. In hurricanes, surges may cause sea level to rise more than twenty feet at the shoreline.

Hurricane Tide: The rise in sea level due to a combination of the hurricane storm surge and the normal astronomical tide.

Hurricane Advisory: An official advisory concerning the hurricane location, strength and expected movement, together with coastal hazards it may present. It is the means of formally issuing hurricane watches and warning.

Hurricane Eye: The central area of the hurricane, 10-30 miles across, often free of rain clouds and with comparatively light winds, but surrounded by a wall of tall heavy rain clouds containing the most dangerous wind and rain conditions.

FLASHLIGHTS, CANDLES OR LAMPS, MATCHES

Store matches in a waterproof container. If you use lanterns or lamps, have sufficient fuel for several days and know how to use safely.

FULL TANK OF GASOLINE

Remember the energy crisis. Never let the tank be less than half-full during the hurricane season; fill up as soon as a hurricane watch is posted. Remember, when there is no electricity gas pumps won't work.

CANNED GOODS AND NON-PERISHABLE FOODS

Store packaged foods which can be prepared without cooking and need no refrigeration. There may be no electricity or gas for days.

CONTAINERS FOR DRINKING WATER

Have enough clean containers to store sufficient drinking water for several days. The city supply will probably be interrupted or contaminated.

MATERIALS FOR PROTECTING GLASS OPENINGS

Have suitable shutters or procure stout lumber for protecting large windows and doors; have masking tape available for use on small windows.

WHEN A HURRICANE WARNING IS ISSUED, ACT PROMPTLY

BEGIN A CONTINUOUS COMMUNICATIONS WATCH

Monitor TV and radio broadcasts or VHF continuous weather broadcasts. Keep a log of official information on hurricane position, intensity, and expected landfall. Discount rumors. Use the telephone sparingly.

IF YOU LIVE IN MOBILE HOME

Check your tie-downs and leave immediately for safer refuge.

PREPARE YOUR RESIDENCE AND PROPERTY FOR HIGH WINDS

Secure all outside objects like garbage cans, awnings, garden tools and loose objects. Anchor them securely or bring them indoors.

PROTECT LARGE WINDOWS AND OTHER EXPOSED GLASS

If shutters are not available board up large windows securely. Tape windows which are not boarded or shuttered to reduce shattering. Draw drapes across windows and patio doors to protect against flying glass if shattering does occur.

MOVE SMALL BOATS ON TRAILORS CLOSE TO THE HOUSE

Fill them with water to weight them down. Lash boats securely to trailer and use tie-downs to secure the trailer to the ground or to the house.

MOVE VALUABLES AND PERSONAL PAPERS TO HIGHEST POINTS

It is good insurance for irreplaceable documents to place them in a high spot and, if possible, in a waterproof container.

IF YOU DECIDE TO REMAIN AT HOME REMAIN INDOORS

Don't venture out during the lull when the eye arrives. The lull sometimes ends suddenly as winds return from the opposite direction. Winds can increase to 75 mph or more in a very few seconds.

STAY AWAY FROM EXPOSED WINDOWS AND GLASS DOORS

Move furniture away from exposed doors and windows during the hurricane.

STAY ON THE LEEWARD OR DOWNWIND SIDE OF THE HOUSE

As the wind direction changes, move to another room. If your home has an "inside" room, remain there during the height of the hurricane.

KEEP A CONTINUOUS COMMUNICATIONS WATCH

Keep the radio or television tuned for hurricane information from official sources. Unexpected changes can sometimes call for last minute evacuations or relocations.

KEEP CALM

Your ability to meet emergencies will help others maintain control of their situation.

IF YOU MUST LEAVE HOME DUE TO THE HURRICANE THREAT

FIRST MAKE SURE THERE IS A SAFE REFUGE WITHIN REACH WHICH CAN ACCOMMODATE YOU

Remember, dangerous winds and tides may arrive three to five hours before the hurricane center reaches the coast. Roads may be traffic-jammed and a stranded auto may become a coffin.

