## Apollo 13 review continues at MSC

The Apollo 13 Review Board has been meeting since Tuesday evening, April 21. Its task, as assigned by NASA Administrator Thomas O. Paine, has been to "delve into every aspect of the accident and recovery" associated with Apollo 13. The Board has been charged to make a full and complete investigation of the circumstances surrounding the accident, to establish the probable cause or causes of the accident, to assess the effectiveness of the recovery actions, and to recommend appropriate corrective or other actions.

### **Probable Sequence Of Events**

Last Friday, NASA Deputy Administrator George M. Low was at MSC to receive the Board's first progress report. In his briefing to the press, Mr. Low outlined the most probable sequence of events which took place on Apollo 13. Here is what he said:

"First, a short circuit occurred on oxygen tank no. 2. This short circuit most probably caused combustion within the tank. This in turn caused the pressure and temperature within the tank to increase. The tank then ruptured. This rupture of the tank caused the pressure in the compartment in which the tank is located to increase which then caused the panel, the big covering panel in the Service Module, to blow off.

Mr. Low also commented that what probably caused the brief loss of data from the high gain antenna was a blow from the panel as it was exploded from the SM.

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DATE.

008 MSC

# 9-14

VOL. 9 NO. 14

### **Preflight Anomalies**

Three preflight events were mentioned which the Board thinks may prove to be of importance in connection with the accident: the fan motors inside the tank were changed early in the manufacturing process; later the tank itself was jarred while being removed from one spacecraft and installed in spacecraft 109; finally, a new procedure was employed in de-tanking the oxygen during countdown demonstration tests at the Cape. The Board will be investigating whether there could be a connection between these factors and the accident itself.

## Last chace for tours of the LSI

Regularly scheduled Friday afternoon tours of the Lunar Science Institute will be cancelled soon. The last tours will be taken from 4 to 5 pm Friday, May 22. After that date, tours will be offered from time to time, usually during holidays.

The Roundup will keep you posted as to when the tours will be scheduled.

### Man's first steps on the Moon are preserved in this work by artist Franklin McMahon. The watercolor is one of 40 works related to the Apollo Mission which are currently on view at The Museum of Fine Arts,

## The Artist & Space" Fine Arts Show

"The Artist and Space," an exhibition of paintings, drawings, watercolors and lithographs related to the Apollo Mission to the moon will be held at the Museum of Fine Arts from May 2 through May 31.

### MSC Days at Searama--this weekend only!

Tomorrow and Sunday, May 9 and 10, will be the only two days when your EAA Sea-Arama Marineworld tickets will be good.

If you haven't already gotten your "Family Fun Days" tickets to the Marineworld shows (at special prices, don't forget), see your EAA representative today!

The forty works in the show have been selected, with a few exceptions, from NASA's art program and have come to Houston via the National Gallery of Art, Washington, D.C., as the first stop on an international tour. Numbered among the 26 participants are some of America's foremost artists, including Robert Rauschenberg, James Wyeth, Paul Calle, Billy Morrow Jackson, Robert Vickery, Mitchell Jamieson, Lamar Dodd, Jack Perlmutter, and Nicholas Solovioff.

the result of a NASA program which has encouraged leading US artists to help document and interpet the space program. NASA Administrator Thomas O. Paine writes: "Machines can duplicate and preserve the cold facts, but the emotional impact and hidden meaning are within the scope of the artist and the poet. The best scientific talent in the western world has helped us to reach our goals and we are proud that some of America's top artists have in their way also been our allies and assistants."

