

COM CALENDAR

Things are getting back in full swing all over China Lake, and one of the swiftest places will be your Club. We have already instituted Wednesday nights as "steak night" when top sirloin will be prepared to your liking.

Tuesday evenings are still set aside for family specials. This Tuesday, tacos and enchiladas will be the specialty.

Because of the many requests on Oct. 2, the Club will start a one month trial period for Sunday brunch and Sunday dinner.

So, do make it a point to

treat the family to these Club features. Brunch will be served from 11 a.m. to 2 p.m., and the dinner hour will run from 5 to 7 p.m.

Set your imagination to work and plan to join all the other goblins and ghosts on Friday evening, Oct. 29. A prize may be yours!

Join us next Saturday, the 2nd, after the golf tournament and complete your day of fun. The Hy-Tones will be on hand for your dancing and listening pleasure.

Play Acey - Ducey Club Tonight



THE VULCANES PLAY a return engagement at the Acey-Ducey Club tonight and tomorrow night after a six-month stand at the "Black Cat-Go-Go" in Sacramento. The Club will start jumping at 9 p.m. and continue until 1 a.m., according to Club manager

"Mick" Lambie. The Vulcanes have recorded such smash hits as "Poison Ivy" and "My Heart Won't Believe." The group provided all the music for Bob Hope's picture "I'll Take Sweden." They are noted for their well-blended vocals and novelties.

Nurses To Show "Schlerosis" Movie At Monday Meet

The IWW Nurses Club will present the most recent film on Multiple Sclerosis at the Monday, Sept. 27 meeting in the Community Center at 7:30 p.m. Club activities for fall will be discussed. All graduate nurses are urged to attend.

Photo Prize Winners



DISPLAY WINNING PHOTOS—Prize winners in the Desert Empire Fair Photographic Contest (l-r) Jesse Cadena, AK2, and Seth Rossman, PH3, display their entries. Cadena holds sunset scene which won him the sweepstakes prize. He used a Yashica 635 at f.4 at 1/30 sec. on Plus X Pan film. Rocketeer photographer Rossman won 1st and 2nd places in portrait class and 3rd in landscape. He used a Rolleiflex.

From _____

TO _____

PLACE STAMP HERE

'BOMROC' Team Successful



Vol. XX, No. 38 Naval Ordnance Test Station, China Lake, California Fri., Sept. 24, 1965

Whirling Fuel Tamed By Graphite 'Diffuser'

The rise of "conventional" warfare to a higher place on the agendas of strategy planners in the last few years has brought forth new demands on troop-support weaponry, and BOMROC, under development here for the last two years, exemplifies the unconventional achievement needed to keep the U.S. ready at sea.



IN TEST DEPT. HANDS — In first flight test of BOMROC, July 30, Clyde Hienzig, experimental ordnance equipment mechanic, prepares to insert rocket in tube at G-2 Range, while Art Butler, ordnanceman for ammo and explosives, checks breach.

BOMROC is the simple name for an assault-support bombardment rocket designed to give twice the reach of previous NOTS-developed five-inch spin-stabilized rockets. The Station's Mark 7 rocket, now in the fleet and being installed in new and recommissioned support vessels, last soared "for real" at the invasion of Inchon during the Korean War.

Propulsion Is The Key "Our big problem in developing a booster and sustainer motor combination for this rocket was to cope with the effect of rapid spinning on the burning of the propellant," said Ray W. Feist, head of Propulsion Department's Engineering Projects Branch.

In order to give BOMROC its doubled advantage over previous models, every aspect of propulsion had to be enhanced, putting heavy stresses on parts. Feist reported that other ordnance activities had worked on the problem of high-speed spin effect without success, before Propulsion Department's recent solution.

Under a 13,000-gravity loading created by some 250 revolutions per second, the solidly filled test cylinder of sustainer propellant — called an "end burner" — suffered a whirlpool effect in which burning propellant bored a hole through the forward wall of

its compartment in about five seconds. "Diffuser" Solves Problem In a pre-prototype "flight-weight" model free flight test in early August, a device draining burned propellant gases from the sustainer motor's circumference to two centrally located nozzles proved itself as a solution to the problem.

The team of Code 45 technicians that designed and assembled the successful configuration included Jack Yeakey, Lonnie Pauls and Danny Meraz, all of Engineering Projects Branch. Yeakey and Pauls are aerospace engineers; Meraz is an engineering technician. Team leader is David W. Carpenter, who has worked on the BOMROC project since its beginning, in 1963. Ron Vetter of Development Engineering Branch and Bill Theilbahr of Materials Technology Branch, headed teams that developed propellant and heat resistant materials.

After the nine-inch long, hollow core, extruded booster propellant section fires—in about five seconds—gases from the end-burner sustainer are channeled through three tubular drains formed in a graphite block into a steel tube leading through the burned-out booster to two sustainer nozzles at the rear.

"This drain system, or diffuser, is pretty well destroyed after the sustainer propellant grain has finished burning," says Carpenter, "but by that

(Continued on Page 3)

NOTS Balloonist Captures National Title Second Time



NOTS' Jimmy Craig brought the U.S. National Balloon Championship back to China Lake for the second consecutive year last week. The Weapons Development Dept. employee soared to his second national championship in his multi-hued Raven S-50 balloon at the National Air Races held in Reno Sept. 10, 11, and 12. Craig amassed 2,984 points in four contests to the 2,673

(Continued on Page 3)

Jerry A. Williams Named 'Bluejacket'

The Rocketeer is proud to have a large share in the photographic skills, recently strengthened at the Rochester Institute of Technology, of NOTS' "Bluejacket of the Month" for September. Jerry A. Williams, PH1, of the photographic Division 13 at NOTS, learned of his selection as "Bluejacket" soon after returning to the station and the Rocketeer from a ten-week course in photographic quality control at RIT in New York State.

Jerry came to NOTS in October, 1964, from VFP-62 in Jacksonville, Florida, where he had enlisted in the Navy in June, 1955. He was a camera repairman with the Light Photo Squadron, and there acquired an affinity for electronics, one of his several avocations at China Lake.

He met and married his wife, Beverly, in Annapolis, where he was a photographer at the Naval Academy from 1956 to 1960. The Williams now live at 311 Robalo, China Lake, and have three children, Flora Jeanne, 5, now in her first year of school at

(Continued on Page 3)



FAMILY'S IN FOCUS—"Bluejacket of the Month" from NOTS, Jerry A. Williams, PH1, applies knack for portraiture at home with wife Beverly, and children (l-r) Jerry, Jr., Flora and Kevin. Williams returned recently from 10-week photo course in New York.

SHOWBOAT

FRIDAY SEPT. 24
"CINDERELLA (74 Min.)
Disney Special
6:00 and 8:15 p.m.
(Feature cartoon in color) Tunefully brought to the screen in brilliant color, the classic tale of Little Cinderella as only Walt Disney could tell it. This is for kids from six to sixty. ALSO: DISNEYLAND AFTER DARK: Its flashing lights, thrilling rides and bands with a beat for young and old. (Adults, Youth and Children)
SHORT: "Disneyland After Dark" (48 Min.)