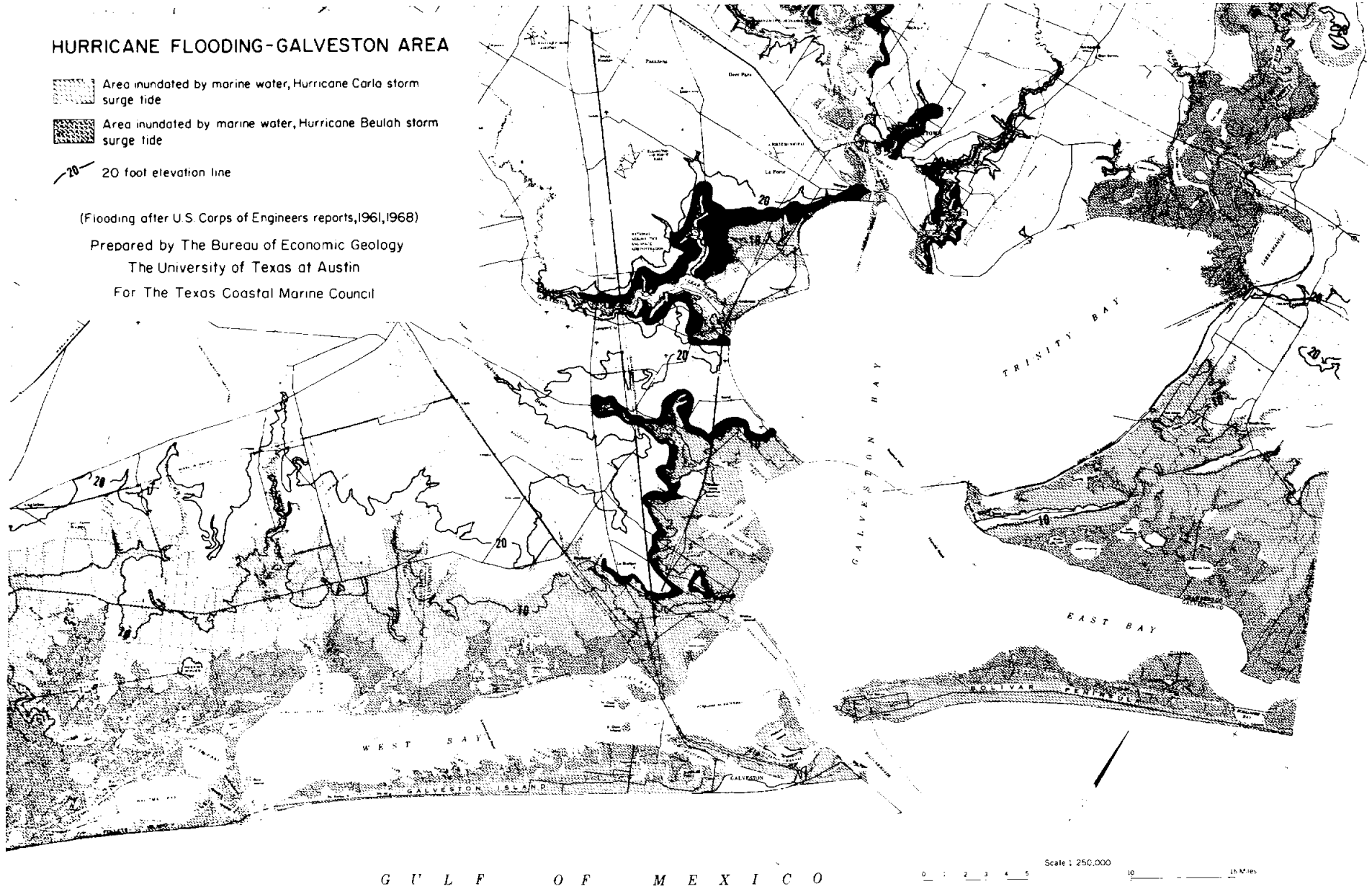
DON'T TRAVEL FARTHER THAN NECESSARY CLOSE AND LOCK ALL WINDOWS AND DOORS CARRY ALONG SURVIVAL SUPPLIES

First aid kit

Canned or dried provisions, can opener, spoons, etc.