The works in the exhibition are

## Alligators at KSC?

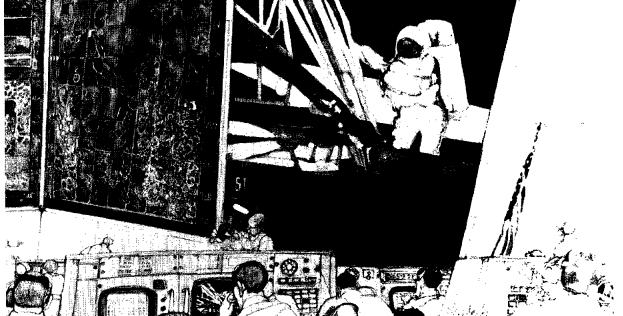
The following article is based upon the observation of Mrs V. A. Jones, after her first visit to K.S.C.

Unexpected opportunities for salt and freshwater fishermen, for birdwatchers and for picnickers

them have even become quite brave, allowing themselves to be seen and photographed without apparent fear.

(Continued on page 4)

Center of attention during a pause in the Apollo 13 Review Board session is this mock-up of an oxygen tank. A short circuit occurring in a tank such as this one is suspected of precipitating the rupture of the tank, thus necessitating the early return of Apollo 13 to Earth.





MAY 8, 1970



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Edgar M. Cortright, Chairman of the Apollo 13 Review Board, is shown addressing a session of the Board as it meets in Building 2 at MSC. The Board is expected to report its findings to NASA Headquarters sometimes around the first of June.

abound at Cape Kennedy. That's not really so surprising when you realize that KSC is located directly on the 57,966 acre Merritt Island National Wildlife Refuge.

Visitors usually ask how an area which launches a Titan III-C and a Saturn V within four days of one another can be considered a wildlife refuge. How come all the animals aren't nervous wrecks, they ask. The guides don't try to explain the phenomenon. All they know, they say, is that tests run with ducks indicate that the launchings have no effect upon these animals. The other creatures seem to have gotten used to man's presence, too. Some of



The common egret, once killed for its feathers by hunters, now flourishes in swampy areas of the U.S.

ROUNDUP

# **Prestige Awards for outstanding contributions**

## NAE selects new members

have been elected to membership in the prestigious National Academy of Engineering: Maxime A. Faget, Director of Engineering and Development, Christopher C. Kraft, Jr., Deputy Director of MSC, and George M. Low, now at NASA Headquarters as NASA Deputy Director.

Page 2

The Academy was founded in 1964 as an organization which parallels the National Academy of Sciences, and shares with the older Academy the responsibility for

Three men well-known at MSC advising the federal government.

New members are chosen for their significant contributions to engineering theory and practice or on the basis of demonstrations of unusual accomplishments in the pioneering of new and developing fields of technology.

Other members of the Academy include such men as Robert R. Gilruth, Wernher von Braun, Igor Sikorsky, Jerome Lederer, I. Robert C. Seamans, Jr., T. Keith Glennan, H. G. Rickover, and George E. Mueller.



Major C. J. Tringali



Stanley H. Goldstein

 $\gg$  Nixon recognizes outstanding citizens

Philip H. Whitbeck

### Prather Award shared by two



James V. Correale

The Victor A. Prather Award will be shared this year by James V. Correale, Assistant Crew Systems Division Chief for Test and Development, and Edward L. Hays, Deputy of the Crew Systems Division. The award was designed to honor researchers and engineers in the field of extravehicular protection in space.

Mr. Correale and Mr. Hays have received the Award in recognition of contributions made over the past 20 years to the development of extra-vehicular life support equipment. Starting with pressure and other life support equipment for the Navy's high performance aircraft, their work led to equipment which has been



### Edward L. Hays

the basis for the development of the first United States space suits. They were responsible for the development and qualification of the Project Mecury Space suit. The NASA teams which they headed provided both developmental and operational support of all Gemini extra-vehicular missions. They also co-authored the original specification for the Apollo space suit and back pack life support system.

It is also interesting to note that before they joined NASA Mr. Hays and Mr. Correale headed the engineering team which developed and provided the pressure suit used by the late Victor Prather, for whom the award is named, in his record-setting balloon flight.

MSC has recently added three names to the list of those recognized by President Nixon as part of his "Program to Recognize Outstanding Actions by Average Citizens."