SATURDAY SEPT. 25
—MATINEE—
"GHOST OF ZORRO" (69 Min.)
Clayton Moore
1 p.m.
SHORT: "Goldilocks and the Three Bears" (7 Min.)
Rocket Men No. 3 and No. 4" (26 Min.)
—EVENING—
"FLUFFY" (92 Min.)
Tony Randall, Shirley Jones
7:30 p.m.
(Comedy in color) Professor gets into trouble with the police in experiments with his tame lion, so he checks into an apartment in a small town where the zany adventure starts all over again. A cute, non-sensical laughfest. (Adults, youth and children)

SHORT: "Sioux Me" (7 Min.)
"Sea Sports Tahiti" (9 Min.)
SUNDAY-MONDAY SEPT. 26-27
"MIRAGE" (108 Min.)
Gregory Peck, Diane Baker
7:30 p.m.
(Mystery-Drama) A super suspense thriller about an amnesia victim who discovers that people who know him want to kill him. But why? You won't find out until the exciting climax in this unusual, intriguing who-dun-it. (Adults and mature youth)

SHORT: "Davey Cricket" (7 Min.)
TUESDAY-WEDNESDAY SEPT. 28-29
"CLARENCE, THE CROSSEYED LION" (96 Min.)
Marshall Thompson, Betsy Drake
7:30 p.m.
(Comedy-Adventure in color) Head of an African animal study preserve meets a pretty lady anthropologist and he, and his pet cross-eyed lion, help her fight the ravages of poachers. Chimps and pythons in the thrill-filled rain forest. (Adults, youth and children)

SHORT: "Barney's Hungry Cousin" (7 Min.)
THURSDAY-FRIDAY SEPT. 30-OCT. 1
"MONKEY'S UNCLE" (95 Min.)
Tommy Kirk, Annette, Leon Ames
7:30 p.m. Thursday
6 and 8:15 p.m. Friday
(Comedy in color) Screwball college genius, Merlin Jones, tries to sleep-teach a chimpanzee and then attempts to construct a man-powered flying contraption to settle a pro or anti-football issue at school. Wacky DISNEY Fun! (Adults, Youth and Children)
SHORT: "Freeway Phobia" (15 Min.)

STATION LIBRARY LISTS NEW BOOKS

Fiction
Anderson—The Star Fox.
Duerrenmatt—Once a Greek.
Healey—Waiting For a Tiger.
Wyckoff—Tars

Non-Fiction
Baker—No Cause For Panic.
Beerbower—Search For the Past.
Conquest—Russia After Khrushchev.
Finer—Passport to Greece.
Hatch—The Mountbattens.
National Geographic Society—Wondrous World of Fishes.
Schofield—Eastward the Convoys.

Red Cross Branch Annual Meet Wed.

The Indian Wells Valley Branch of the American Red Cross will hold its semi-annual meeting on Wednesday, Sept. 29, at 8 in the East Wing of the All Faith Chapel. The public is cordially invited.

CROSSWORD PUZZLE

ACROSS

- 1-Macaw
- 4-A continent (abbr.)
- 6-Wheel teeth
- 11-Nullify
- 13-Amend
- 15-Displaced person (abbr.)
- 16-Hat ornaments
- 18-Symbol for nickel
- 19-For example (abbr.)
- 21-Mature
- 22-Finishes
- 24-War
- 26-Evaluate
- 28-Household pet
- 29-Bog down
- 31-Narrate
- 33-Legal seal (abbr.)
- 34-Expired
- 36-Face of clock
- 38-Tuberculosis (abbr.)
- 40-Sow
- 42-Place for combat
- 45-Electrified particle
- 47-Barracuda
- 49-Platform
- 50-Girl's name
- 52-Unusual
- 54-Note of scale
- 55-Spanish article
- 56-Chief officer
- 59-Prefix: with 61-Challenges
- 63-Mortified
- 65-Remains at ease
- 66-Conjunction
- 67-Peer Gynt's mother

DOWN

- 1-Conjunction
- 2-Iterate
- 3-Symbol for silver
- 4-Heavenly body
- 5-Norse gods
- 6-Welcomed
- 7-Lamprey
- 8-Part of church
- 9-Note of scale
- 10-Heelless shoe
- 12-Near
- 14-Rosters
- 17-Quarrel
- 20-Merry
- 23-A state (abbr.)
- 24-Postscript (abbr.)
- 25-Ancient Greek district
- 27-Lamb's pen name
- 30-Dregs
- 32-Fat of swine
- 35-Sadden
- 37-Shakespearean king
- 38-Wearied
- 39-Cistern
- 41-Hard of hearing
- 43-Relatives
- 44-Conjunction
- 46-Symbol for niton
- 48-Lock of hair
- 51-Sacred bull
- 53-Reverberation
- 57-Soak
- 58-Symbol for tantalum
- 60-Poem
- 62-Symbol for iron
- 64-Parent (colloq.)

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Desert Empire Fair Parade

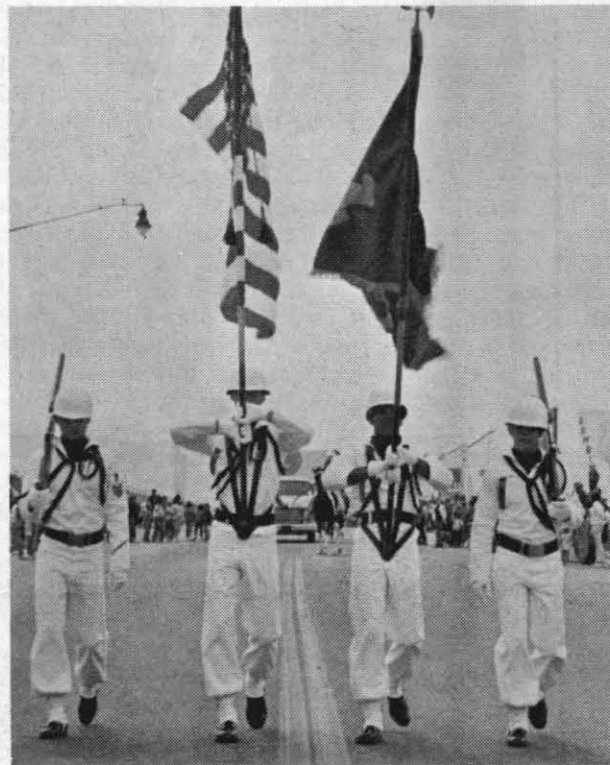
As thousands watched, 20 years of Ridgecrest-Community progress was reflected in the 15th annual Desert Empire Fair parade.

Yesteryear's wasteland has evolved into twin-communities for the future.

Ridgecrest has progressed from settlement to a city of businesses, schools, homes, and churches.