Bottled water

Medications required regularly.



THIS COMPOSITE map shows the extent of storm surge tide flooding which occurred after Hurricanes Carla and Beulah. The map key explains the lighter hatch areas; the dark area to the north of the flooded zone represents land which would be under water from a surge tide if a Carla-type hurricane hit today based upon subsidence since 1968.

Spare eyeglasses or hearing aids and batteries, if required.

TAKE IMPORTANT PAPERS WITH YOU

- Driver's license and other identification
- Insurance policies
- Medic-alert or device to convey special medical information.
- Keep these papers with you at all times

AFTER THE HURRICANE PASSES, SOME DANGERS REMAIN

BEWARE OF OUTDOOR HAZARDS

Watch out for Loose Or Dangling Power Lines. Many lives are lost by electrocution.

WALK OR DRIVE CAUTIOUSLY

Debris-filled streets are dangerous. Snakes and poisonous insects will be a hazard. Washouts may weaken road and bridge structures which may collapse under the weight of passing vehicles.

GUARD AGAINST SPOILED FOOD

Food in refrigerators may begin to spoil if power is off for more than a few hours. Home freezers will keep frozen for several days if the doors are not opened after a power failure.

DO NOT USE WATER FROM CITY MAINS UNTIL YOU ARE SURE IT IS SAFE

Use your emergency drinking water, or boil other water before drinking until you receive official word that the city water supply is safe.

TAKE EXTRA PRECAUTIONS TO PREVENT FIRES

Until all services return to normal, lowered water pressure in city mains and the interruption of other services may make firefighting extremely difficult after a hurricane.

Surge Tides Greatest Threat To Lives, Land

Storm surge is the greatest killer and generally most destructive part of a hurricane. As the hurricane approaches the coast, its low barometric pressure and winds combine to move a mound of water ahead and to the right of its track.

As the hurricane arrives at the coast, this surge may cause water to pile up 15-20 feet high at the coastline. This mass of water then moves inland across the coastal plain causing flooding and turning debris and other floating objects into battering rams. Carla, in 1961, had a 21 foot surge which extended more

than 10 miles inland. Camille, which hit Mississippi in 1969, had a surge of nearly 25 feet. The Galveston seawall is only 17 feet high.

A special form of the surge is especially deadly—as witnessed at Galveston in 1900 when 6000 persons died, and Corpus Christi in 1919 when 300-600 died. Although there is debate in the scientific community over whether or not a true seiche (pronounced "saysh") did occur, the fast-moving, quickly deepening series of inundations certainly were seiche-like. The seiche occurs when a surge moves across

a bay or along a shallow coast in a certain manner. If all the factors are right when the surge reaches land, it suddenly breaks into a series of fast moving wave fronts which constitute the deadliest aspect of a hurricane.

Defenses against storm surge are few. Seawalls and strongly constructed buildings offer some protection, but are not invincible. The only sure way to avoid a destructive surge is not to build in low-lying coastal areas which might possibly be affected. Unfortunately, this includes most of the Texas coastal zone below the 20 foot elevation line.

Prepare For Hurricane Season—

(Continued From Page 1)

appliances (coffeepots, heaters, etc.), office machines, and clocks; closing all doors; moving unique or valuable papers from outside rooms and bottom file drawers when possible; and raising all venetian blinds to maximum height.

If released due to severe weather conditions, employees are expected to report for duty the following day unless otherwise advised through news media.

Each major JSC organization has an individual designated as the interface with Command Post and Emergency Preparedness personnel for all hurricane planning and preparations.