The three who have recently received letters of recognition from President Nixon are: Mr. Stanley H. Goldstein, Mr. Philip H. Whitbeck, and Major Charles J. Tringali.

Emil R. Schiesser, of Mission Planning and Analysis Division,

### 6 elected to AAS **Fellowship**

The American Astronautical Society (AAS) selects its Fellows from among those candidates who have (1) made significant contributions in one of the astronautical sciences, and (2) have done original work of direct value to astronautics.

Six men at MSC have recently been selected to Fellowship. The formal presentation will take place June 8, at the AAS Awards Banquet.

The six new Fellows from MSC are: Colonel James A. McDivitt; Colonel Thomas Patten Stafford; Mr. William A. Anders; Colonel Frank Borman; Captain Charles Conrad, Jr.; and Captain James Arthur Lovell.

### Space Flight honor

was chosen earlier in the year for this honor (see Roundup for February 13, 1970).

### Charles J. Tringali

Major Tringali is a member of the Flight Crew Support Division. As Team Leader of the Flight Crew Support Team for the Apollo 12 mission he was instrumental in developing procedures and formal review steps which saved the Apollo 12 flight crew hundreds of hours, thus permitting the crew to spend their time in the spacecraft simulators and in geological studies. Without a doubt this greatly enhanced their effectiveness in space and on the lunar surface. In a televised program from space, the Apollo 12 crew mentioned Major Tringali's contributions to the flight.

#### Philip H. Whitbeck

President Nixon's letter to Mr. Whitbeck expressed appreciation for his efforts to improve the lives of citizens in the La Porte area.

As President of the La Porte Area Neighborhood Center, Mr. Whitbeck has been active in contributing to the education and counseling of minority groups, and has taken a personal interest in providing special tutoring for children and teenagers in the community. The program for adult education and family counseling which he helped to establish have been further indications of his leadership in the community.

### Stanley H. Goldstein

Mr. Goldstein was awarded recognition for his efforts to provide employment opportunities for underprivileged young people in the Houston area. As part of this effort, Mr. Goldstein arranged transportation, counseling, training and employment for over 300 young people in the last year alone.

## 11 crew wins AAS Achievement Award

Not surprisingly, the three men Collins share the Award, given who share the 1969 AAS Flight Achievement Award are the Apollo 11 astronauts.

Astronauts Neil A. Armstrong, Edwin B. Aldrin, and Michael to those who "through (their) efforts in flight testing, (have) contributed to the advancement of manned space flight."



tions at MSC, was the recipient

### MSC man elected to ASMA position

Dr. A. D. Catterson was elected 1971 president of the Aerospace Medical Association's Space Medicine Branch during the Aerospace Medical Conference held last month in St. Louis.

Dr. Catterson is Deputy Director for Medical Research and Operations at MSC.

The 1971 annual meeting of the ASMA will be held in Houston April 26-29 at the Shamrock Hilton Hotel.

nary Performance in the Medical Service of Mankind.

The award was made to Dr. Berry by the Southwestern Pennsylvania Chapter of the American College of Surgeons on April 22. The presentation was "in grateful recognition of his outstanding contributions to the new frontiers of Aerospace Medicine."

Bob Hope Extra Special May 16th

goes to Kraft

Dr. Christopher C. Kraft, Jr., will receive the 1969 AAS Space Flight Award on June 8. He has been chosen as the one man who, through his efforts, has contributed the most to the advancement of space flight and space science.

Dr. Kraft joins the ranks of such men as James A. Van Allen, Hugh L. Dryden, Robert R. Gilruth, Kurt H. Debus, William H. Pickering, George W. Mueller and George M. Low, who are previous winners of the Award.



The winners of the AAS Flight Achievement Award: Edwin B. Aldrin, Neil A. Armstrong, and Michael Collins.

MAY 8, 1970

## Awards for long-timers

A. Caudel each completed their 35th year of service they had to wait to receive their service awards-NASA Headquarters had only recently designed and manufactured the 35-year emblem!