China Lake, in whose boundaries once echoed the crack of mule skinner's whips which have been replaced by the whine of jet planes, has grown into one of the nation's largest research centers.

AT LEFT—Capt. John I. Hardy, ComNOTS, and Mrs. Hardy view mile-long parade.



NOTS COLOR GUARD LEADS DIVISION



LOS ALAMITOS NAVAL AIR STATION BAND



MISS BORON AND HER COURT



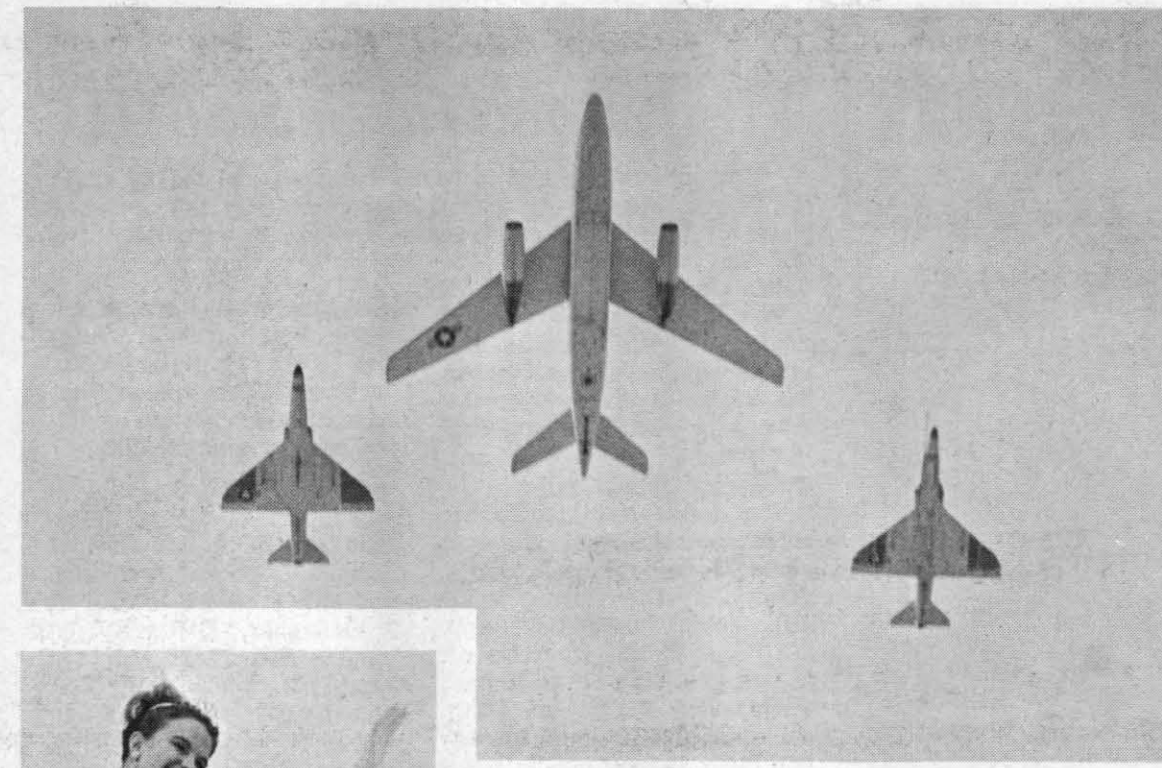
TOMMY NELSON, THIRD PLACE WINNER IN NOVELTY NON-EQUESTRIAN CLASS



GOLDEN NUGGETS DRILL TEAM OF NEWHALL DISPLAY LARIAT TECHNIQUE.



PARADE MARSHALL JODY McCREA



ABOVE—NAF renders aerial jet salute.

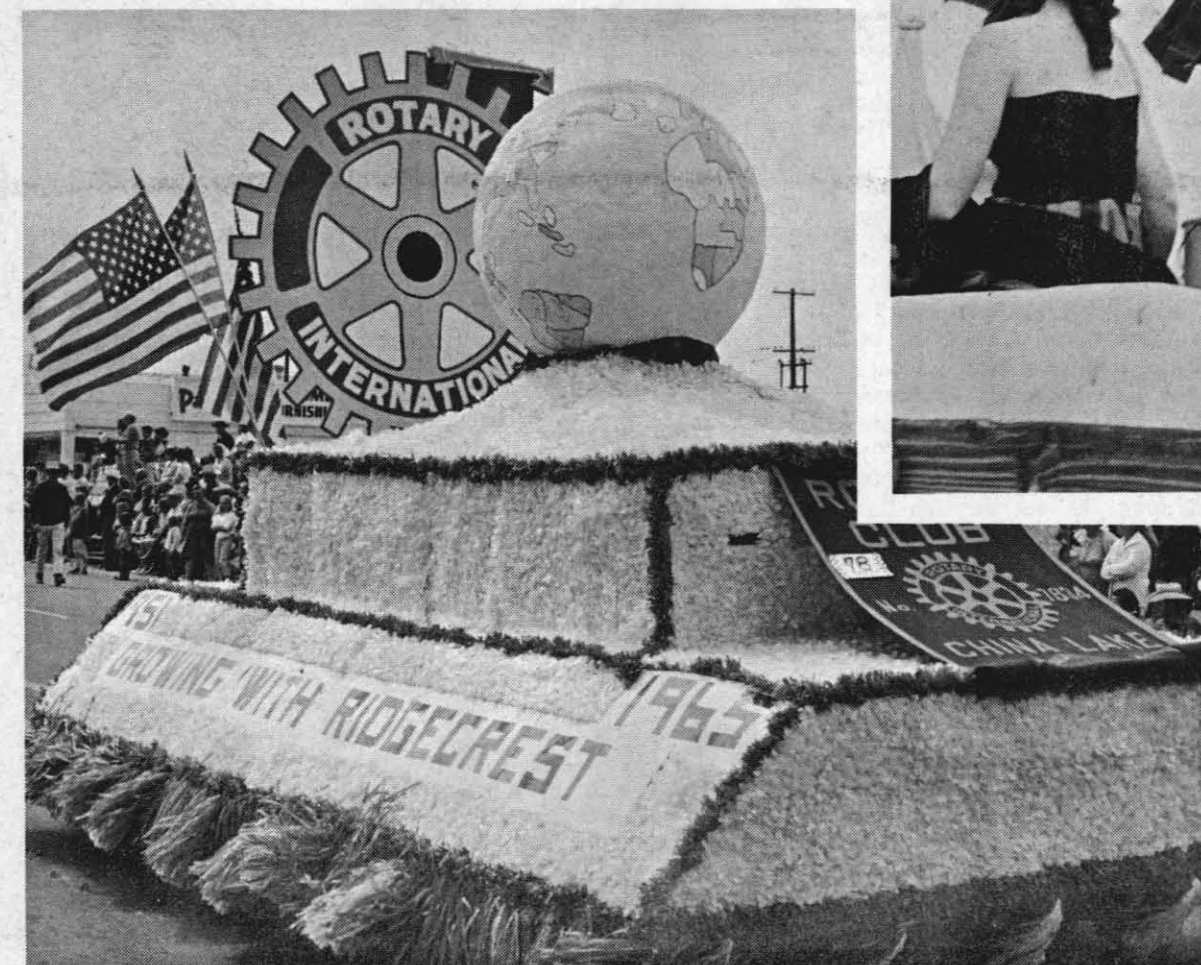


AT RIGHT—Ft. Irwin Army Color Guard.