These individuals are responsible for advance notification of

any situations requiring special precautions or operational support and should be the channel for all such organizational requests

When the Hurricane Plan is implemented and the Command Post is opened, these individuals will be responsible for maintaining close contact with the Command

Post. Names of these individuals are available from the major organization concerned, or from Smith.

"We have been fortunate that no hurricanes have seriously affected this area since JSC has been located here" Smith said, "We should assume that a hurricane can strike at any time during the current season."

Our Thanks To . . .

Information for map captions and the maps themselves are provided by the Texas Coastal and Marine Council. The Council has spent much time warning Texas coastal residents and government agencies of the dangers of hurricanes and providing them with safety information should bad weather strike along the state's 592 km (370 miles) of Gulf Coast. The information which formed the basis for these maps was provided by the U. S. Corps

of Engineers and compiled by the Bureau of Economic Geology at the University of Texas, Austin.

Attention!

The July 19 edition of the Roundup will be dedicated to the anniversary of Apollo 11. The Swap-Shop will not appear in this particular issue. The printing of ads will resume in the August 2 issue.



The Roundup is an official publication of the National Aeronautics and Space Administration Lyndon B. Johnson Space Center, Houston, Texas, and is published every other Friday by the Public Affairs Office for JSC employees.

Editor: Janet Wrather

Photographer: A. "Pat" Patnesky



MAN ON THE MOVE—On his way to a meeting to present the results of analyses on the operations cost differences for alternative Space Shuttle Rocket Booster design configurations, Howard Renfro of the Operations Analysis Branch is certainly a man on the move.

JSC Personality Profile: Howard Renfro

Most people enroll in karate classes for protection, fun, or just the curiosity of the art.

Howard Renfro's reasons were no different. However, since he enrolled in the classes last year he has learned that there is more to karate than just physical action.

"I especially benefit from the concentration and the discipline karate requires," Howard says, "I tend to think more deeply about why things are done instead of forming opinions from surface appearances."

Howard is employed in the Operations Analysis Branch of the Space Shuttle Resources and Schedules Integration Office. His responsibilities include cost mod-

eling and analyses of Shuttle program resource requirements. This assignment entails meeting with Center Management to discuss various cost aspects of the Shuttle, traveling to other NASA Centers to coordinate resource activities and interfacing with Air Force personnel who will play a significant part in the Shuttle program.

Howard received his B. S. degree in mathematics from Lamar University in Beaumont. He minored in engineering and computer science. He joined JSC in 1966 as a co-op student. He has received the NASA Outstanding Performance Award and several Group Achievement Awards.

Howard met his wife, the former Freddie Lee Clouche while both were freshman at Lamar. They were married a week after graduation. The Renfros live in Clear Lake Forest in Seabrook, with their son Theron J., two.

Howard says he is always on the go. "My life is full of things to do and I make the most of every minute I have," he said.

Besides his karate lessons on Monday and Thursday nights, Howard participates on his office

softball team, the Boas.

He and his wife enjoy bicycle riding through the neighborhood. They also enjoy movies, card-playing, dancing, listening to music and "rap sessions" with friends.

Howard assisted in coordinating activities at JSC during Black History Week last February. He is also involved in Black Christmas project activities, held annually at JSC. Howard and a number of other employees in 1971 originated the project to aid needy families during the Christmas season. Since that time, the project has been expanded to assist the needy throughout the year. Howard has served as financial coordinator since the project's inception.

"Hopefully some day there will be no need for such efforts, Howard says, "But as long as there is a need, we will continue to promote the project at JSC."

Howard feels that there are not enough people in the world willing to take out time to do something for others.

"It's not enough to donate a little time or a little money," he said, "You have to give a part of yourself."

It's Travel Time!

Final plans have been made for the JSC Travel Club trip to Mexico, City. The tour will depart Houston August 1 and will return August 6.

Cost per person is \$182.50 for single occupancy, \$145 for double and \$137.50 for triple. The price is \$95 for children 11 and under. (It is not recommended that children under 7 be taken on the trip).