The following people have also received their awards for completing the designated periods of service during the first quarter of the fiscal year. Awards for the second and third quarter are now being presented. The Roundup will announce the names of these recipients as soon as all of the awards have been made.

#### 30 Years

Margaret M. Jackson, Edward J. Kawiaka, James R. McCown, Aaron B. Olsen, Jr., and Charles M. Tucker.

#### 25 Years

William R. Ball, William A. Bowles, Westley H. Brenton, Ervin L. Chicoine, Kirksey Collins,

When Adam E. Cook and James Alfred B. Eickmeier, Raymond J. Ensley, Mitchell H. Johnson, Evelyn J. King, John J. Liddell, John P. Mayer, James C. McLane, Jr., Glenn C. Miller, Charles S. Murphy, Salvatore Palazzola, Homer Scott, Charles E. Statz, Robert M. Weinert.

#### 20 Years

Stanley L. Bachman, Raymond L. Brazil, Jenney P. Burgan, Frank Chapko, Walter Cheng, David H. Cordiner, Levin T. Crowson, Jr., Lawrence Davis, Harley F. Erickson, Mario J. Falbo, James M. Grimwood, Willard R. Hawkins, Vira M. Henry, Florian B. Hopson, Nicholas S. Jakir, James D. Jenkins, Kenneth A. Jones, John W. Kiker, George F. Koepke, James F. Moody, William C. Moseley, Jr., William Parker, Gene T. Rice, James H. Sasser, Verna M. Smith, Walter H. Smith, Karl P. Sperber, Donald B. Sullivan, Richard W. Underwood.



Can This room be at Ellington? Yep, and all it took to make the Bridge Club room in Building 336 so comfortable was gumption, know-how, and a moderate investment in materials. It helps if you have youngsters who can help-as John Herrmann did when he papered the walls, hung curtians, and installed the archways. Jim Raney built the most expensive addition to the room: the glassed in mahogany trophy case. The whole transformation cost only about \$300.

## Bridge club lays cards on the table

#### By John Herrmann

Dr. Henry Link, one of the foremost psychologists in the United States said:

"As a discipline in unselfish social habits and as a tonic for an able intellect, bridge ranks high in the category of worthwhile human activities. It is a pleasure-a step in the building of a more effective personality and an achievement in the technique of social cooperation. Few human activities require such meticulous attention to the rules of good behavior as does bridge."

The MSC Duplicate Bridge

Club is dedicated to the principles propounded by Dr. Link. The purpose of the club is to provide healthy, wholesome and engrossing entertainment consistent with the concepts of good sportsmanship, high moral courage and congenial fellowship.

The club facilities in Bldg. 336 at Ellington Air Force base are among the finest bridge facilities in the Houston area. The lighting is excellent, the chairs are overstuffed, the bridge tables are large size with two small refreshment tables for each bridge table. The game rooms feature papered walls, window drapes, and tiled floors. Potted plants compliment the comfortable atmosphere and a large trophy case contributes significantly to the aura of relaxation and entertainment.

The club events are all sanctioned by the American Contract Bridge League (ACBL) and master points are awarded by the ACBL to the top 30% of the players at each session. These master points are recognized throughout the United States as evidence of superior bridge playing accomplishment.

Bridge Club awards trophies each ACBL Certified Directors.

year to the Club Champions, Mixed Pair Champions and Senior Events Champions. The trophies are on display in the trophy case at the club.

The club membership includes several Senior Masters and six Life Masters, many of whom have won events ranging from regional to sectional championships. The club is now looking forward to co-sponsoring the national Championships which will be held in Houston this fall. These National Championships are expected to attract more than 2,000 bridge players from all over the United States.