DESERT EMPIRE QUEEN Janice Hukel (above) flashes regal smile to royal subjects in reviewing stand. Maturango Museum float with Ken Robinson depicting corn cob pipe smoking, musket carrying, hardy pioneer, and "Pop" Lofinck as a "dry gulch" prospector call attention to Valley's Museum which houses exhibits relative to area.

Photos by Seth Rossman, PH3, and Jerry Willey, PHAN



CHINA LAKE ROTARY CLUB'S FLOAT DREW ACCOLADES FROM PARADE VIEWERS.



GWEN SPROUSE, MISS KERN COUNTY

NOTS Pasadena

VIRGINIA E. LIBBY — EXT. 638



THE PROUD CREW of the USS Butternut (AN-9) celebrates her 24th year of active duty.

USS Butternut Marks 24 Years Service

The USS Butternut (AN-9), the only remaining Net Tender on active duty with the Pacific Fleet, and long a familiar sight to Long Beach area mariners, marked 24 years of continuous active commissioned service on Friday, Sept. 3, making her the third oldest ship in the United States Navy on active duty with a record of continuous commissioned service.

The Butternut operates in support of NOTS, assisting the Pasadena Annex and the Long Beach Sea Range Section in the test and development of ASW weapons, in towing and mooring duties, and in readiness for any task assigned. She remains under the administrative control of Commandant 11ND, although operating almost exclusively from Long Beach.

She marked the occasion of

her 24th birthday with a family cruise on Saturday, Sept. 4, and a cake cutting ceremony while at anchor off Rainbow Pier in the shadow of Long Beach's modern skyline. Twenty-four dependents and guests attended the cruise, which was blessed with warm and sunny California weather.

Built at the Houghton Shipyards on Seattle's Lake Washington, she was launched May 10, 1941 and placed in service Sept. 3, 1941.

After a short fitting out and training period, speeded up by the outbreak of World War II, she sailed for war duty in the Western Pacific on June 1, 1942.

There she remained for over 10 years, not returning to the United States until late Aug., 1952, and completing one of the longest continuous

overseas deployments on record.

Extensive War Duty
She saw extensive wartime duty all over the Pacific, laying and maintaining anti-submarine and anti-torpedo nets at most of the major fleet anchorages in such areas as the Solomons, Philippines, Admiralty Islands, Mariannas, Marshalls, Carolines and Bonin Islands.

In addition to her primary duties of net-tender, she also saw extensive service towing ammunition barges in support of the fleet and in salvage and mooring operations. After the war, she saw duty in the Mariannas, did yeoman service off Iwo Jima, and finished out her WestPac duty in Japan, operating primarily out of Sasebo and Yokosuka.

Polaris Program
On return to the United States she was assigned to Commandant 12th Naval District as a District Ship, and was used for several years as a training ship operating out of the Navy Net School at Tiburon, Calif.
She trained numerous reserve units in net-laying, buoy and underwater tasks, and harbor defense.

In 1957 she was assigned to the Operational Control of NOTS in support of the Polaris Missile "Pop-Up" program conducted at San Clemente Island.

The USS Butternut is 162 feet long, 30 feet through the beam and displaces 760 tons. She has a crew of 4 officers and 36 enlisted men who consider their duty the best in the Navy. She is commanded by Lt. Victor D. Moaden, USN, the 16th C.O. since her commissioning.

The ship completed an extensive three month shipyard overhaul at the Harbor Boat Building Company, Terminal Island in August, and apparently her low silhouette and the prominent 18 foot horns protruding from her bow will continue to mystify the uninitiated in the local operating areas.

NOTS Divers Picked For Vital Role In Sealab II

Navy divers attached to NOTS Pasadena and led by Lt. R. R. Warren, are playing a vital support role in the Sealab II phase of the Deep Submergence Systems Project, 3000 feet off the coast of La Jolla, California.

The NOTS divers are being used as surface support divers to supplement and assist the Sealab II divers with the topside or surface diving and are standing by in case any emergency should arise.

The divers have participated in several bottom surveys, photographic missions, and a variety of other diving tasks using both "hard hat" and SCUBA at depths in excess of 200 feet. CWO-4 D. J. McCafferty and C. V. Taylor, DCC, made one of the initial inspection dives at the La Jolla sight surveying the bottom to find the most suitable area to place the gigantic 60' x 12' cylindrical Sealab II.

After the Sealab II was lowered to the ocean floor, R. Villaseñor, BMI, made a critical "post lowering" inspection dive bringing back such vital information as bottom conditions, terrain, and visibility.

Other divers participating in the support of Sealab II include Lt(jg) R. F. Bell; J. P. L. Flanagan, DCCS; W. R. Slaughter, BMC; C. Galik, ENCS; T. M. Gallagher, QMC; A. W. Holmes, HMC; C. H. Smith, HMC; E. G. Jones, BMI; F. T. Allen, BMI; J. N. Maxwell, DCI; B. F. Weeks, DCI; L. E. Carlson, MMI; K. W. Smallwood, GMGI; W. H. Williamson, HMI; K. C. Swales, BM2; R. E. Batty, BM2; R. D. McKinney, SFM2; and J. A. Grills, SK2.



TAKING TIME OUT from their Sealab II duties to pose for a picture are NOTS divers (l-r) R. E. Batty, BM2; C. H. Smith, HMC; A. W. Holmes, HMC; T. M. Gallagher, QMC; and C. V. Taylor, DCC. Seated in "hard hat" suit is B. F. Weeks, DCI.

Winter League Battle Begins

The AstroNOTS and the Jacks and Better jumped off to a quick lead as the result of four-game victories on the first night of NOTS Wednesday night winter league play. The AstroNOTS are Kathy Stanier, Coco White, Sam Brown, Phil Foster, and Ray Hanson, while the Jacks and Better consist of Norma and Jack Sayre, Pris and Jack Springer and Julius Bajusz.

The league is a whopper this season, with no less than 14 teams rampaging for the crown!
High scores for the first week are as follows: team series, AstroNOTS, 2305; team game, Hunees, 773; men's series, Lyle Emerick, 586; women's series, Kathy Stanier, 577;

PROMOTIONAL OPPORTUNITIES

To apply for vacancies, contact Nancy Reardon, Pasadena Personnel Division, Ext. 492. A current SF-58 must be submitted when applying.