Prices include round trip bus transportation between JSC and Houston Intercontinental airport, roundtrip air fare, hotel accommodations at the Cheau Royal, transfers between hotel and airport and a half day tour of Mexico City. Full payment is due July 16.

A film will be shown July 16 of Mexico City.

Contact Hal Parker, X-6321 for more information.

Don't Miss World Team Tennis Matches

World Team Tennis is the most recent and exciting sport to be seen in Houston. It is the first major league sport involving men and women playing together and against each other, and boasts over 100 of the World's best tennis professionals.

Sixteen cities stretching from Miami to Toronto and Hawaii have entered teams and each team plays 44 matches in the season from May to August—22 at home and 22 away.

The Houston entry is a team called the "EZ Riders," headed by John Newcombe, World Professional Champion and three-time Wimbledon Men's Singles Champion, and supported by Dick Stockton, Karen Krantzke, Helen Gourlay, and husband and wife teams Bill and Lesley Bowery, and Peter and Cynthia Doerner.

Teams competing against the EZ Riders include such tennis stars as Billie Jean King, Roy Emerson, Evonne Goolagong, Tony Roche and Rosie Casals.

World Team Tennis has a new simplified scoring system in which the overall team game score decides the evening's play making the matches easy to understand.

As an initial incentive to NASA employees to attend the matches, the EZ Riders are offering discount tickets to the games. Regular \$5 tickets will be \$3/person. Children and students get discounts of 1/2 off the regular price ticket.

All home matches are played in the Sam Houston Coliseum, 810 Bagby beginning at 7:30 p.m.

The remaining home schedule is, July 7, Detroit Loves; July 22, Denver Racquets; July 24, Boston

Lobsters, July 29, Baltimore Banners; July 30, Florida Flamingos; August 1, New York Sets; August 3, Toronto Royals; August 5, Minnesota Buckskins; August 11, Pittsburg Triangles; August 18, Florida Flamingos. Playoffs are August 19-25.

**Take stock in America.
Buy U.S. Savings Bonds.**

Roundup Swap-Shop

Swap Shop advertising is available to JSC and on-site contractor personnel. Articles or services must be offered as advertised, without regard to race, religion, sex or national origin. Ads should be 20 words or less, including home telephone number. Name and office code must accompany, but need not be included in ad copy. Typed or printed copy must be received (AP3 Attn; Roundup) by Thursday of the week before publication.

VEHICLES

- 60 Rambler sta wgn, gd running cndn, tires worn, \$100 or bst ofr, 946-5117 aft 5.
- 66 Corvair parts, gd differential and parts for 4 spd trans, Len, X3217.
- 26" Schwinn girl's 3-spd bike, maroon/silver, \$50, 534-3365.
- Honda CL-450, 70, clean, hooks, 2 helmets, \$725, firm, 474-2521 or 538-2039.
- 73 Duster V8, 1 owner, 49,000 mi, gd tires, a/c, gd cndn, \$2150, 333-2848, Cliff.
- 67 Stuary fold-down, self contained camper w/ patio, sleeps 8, \$750 firm, Dubbin, 473-7364 or 472-5209.
- 70 Honda "Trail 90", \$200, 1w mi, gd cndn, adult owner, 332-3674, Scott.
- 67 Buick Wildcat, 11 new engine, gd tires, air pwr, runs, looks gd, \$400, Schneider, 426-4749.
- 72 orange Camaro, blk vinyl top, auto, ps, pb, 307 v8, air, gd tires, mags, xlnt cndn, Charite, 643-0876 aft 5.
- 69 honda "450" gd cndn, 1w mi, \$650, Simpson, 471-2059.
- 23 ft self contained trail blazer, 72 model w/ AM radio, air, Eq trailer, hitch, sway bar, \$3,600, Cornelius, 427-3365.
- 68 Chevy II Nova 307, 4 dr, air, autom 68000 mi, \$975 Errington 481-1272 aft 5:30.
- 72 Montecarlo 350 hp, air, auto, ps/b, 20,000 mi, \$2800, 481-1272.
- 73 Volkswagon Super Beetle, \$2525, white, blc int, 20,500 mi, xlnt cndn, fact air, new radio, recent tune up, 488-4331.