The MSC Duplicate Bridge Club is one of the most active clubs in the EAA. It has a full compliment of bridge activities running the gamut from bridge instruction for beginning players to top rated, open class duplicate bridge sessions. Membership is open to all civil service and MSC contractor associated employees and their families. Members may bring guests for any club activities. Persons eligible for membership are invited to attend any single club activity as a guest of the club. In addition, the MSC Duplicate All club events are conducted by



Adam E. Cook



(Deadline for Swap-Shop classified ad is Thursday of the week preceding Roundup publication date. Ads are limited to MSC civil service employees and assigned military personnel. Maximum length is 15 words, including name, office code and home telephone number. Send ads in writing to Roundup Editor, AP3.)

REAL ESTATE

Three lots on Lake Travis, Briarcliff, by owner, 932-4897 after 5 p.m. Wooded lot on Toledo Bend Lake, \$250,

944-5624, Croom. Rent or lease: 3-2-2 brick, Pasadena Oaks separate den, air, carpet, built-ins, fenced,

\$175/mo., x4326, Mary, or HU8-5231. 3-2-2 Camino South, custom drapes, new

paint, 7%, \$180/mo., 488-0510. 3-2-2 Newport, brick, carpets, central a/h,

wood fenced, equity, \$153/mo.,6% loan, 932-2898.

3-2-2 Beverly Hills, walk to schools, paneled den, large covered patio, fenced yard, assume 6% loan, 946-6396.

3-2-2 brick, Leave City, carpets, built-ins, central a/h, equity and assume 61/4%, central a/h, equity and assume 61/49 \$150/mo., x2001, Ojalehto, or 932-4165.

#### AUTOMOBILES

62 Falcon station wagon deluxe, air, radio, rack, low mileage, excellent, wife's car,

68 Volvo, standard 1425, dark blue, radio, heater, \$1700, 483-2251.

63 Rambler American, 4dr, extra clean, good condition, cheap transportation, \$350, 534-3378. 66 Opel Kadett Station wagon, air, low

mileage, excellent condition \$950, 471-0172. 66 VW, one owner, radio, vinyl interior, push-out rear windows, \$900, x6128, Jones, or 944-2124.

67 VW bug, radio, 29k miles, excellent condition, \$1150, 488-2887.

#### MISCELLANEOUS

Empire style wedding gown, lace appliques, detachable full-tenth chapel train, veil of imported English illusion, \$200 new, now

\$80, 932-5719, Dempsey, after 5. Zenith Circle of Sound stereo, used 5 months, excellent condition, \$150, 941-3598,

Harris. Kodak "Merit" slide projector, 150 watt,

Aero club ground school to start soon, call Oliver Jones, 944-2124, or Jim McCoy, 944-5574.

Guitar, case, strap, and 100w amp.

\$200, 932-4896. Dyna Fog 70 insect fogger, 15 gallons insecticide, same as they use at MCS, 488-4372, Brenton.

191/2' cabin sloop, fixed keel, excellent family boat, plus trailer, \$1800, or make offer, 482-7869.

Lady Kenmore deluxe washer, 16 lbs., white, used 3 months, \$220; also Coldspot air conditioner, 16,500 BTU, 220v, used 2 months \$200, 488-2184, Durand.

3-ton Coleman air conditioner / heater. 36000 BTU with thermostat, excellent condition, 3-year warranty, x2468, Jerry.

Brown colonial swivel rocker, \$10, x2848, Woodfill, or 488-3957.

Gibson electric guitar, ES 330, Cherry red, 1 yr. old, hardshell case, \$325, M19orange carpet, \$10/room, x4097, Pace, or 534-3058.

G.E. air conditioner, 19k BTU room, used 4 summers, good condition, \$109, x7372,

Bethany hdtp. tent camper, dinette, sleeps 6, no kitchen, excellent condition, 488-1967.

PETS

\$325, 877-1053.

67b Cougar, V8, automatic, air, power, excellent condition, low mileage, in warranty, x4368, Laszlo, or 591-4502.