Supervisory Budget Specialist, GS-11 or GS-12; P8012 — Responsible for preparation of UOD technical and capital budgets and Pasadena Annex overhead budgets, including San Clemente Island. Four-year degree in business administration or related field desired. Must have extensive experience with principles, theories and methods of budget administration and modified industrial accounting.

men's game, Russ Hayslett, 243; women's game, Caroline Yuge, 219.

Surplus Property Sale Slated Here On October 2nd for General Public

Hundreds of surplus government items from the Station will go on sale here to the general public on Saturday, Oct. 2, from 9 a.m. to 3:30 p.m. This is the first such sale to be conducted at China Lake.

NOTS' Main Gate will be open for customers from 8 a.m. to 4:30 p.m. to allow access to Warehouse 14 where the sale will be held. Signs will direct customers to the sale site.

All manner of government surplus property from NOTS will be available at half and less the price originally paid by the government.

Included in the surplus sale is automotive equipment and furniture, household appliances, electrical and plumbing supplies.

Of interest to students will be some 500 surplus technical books from the Technical Library. While the books have been ruled obsolete for advanced research and development conducted at NOTS, some of the standard scientific works will be useful to students.

Some of the surplus is used, some is new. All items included in the sale are offered to the public "as is."

All sales are cash and carry and the cashier will be unable to accept personal checks or other negotiable instruments.

Captures National Title Second Time

(Continued from Page 1)
scored by his nearest competitor, Lynn Emerich of Seattle, in a field of 11 entries. Don Kirsten of Fort Dodge, Iowa, placed third with 2,263 points.

Clinches Championship
Craig clinched the championship on the last day of the meet with a spectacular performance in the LeMans Start event, which is judged on start, altitude achieved, and distance covered all within one hour. He reached an altitude of 7,000 feet and covered a distance of nine miles.

The balloons are laid out on the ground ready for inflation and on signal the ground crews race a distance of 100 feet to start the inflation to get the pilot in the air as quickly as possible.

"I had a terrific ground crew," Craig said, "they got me off in a hurry. They did a yeoman job and there were only four of them, Frank Lydon, Margy and Dick Zincke, and my wife, Carol. In fact she lost 10 pounds during the meet."

"Other pilots had from eight to ten members in their ground crews," Craig noted.

"It's a ticklish job," Craig said. "In a stiff breeze, an 80-foot high balloon can suddenly become a sail-powered bulldozer."

On the first day in the "Hare and Hound" event in which the "hare" balloon leaves some 30 minutes early after which the "hound" balloons follow and try to land as close as possible to the "hare," Craig placed fourth.

In the Altitude Control Event Craig placed second. An aircraft equipped with a barograph makes a series of sudden climbs and descents and the barograph tracing is given to each pilot to duplicate as closely as possible. One hour is allowed for the feat.

"My experience as a glider pilot certainly helped me in this event," Craig said. "Understanding the barograph and using my variometer I was able to duplicate the plane's maneuvers without any trouble."

"I just hope I can win next year," the 1965 champion said. "If I do I can retain the cup," he added, referring to the huge silver trophy which will be his if he chalks up a third win.

Sept. Bluejacket Has Weekend Of Events Ahead

(Continued from Page 1)

Desert Park School; Jerry, Jr., 4; and Kevin, 3.

Welcome in Bakersfield
The Greater Bakersfield Chamber of Commerce will host Jerry Williams and his family starting this afternoon for a weekend on the town. They'll stay at the Holiday House, and drive a new car from the Haberfelde Ford Agency, after receiving gift certificates from participating Chamber members.

Jerry's selection as "Bluejacket of the Month" will be reported by Burleigh Smith on Channel 17 at 6:00 this evening and on other stations in their news broadcasts.

Days Are Full

Jerry Williams has found the Navy a good place to keep busy in work that he enjoys both on and off duty, and adds hobbies and extra training to his photographic work at China Lake.

He was raised in Sedan, Kansas, and moved frequently with his father, an aircraft company missile program worker, from whom he received an early interest in things technical.

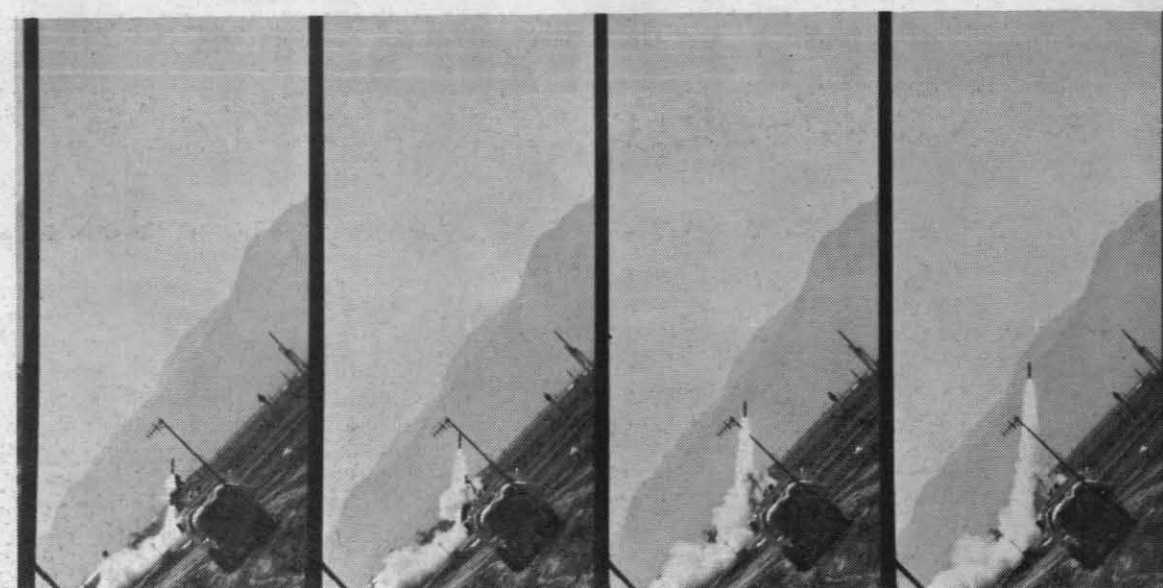
Jerry is president of the China Lake Model Airplane Club, in which he spends many evenings developing airframes, engines and electronic control systems for flying models. The club flies wire controlled, radio controlled and free-flight models nearly every weekend on the dry Mirror Lake bed.

Takes On-Station Training

"I am trying to get a good grounding in mathematics, so I can go deeper in electronics," says Jerry. "There are quite a lot of things I'd like to find out about it."

To that end, he is studying in a Navy-sponsored course in algebra by the screen-projected "reader training" method during duty hours, plus a course in math at Bakersfield College extension.

"These hobbies and training and all fit very well into my family life," Jerry comments. "Beverly approves of them highly — since they all help to keep me around home!"



SUCCESSFUL TEST of BOMROC, July 30, begins in cloud of smoke as booster, using hollow core charge, starts its five-second burn. Sustainer's "diffuser" performed as hoped, making exhaust gases behave under more than 13,000 G's of loading.