MISCELLANEOUS

- Exquisite wedding gown, Maurer Designer, gown/veil, sz 10, less than year, nw cost ovr \$300, now \$150, 334-3459.
- Assorted golf clubs, balls, bag and cart, \$12.50 for all Jimmy, 334-5949.
- Ham radio, HW-12A w/ac and dc supplies, SB200 amplifier, SB-101 w/ac, swan 350c, 538-1151.
- Private pilot course, test, workbook, ref material, sample exams, flight computer, \$12, Bernie, 334-1138.

Two 7.35 x 14 snow tires li nw, \$20, aluminum screen dr, \$15, 488-1243.

Tent, 10'x16', Sears best, gd cndn, \$75, tires, JR 70x15, Falcon, steel radial, li nw, \$50/pr, x4019 or 554-2629.

Baby items, car seat, \$5, Cosco chair, \$5, Smith, 488-3238.

HOUSEHOLD ARTICLES

73 Hoover portable apartment-size electric washer and dryer (avocado), used 8 months. Outstanding value in mint cnd, \$200, 946-6242 aft 5.

Apartment sz Hoover washer/dryer gd cndn, 333-4786.

Kenmore 600 washer, \$70, dryer \$50, Errington, 481-1272 aft 5:30.

PROPERTY and RENTALS

Wooded lot for sale, Nassau Bay, 333-4774. 1350 acre deer lease, 20 mi, North Junction Doe permit, feeders, stands, 10 members, incl fam, 488-2182.

Beautiful wooded lot, Wildwood Resort City, exec type facilities, privately owned coop, 1 1/2 hr drive from JSC, 488-2226.

PETS

Registered Irish Setter pups, gd hunters, wonderful pets, 4 males, 4 females, \$85 ea, 925-3690.

BOATS

15' 72 Gaspar G-3, ski/spd Rig w/100 horse Johnson motor, trailer incl, vry gd cndn, \$1900; Swan, 442-2213.

LOST and FOUND

Found ladies ring in Bldg 419 on June 11, will release to owner upon identification, Evelyn, x2737.

WANTED

Stereo preamp, motorcycle trailer, Lindsey, 488-0517.

Mary Nordin Gets Honors

Mary Nordin, Principal Investigation Management Office (PIMO), Earth Observations Division, was selected Outstanding Secretary for June.

Mary was responsible for organizing clerical operations when the PIMO was established in support of the Skylab Earth Resources Experiment Package. Part of this effort included compiling files and correspondence for PIMO functions previously assigned to the Science Mission Support Division and the EREP Principal Investigation Ad Hoc Group.

Other assignments included preparing 150 Principal Investigator Requirement Documents (IRD's); scheduling clerical support to complete the Statements of Work (SOW) submitted by each Principal Investigator; and maintaining a current and accurate PI mailing list. "Mary coordinated in an exceptional manner the voluminous correspondence requirements generated by the PIMO teams."



MARY NORDIN

Thomas Kloves, then manager of PIMO said, "Stringent timelines were established, adhered to and met through her unselfish endeavors," he added.

Services Held

Funeral services were held recently for JSC Security Policeman, Kermitt C. Hickman, 37. Hickman had been at JSC since September, 1973.

Survivors include his wife Annette and three children Carolyn, Angela and Patrick, Jr.



TABLE TENNIS WINNERS—The winners of the Semi-Annual Open Table Tennis Tournament at the Gilruth Center are shown receiving their trophies from club president, Stephen Jacobs, right. From left to right are Richard Russell, first place, and Danny Feagin, second place. Not pictured is third place winner, Lee Norman.