63 Continental, new polyester tires, leather interior, loaded with power options, \$700 x4065, McChesney.

63 VW sedan, \$350, x5276, Chaviers, or 932-6066.

64 Dodge Dart, 6 cyl, automatic, radio, good tires, economical, \$385, 474-2123.

Dodge Custom Sportsman, 108-68, 225 CID, automatic, am-fm, 18k miles, still under warranty, 8 passenger, \$2375, x3838, Nicolson, or 591-3218.

65 Chevrolet V8, standard shift, air, radio, \$600, x3995, Bassham, or 932-3796.

65 Pontiac LeManns "237", hdtp coupe 2D. very clean, new paint, interior extras, factory air, \$995, x4901, Johnston, or 944-5212.

65 Impalla, 396 engine, air, power, runs well, see to appreciate, x5165, Starnes, or 534-5397

69 VW, white, vinyl trim, 11k miles, radio, excellent condition, \$1550, x4711, Stanton, or 932-2987

ed, excellent condition, with case, spare bulb, \$15, 482-7041, Handley. 14,000 BTU, 220v refrigerated air conditioner, rebuilt, used 2 months, cools 3-4 rooms, \$80, 946-4034.

Stoeger Luger, 22 cal. automatic pistol, new, \$60, also Guitar with carrying case, extra strings, excellent condition, \$45. x2801, Randall, or 932-3884.

Resident membership to Clear Lake Country Club, full privileges, \$300, I pay transfer fee, 877-4903, Hammer,

Underwood upright typewriter, excellent, \$45; beautiful carved antique dining room table and five chairs, \$375, 649-2569.

2-speed Wollensak storeo tape recorder/ player, \$75, Cason, x3541.

SCUBA tank, Navy-II regulator, depth guage, compass, all good shape, all \$65, 941-2371, Moore,

20" rotary lawnmower with 3.5 hp. engine, \$10, 488-1100, Sobolik.

14' fiberglass Super Satellite sailboat w/trailer, Genoa jib, dacron sails, like new, \$950, x7726, Algranti, or 591-3706. Coil spring for twin beds, 2 each, \$20, x7351, Nitschke, or 487-4531.

3252, Mike.

20-gallon aquarium, complete except for stand, \$25, 932-4897 after 5 p.m.

Hi-fi speaker, all walnut cabinet, 11x11x 24, \$25, 474-2123.

Table-top hood hair dryer, hairsetting mist, remote control, new, \$25, 488-5162. Blonde semi-curly dynel stretch wig, worn 3x, \$20, x4286, Walker, or 422-2244.

16' alass-covered fishing/fun boat. Evinrude 450, trailer, 2 sets ski equipment, \$550; also '60 Dodge Senecca, consider swapping all for good ½ ton pickup, 877-2479. LeCroix.

Log log duplex decitrig slide rule, 534-5697. Spencer.

Mobil antennas, cable & 110v power supply, channels 4, 9, 11, 13, 6, \$85, x3111, Lill-

Finn fiberglass sailboat, Olympic class, ready to sail, very good condition, plus trailer & cover. \$695, x3576, Finlayson, or 591-3446.

Hotpoint dishwasher, good condition, \$30 or trade for apt. size refrigerator; also Kenmore range top, \$25. 3 rooms redNorris, or 877-2649.

Dark green upholstered swivel rocker, \$30, x7581, Corbett, or 534-3770 after 5 p.m.

Very good western saddle, 15", embossed brown leather, \$200 new, now \$85, 877-4198.

Hide-a-bed; also Coldspot upright freezer, Khirlpool refrigerator, Craftsman 7 hp. riding mower, 16x8 tent, 534-5648 (Dickinson). Free, 100' wire fence, 4' high. also 15 gal. aquarium, complete set-up or just equipmen, make offer, 482-1086.

.32 cal. spanish Eiber automatic pistol, with ammunition, \$20, 946-4311. AM push-button radio, Delco, 1969 Chevy,

\$20, x4926, Goodrick.