Controlled With 'Diffuser' Device

(Continued from Page 1)

time it has done its job."

Putting the Heat On
To use the highly advanced propellants developed by Vetter's team, Theilbahr and his people have had to develop unusual materials combinations to withstand the high heat and erosion problems due to exhaust gases of the fuels.

"The BOMROC model we'll be testing soon will have a 40 to 1 booster to sustainer thrust ratio, from an especially fast burning booster propellant grain," Carpenter explained. "The exhaust gases reach about 6,000 degrees Fahrenheit, much higher than most solid fuels."

Complementing the high heat resistance of the graphite nozzle parts within the 60-lb. rocket, are parts of asbestos reinforced with resin, for structural integrity. Machinists at Michelson Laboratory turned out the high grade steel shell and structural parts for captive test (heavyweight) and free flight (flightweight) models.

"We're quite satisfied with the progress we've had so far," said Carpenter, "and we are now at work optimizing fuels and motor parts for further testing."

The next free flight testing is scheduled for early October.

On Its Way To Fleet
BOMROC currently is aimed for introduction to the fleet

Maura McCreery Dies at Oxnard

Word was received here last Saturday of the death of Maura McCreery, wife of Capt. Bernard L. McCreery, Director of Supply here from July 1962 to Feb. 1965.

Mrs. McCreery died Sept. 16 in St. Johns Hospital at Oxnard after a prolonged illness. Burial was in Arlington, Va.



INDIAN WELLS VALLEY RIDGECREST • INYOKERN CHINA LAKE



WITHIN FIVE SECONDS, "vortex effect" created by 250 revs per second of BOMROC sustainer motor test segment, caused burning propellant to drill through heat barrier and aluminum spacer. Propulsion Dept. team solved impasse with "diffuser" of graphite that gathers gases from circumference.

within about two years. It promises to double the range of the present Mark 7 rocket, and is to be fired from present launchers, slightly modified.

Supply Launches Project Pride

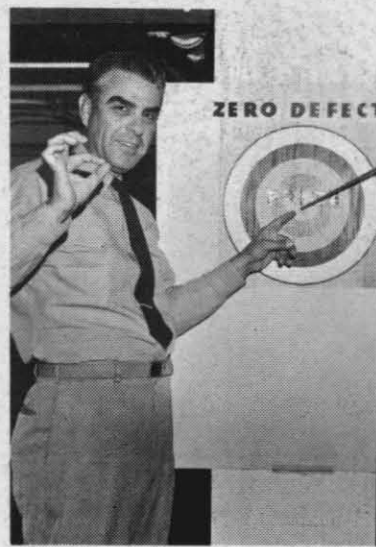
"Today marks the official kick-off of Supply Department's all-out Project PRIDE drive," announced Supply Department Director Capt. P. W. Jeffrey this week.

"Our goals are high," the Captain continued, "100 per cent participation in the Stationwide drive to combine renewed effort in our jobs with Zero Defects."

This is a total Supply Department program, emphasized Captain Jeffrey, that will include Pasadena and China Lake.

Two Contests
To add zest to Supply Department's serious Zero Defects program, the Captain described two contests that he's sponsoring in the Department. One is a slogan contest, the other is for posters. Intra-divisional run-off contests will be capped by competition between divisions for an all-Supply sweepstakes in each contest.

Winning slogans and posters will be used by Supply Department to carry out a continuing Zero Defects program. Suggestion blanks and rules for the two contests were distributed this week to all Supply People, said Supply Department PRIDE Chairman Ted Bates. And, he added, contest winners will be announced at a departmental awards presentation on Nov. 12.



CAPT. JEFFREY points to target for Zero Defects.

"FLU" SHOT CLINIC—Free influenza inoculations will be available to military personnel and their dependents (over six years of age) and to NOTS Pasadena Civil Service employees today between the hours of 9 to 12 noon and 1 to 4 p.m., according to nurse Virginia Olson. Dr. E. R. Zumwalt, Industrial Medical Officer from China Lake, will conduct the clinic.



ESO VICE PRESIDENT Howard Miller (r) presents courtesy tickets to Captain G. H. Lowe, Officer in Charge, and D. J. Wilcox, Head, Underwater Ordnance Department, for the NOTS Masquerade Party to be held October 29th at the Arcadia Elks Lodge, 27 West Huntington Drive, Arcadia. Everybody's going — are you?

JEWISH MESSAGE

Rosh Hashana, Yom Kippur

By (Student) Rabbi David Zucker



On the evening of September 27, Jews throughout the world will gather in Synagogues to celebrate the holiday Rosh Hashana, the New Year. This holiday is an introduction to the Ten Days of Repentance that precede Yom Kippur, the Day of Atonement.

A tradition relates that on Rosh Hashana God sits as a judge of all humanity. The fate of all living creation is decided at this time, whether he shall live or die, be happy or unhappy, rich or poor. On this Day of Judgment the decree is written into the Book of Life or Death. The tradition continues, however, and notes that should one sincerely pray and repent the judgment will be changed before the time that it is sealed on the Day of Atonement. As one of these prayers explains "The Lord does not want the death of the sinner, but that he repents from his ways and lives."

Ten days following Rosh Hashana is Yim Kippur, the Day of Atonement. At this time the fate of creation for the coming year, is sealed. Many Jews, recognizing the solemnity of this occasion do not eat, but fast the full 24 hours of the Holy Day.

The Yom Kippur service starts out with the prayer "Kol Nidre," literally "all vows" in which one asks forgiveness for any vows that will be made in the coming year under duress or coercion, promises to God that one will not be able to keep.

The Yom Kippur service is the longest in the Jewish liturgy. It is the most important day, known as the Sabbath of Sabbaths. The service ends with the Neileh prayers, the "closing prayers" which symbolizes the closing of the Gates of Heaven and the finality of the sealing of the Book of Life or Death.

Memorial Services Held at Chapel for Ens. Marvin H. Clark Jr. of VX-5

Memorial services were held Monday morning at the All Faith Chapel for Ensign Marvin H. Clark Jr. of Air Development Squadron Five.

Chaplain Robert W. O'dell, Chaplain Mark E. Fite, and Chaplain Edward F. Kane conducted the service.

The 23-year-old officer died at 12:15 a.m. last Friday when he lost control of his motorcycle and crashed into a light standard on Nimitz Ave.

He was a native of Ashtabula, Ohio, and a graduate of Ohio's Bowling Green State University. He was unmarried.

Ensign Clark came to China Lake on January 12 of this year after completion of Officer Candidate School at Newport, R.I.

He is survived by his parents, Mr. and Mrs. Marvin H. Clark Sr., 438 Myrtle Ave., Ashtabula, Ohio.



ENS. MARVIN CLARK JR.

PROMOTIONAL OPPORTUNITIES

Electronic Engineer, GS-13, Code 5520 - This position is that of Sidewinder Project Engineer in the Sidewinder-Chaparral Guidance & Control Project Office, Electromechanical Engineering Div., Engineering Dept. The incumbent will share responsibility for the Guidance and Control Unit of the Sidewinder IA and Sidewinder IC air-to-air missiles.

It requires special technical facilities in such unrelated areas as: micro-wave, infrared, radar, servo-mechanics, hot gas generators, gyro operation, electro-optical systems, turbines, alternators, aerodynamic heating and stress and flutter in airframes.

Position requires incumbent to perform production engineering duties, mechanical design, evaluation of proposed changes, and plan work assignments for the constant upgrading of missile performance and its cost reduction.

Incumbent must be familiar with all aspects of the guidance and control, servo and seeker systems of the project.

Incumbent must also determine the kind and extent of testing and analysis to prove out proposed changes.

Electronic Engineer (General), GS-11 or 12, Code 5522 - Primary work areas will be circuit design production, engineering and contract liaison on the electronic portions of missile guidance systems.

Incumbent will review and monitor contractor performance (via correspondence and travel) to assure that the function, quality, and reliability of the equipment is maintained at an acceptable level. Evaluation of proposed changes and solution of production problems in the electronic areas are part of this position.

Design work will include conversion of vacuum tube circuits to transistor types as well as original semiconductor circuit design. Will also analyze existing circuits to determine producibility and component stress levels.

File applications for above with Loreta Hetherington, Bldg. 34, Rm. 34 Phone 71471.

Refrigeration and Air Conditioning Mechanic, Code 7043 - Installs, maintains and repairs refrigerating and air conditioning equipment and components used in providing refrigeration and air conditioning for living quarters, offices, and industrial uses.

Qualifications: (a) Completion of an apprenticeship of four years in the trade or four years of experience sufficient in content to be the equivalent of an apprenticeship; or (b) four year apprenticeship as an Electrician, or four years of experience equivalent to an apprenticeship plus two years of experience in the installation, adjustment, maintenance and repair of all types of air conditioning equipment. All applicants must show that their experience has included or has been supplemented by at least six months of experience in modern air conditioning equipment.

File application with Dora Childers, Bldg. 34, Rm. 32, Phone 71393.

Business manager, GS-11 or GS-12, Code 4033 - Responsible for administrative management of a program involving activities both on and off-station, in non-technical areas concerning program administration, budgeting, personnel needs and servicing current and future needs for equipment and materials.

Qualifications Required: Incumbent must have familiarity with accounting principles and practices, and procedures used in the preparation of reports. Must be able to deal effectively with persons at all organizational levels.

A minimum of three years of specialized experience is required, which must have been administrative experience in staff services such as personnel administration, organization and methods examining, budget administration, fiscal administration, supply administration or traffic management; or work involving directing operating programs and executing policy or a combination of service operating functions.

Mechanical Engineer, GS-9, GS-11, or GS-12, Code 4054 - Incumbent will work in the field of design with emphasis on structural dynamics of missile. Will analyze environmental determining test data to establish laboratory simulation of environment of the missile and sub-systems.

File applications for above with Sandi Craig, Bldg. 34, Rm. 28, Phone 72676. Fire Fighter (General), GS-5, PD 584003-5, Code 842 - Performs normal duties in combating fires involving both airfield and structural fire fighting and rescue work; conducts preventive inspection; drives motorized equipment, assists in maintaining equipment and stations in top operating condition.

Qualifications required: Three years' experience in structural and airfield fire fighting and duties as described above.

Policeman, GS-4 or GS-5 (Two vacancies), Code 843 - Performs normal police duties, i.e. vehicle patrol, making arrests, protecting life and property, maintaining law and order, preventing crime, preserving the peace.

Qualifications Required: One year general experience as regular member of a guard or comparable protective services force; and two years' experience in making arrests, patrol, traffic control, etc.

File applications for above with P-1 Daniels, Bldg. 34, Rm. 28, Phone 72218. Deadline for filing is October 1. Information on Overseas vacancies is available in the Personnel Bldg.

Sutherland Will Lead Caravan To Panamint

A caravan for newcomers to fabled Panamint City and to Surprise Canyon above it, is to lead off a busy October schedule for members of the Maturango Museum.

George R. Sutherland, head of Ground Electronics and Frequency Coordination Division, will be caravan master for the trip set for Sunday, Oct. 3. Employed at NOTS since 1945, he has lived, worked, traveled and mined in many of the desert towns in the Panamint Valley and Upper Mojave desert.

Tour Stated Locations Weather willing, Sutherland is to lead the tour group from the starting point at the intersection of Richmond (on station) and Trona Roads at 7 a.m.

After reaching Panamint City, the group is to tour to the summit of the Slate Range, view old trails and camps and visit the ghost town of Ballarat, where Sutherland promises to tell of his encounter with such desert characters as "Shorty Harris" and "Seldom Seen Slim."

Other tour targets up the Canyon will be the camp of Chris Wick, long time guard at the entrance to Panamint City; the narrows where desperadoes Small and McDonald planned to steal Bill Stewart's silver; and the "smokestack sentinel" at 8,000 feet, the only remaining part of Stewart's mill.

The trip is to be filled out and spiced with impromptu sessions of story-telling by Sutherland. It will include the Minieta Mine, where he worked for many years; Harrisburg Flats and the old town of Skidoo.

The once-a-year ghost town trip is open to members, new members and prospective members of the Maturango Museum, only. Participants are advised to bring sufficient wa-



GEORGE SUTHERLEN

ter, food and warm clothing for car members, and to wear hiking boots. Family cars with good road clearance may be used, and should be filled with gas, oil and water before starting time.

The Museum's board of trustees have determined that any new memberships sold from September on, will be for the year 1966.

Other activities of the Museum planned for October are a guided tour of the Petroglyphs on Oct. 24; three lectures by George Silberberg on such subjects as Valley water, wild game birds and Afghanistan, and a reception for teachers of Valley schools.

Inquiries on Museum activities can be called in to its office at ext. 723683 or brought in person during its open hours of 2 to 5 p.m. Saturdays and Sundays and 9 a.m. to 1 p.m. Mondays and Thursdays.

Distinguished Churchman To Speak Here Sunday

The Reverend Richard D. Beving, noted clergyman and youth worker, will be the guest minister at the 8:30 and 11 a.m. Protestant Services at the All Faith Chapel this Sunday.

His topic for the first service will be "Living in a Frontier" and for the second "Life on the Installment Plan."

At 3:30 p.m. he will speak to the Youth Fellowship in the East Wing of the All Faith Chapel on the theme "Never Let Me Down."

Involved in youth work since his student days at Iowa's Central College and New Jersey's New Brunswick Theological Seminary, he has conducted camps for youths for the past eight summers.

Ordained in the Reformed Church in America, he transferred to the Presbyterian Church in 1947. He has held pastorates in New Jersey and was the organizing pastor of the South Hills Presbyterian Church, Pomona.

Associate pastor of the First Presbyterian Church, San Fernando, since 1957, he will enter San Fernando Valley State College for full-time graduate studies.