Sailboat, 14' Flying Tern, plus trailer, spinnaker, Genoa, selfbailers, \$850, x4995, Dallas, or 658-3794.

Hdtp fold down camper, extras, can carry 14' boat on top, excellent condition, \$1,500, GR 4-2344, 877-2314 during day or 932-2836 ofter 5.

Girl's bicycle; also 30" maple bar stool; Command transmitter and receiver 6-9 mcs, 488-2278.

old, all males, 2 black-and-tan, 1 brown, \$35 each, 474-2785, Shows.

Perfect male bluepoint Siamese kitten, months old, no papers, wormed, 474-2489 AKC Dalmations, beautiful champion-sized \$40, x2703, Hill, or 488-3292,

AKCDalmatians, beautiful champion-sired puppies; shots, wormed, x3888, Wallin, or 487-3590.

FREEL American Short Hair Kittens, males & females, will deliver within 25-mile radius, x3325, Ullrich, or 487-0307.

Good Quarter-horse, 6 year old,brood mare sorrel with white stockings, blaze face, youth horse, \$350, 877-2101.

World's cutest kittens — ginger, tabby, calico, tortoise shell, black and white, available May 10, x3566, Manry, or 932-2908.

#### WANTED

Apt. size refrigerator, pay \$30; also pingpong table, bumper pool table, x4097, Page, or 534-3058.

Ride from Casa Blanca Apts., 9200 Gulf Fwy., to bldg. 2, 8-4:30, x3558, Womack.

courtesy of TRW's gordon a. south

## "You don't see it so you don't spend it!"

So says William A. Stranksy, Chairman of the MSC Savings Bond campaign.

The 1970 Campaign began on May I and will continue through June 19.

Perhaps the most convenient way to buy bonds is to have a deduction from your paycheck made automatically. Just fill in the payroll allotment card which your division representative will supply. The deduction can be as small as \$3.75 per pay period.

Of course the increased interest rate (5%) paid on Savings Bonds is an important new selling point-but so is the timing of the campaign. Most of us will be getting the checks for our retroactive pay increase during the campaign. What better time could there be to save the painless way than right now?

Page 4

Tuck away at least part of that money in Savings Bonds!

See Madrid and save with Credit U. An exciting 9-day "Fiesta in Madrid" trip is being sponsored for MSC Federal Credit Union members at a savings of well over 50% of the cost of a comparable, arranged vacation individually

trip. The Madrid trip includes round trip jet transportation, 7 nights at the deluxe Plaza Hotel in Madrid, two meals daily, exciting

### Track and Field meet to be discussed

All those interested in organizing a track and field day are invited to attend a meeting at noon on Wednesday, May 13, in Building 2, room 316. Contact D. Doherty, x2741, if you have any questions.

tours, the novelty of a "Sangria" party, and many other rememberfor-a-lifetime experiences.

Cost per person is only \$389. and both a Madrid Vacation Savings Plan and Loan Plan are available. Members making reservations for this trip will receive a chance to win \$100 spending money.

The flight leaves Friday, October 30, 1970 and returns Saturday, November 7.

Credit union members can obtain complete tour itinerary and reservations information by dropping by the credit union office in Building 11, or calling Mrs. Peggy Ray, x2066.

### Animal refuge is a treat for all

(Continued From Page 1) Avian life in the marshy waters of the Refuge is representative of the usual sub-tropical varieties: the snowy egret, the common egret (the symbol of the National Audubon Society), and the cattle egret are commonly seen. You may have seen the cattle egret right here in Texas, as you head for Galveston. He's the white bird with the long graceful neck who stands in the cattle pasture on first one stilt leg, then the other. At other times he rides along on the backs of the cattle, lunching on small insects who would ordinarily pester the larger beasts.

The Merritt Refuge is also the home for birds whose numbers have been on the decline elsewhere in the nation. The American Bald Eagle is one vanishing species found here. On a tour of the area you can see nests weighing a ton or more, stretching across an 11-foot area, high in the tops of a slash pine.