REV. RICHARD D. BEVING

Aetna Agent To Be At Community Center Tuesday and Wednes.

Howard Keenan, representative of the Aetna Insurance Co., will be at the Community Center next Tuesday from 9 a.m. to 4:30 p.m. and Wednesday from 9 a.m. to 3 p.m., according to Austin Ross, Head of Employee-Management Relations.

Tennis Club Sets Out Plan For Fall Meet

The first major event in the fall schedule of the China Lake Tennis Club is to get underway Saturday, Oct. 2, at the Station courts behind the shopping center, with the first round of its fall tennis tournament.

First matches are to begin at 9 a.m., according to the tourney schedule set out by the Club's tournament committee.

The committee announced that basic U.S. Lawn Tennis Association rules will govern play, and that all matches will be decided by two out of three sets. It warned entrants that it will call defaults for players not appearing at scheduled times without making satisfactory prior arrangements, to insure fairness to all players and to keep the competition on schedule.

The tournament will continue on the weekend of Oct. 9 and wind up on the weekend of Oct. 16. It will adhere to the following schedule:

Men's Singles—Entries close Wednesday, Sept. 29. Pairings and times of matches to be posted at the courts by Friday, Oct. 1. First round play will begin at 9 a.m. on Saturday, Oct. 2. A consolation meet of all first and second round losers will be held, with pairings and schedules posted by Sunday, Oct. 3.

Men's Doubles—Seeded players will be paired with non-seeded partners. Entries will be taken until 10 a.m. Saturday. The draw will be made, and schedules posted later that day.

Women's Singles—Entries will be taken until 10 a.m. Saturday, and schedules posted after the draw.

Mixed Doubles—Entries will be taken Saturday, and play scheduled if interest warrants.

Entries may be made for all events by contacting Don Beresford, ext. 77611, or Jerry Whitnak, ext. 723172. Special Services will supply tennis

Vampires 1965 Softball Champs



VX-5 WINS MILITARY LEAGUE—The "Vampires" managed by Joe Hootman, MA1, are the Military Softball Champs. Members with team trophies and individual trophies, kneeling (l-r) are LCdr. R. E. Cooper; Hank Myers, AZAN; Joe Hootman, MA1; N. H. Perry, YN3; J. B. C. Perez, AK2; and J. W.

Armistead. Standing (l-r) are R. C. Johnson, SN; Lt. Don Merritt; T. M. Rose, ADR3; M. J. Saul, MA3; J. L. Schwarting, AMS3; Lt. W. E. Turlay, Lt. Gene Wangle, and LCdr. G. E. Russell. Not shown: L. T. Yetter and W. R. Dalmas, YN2. LCdr. Don Loranger presented players their trophies.

balls for the tourney and prizes for winners and runnerup positions.

The tournament committee also announced that all players, both new and previous members of the Club, should affirm their membership.

It set a brief business meeting, with election of officers, for the starting day, Saturday, Oct. 2, at the courts.

The country with the most currency per capita is Switzerland with \$294.50 per person; least recorded is Indonesia with \$2.15.

Rosh Hashana To Be Observed In Chapel Service

Rosh Hashana, the start of the Jewish New Year, will be ushered in at sundown on Sunday, Sept. 26. The new year on Jewish calendars will be 5726.

Rosh Hashana services will begin promptly at 8 p.m. at the East Wing of the NOTS All Faith Chapel. All interested persons are cordially invited to join the congregation in worship.

Trona to Host Two-Day Meet Of Chem. Engrs

The Mojave Desert Section of the American Institute of Chemical Engineers will present a two-day technical meeting at Trona Unified School on Friday and Saturday, Oct. 8 and 9.

Three simultaneous technical sessions will include papers on Crystallization, Earth Science, and Computer Applications, Saturday morning. Saturday afternoon, three sessions will include papers on cesium uses, Computer Applications, and General Subjects.

On Friday, guests have the opportunity of touring either the American Potash & Chemical Co.'s Trona plant, or Stauffer Chemical Co.'s West end plant.

Several industries will exhibit their products in the auditorium of Trona Unified School all day Saturday.

NOTS Blind Mathematician To Speak at Braille Center

Ralph Middleton, NOTS blind mathematician, will speak next Tuesday in Bakersfield to two groups of students studying at the Kern County Braille Center.

He will relate to the groups his own personal experiences in transcribing material into braille, particularly the complexities of translating computer programming texts into braille.

Middleton, who spoke at the 1964 National Federation of the Blind convention, thinks computer programming for the blind represents "a scientific breakthrough for unlimited opportunities for blind persons whose vision isn't limited to eyesight."

"The techniques and methods I applied in learning computer programming could be duplicated by others who are sightless," he emphasizes.

He believes the sightless are particularly gifted for computer work.



RALPH MIDDLETON

Tapestry Maker Visits Art League

Mrs. Ruby Hufford of Laguna Beach will be guest speaker Monday, Sept. 27, at the monthly meeting of the Desert Art League.

The League will meet at 7:47 p.m. at the Community Center for the presentation, business meeting, and introduction of new League chairmen by president Betty Heflin.

Mrs. Hufford, a versatile artist, currently teaches nine classes per week in oils, collage, tapestry - making (or "stitchery") and papier mache. The work of her needle has been shown at the 1964 Wichita (Kansas) National Show and in the Design IX Show in Pasadena this spring, and has gleaned 23 awards since 1959.

She plans to speak on tapestry-making to the League.



TOYLAND OPENING - Outdoor Shop Manager William West and Capt. Leon Grabowsky get an assist from pert Kari Lynn Grabowsky in opening Toyland for Yule season.

The Rocketeer

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"J" Bibby Public Information Officer

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DEADLINES: Tuesday, 4:30 p.m. Photographs Tuesday, 11:30 a.m.

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DIVINE SERVICES

Christian Science (Chapel Annex)—Morning Service—11 a.m. Sunday School—9:30 a.m.

Protestant—(All Faith Chapel)—Morning Worship—8:30 and 11 a.m. Sunday School—9:30 a.m., Chapel Annexes 1, 2, 3, 4 (Dorms 5, 6, 7, 8) located opposite Station Restaurant.

Roman Catholic (All Faith Chapel)—Holy Mass—7, 9:30 a.m., and 5:30 p.m. Sunday, 6 a.m., Monday through Friday; 8:30 a.m., Saturday.

Confessions—8 to 8:25 a.m., 6 to 8:30 p.m., Saturday; Thursday before First Friday, 4 to 5:30 p.m.

NOTS Jewish Services (East Wing All Faith Chapel)—8 p.m. every first and third Friday. Sabbath School—10 a.m. to noon, every first and third Saturday.

Unitarian Fellowship (Chapel Annex No. 95, 85 King Ave.) Fellowship Meeting—Sundays, 7:30 p.m. Sunday School—10:45-11:45 a.m. (Chapel Annexes Nos. 1 and 2).

Information on Overseas vacancies is available in the Personnel Bldg.