The brown-billed pelican, seldom found elsewhere in the United States, is another common sight along the seacoast at KSC.

of birds make their home in the Refuge.

For saltwater fishermen there are speckled trout, red drum, blue fish and whiting. There is fresh water fishing for largemouth bass, bluegill, and shellcrackers. (The fresh water is the result of mosquito control techniques. Lowlying marshy areas have been damned off to form fresh water impoundments which help eliminate the mosquito's breeding areas.)

The next time you travel to the Cape, you might like to contact the Refuge Manager, Box 956, Titusville, Florida 32780. Wildlife tours can be arranged, and trapping permits can be obtained for capturing wild hogs, seen from time to time. The Rangers will also tell you where to fish, hunt waterfowl, picnic, and birdwatch.

Although living in the shadow of giant rockets and launch facilities may be an everyday experience for the animals, the chance to observe them at such close range can be an unusual experience for us humans-an experience you may want to enjoy the

### **Register soon** for U.H. courses

Registration will be held Friday, May 22, from 9 am until noon in the Building 1 Press Conference Room for the three Graduate-level courses to be offered at MSC by the U. of H. The three courses are: Physics 697-Electrodynamics Math 633--Theory of Matrices Math 685--Selected Topics in Applied Math,

For further information call D. S. Burns, x7311.

### Golf winners dare winds & toil

A combination of heavy winds and the long, hard Long Meadows Country Club took its toll among the members of the MSC Golf Association who played in the organization's second tournament of the year April 25.

Jean Petersen swept the boards clear as he turned in the low gross score of the day as well as winning the championship flight. He had a gross of 83, and a net score of 72. Five were tied for second with net scores of 73. They were Dave Chenault, Bill Dusenberry, Tom Henderson, Bill Shropshire, and Dick Siler. Dave Rosen won the first flight with a score of 89-20, 69. Tom Gibson and Pete Smetek were tied for second with net scores of 70, and Jerry Shinkle was fourth with a net 71. Bob Sampson won the second flight with a 92-69 total. Steve Gorman was second with a net 70, and Ken Land and Sam Sandborn tied for third with net 71's. The next tournament will be held at Atascocita May 16.

"We had wonderful results with the test model!"

Your Job in Focus

political parade.

- You may not sell tickets for or otherwise actively promote such activities as political dinners.
- You may not write for publication or publish any article or letter soliciting votes for or against any political party or candidate.
- You may not solicit or receive any assessment or contribution for any political purpose.
- You may not make a political contribution in a Federal building or to some other employee.

The Civil Service Commission enforces political-activity restrictions for Federal employees. They make investigations, hold hearings, and impose penalties. The most severe penalty for violation is removal and the minimum penalty is suspension without pay for 30 days. If you are uncertain whether an



THE ASTRONUTS

In all, more than 250 species next time you're at the Cape.



Keep a sharp lookout in the Refuge for this fellow. Although his species is on the decline, the American Bald Eagle has found a home in the Merrit Island National Wildlife Refuge.

pools can stop at the polls on the way to or from work.

Two weeks ago your "Job in

Focus" Column tackled the sub-

ject of Political Activities in

which government employees

are admitted to engage. This

week those activities which are

Some of the prohibited activites

• You may not be a candidate

for nomination or for elec-

tion to a National or State

• You may not solicit others

to become candidates for

nomination or election to

• You may not campaign for

• You may not use your

automobile to transport

voters, except members of

your immediate family, to

the polls. However, riders

in regularly scheduled car-

or against a political party

partisan offices.

or candidate.

proscribed will be present.

are:

office.

- You may not distribute campaign material.
- You may not march in a

action would violate politicalactivity rules, contact the Personnel Office before engaging in the action, since ignorance of provisions of the law will not excuse you from penalties for violation.





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Editor	Sally LaMere
Staff Photographer A. "	'Pat'' Patnesky