Friday, November 25, 1966

ROCKETEER

WACOM Christmas Event Scheduled



LUNCHEON PLANNED - Preparations get underway for the WACOM Christmas Boutique Luncheon to be held December 13 at the Officers' Club. From left to right are Donnie Goettig, Doris Sorge, Mary McMul-

len, Dee Hardy, Elaine West and Joan Bach. Christmas items, some of which are shown above, may be purchased following the luncheon. -Photo by PH1 Gary Bird

Seabees Invite Public To Ceremonies

8:30 a.m.

Page Eight

Construction Battalion Division spection.

Models of current cars dra-

matize the Station Library's

new display at the Station The-

atre. The library has many

books on cars including auto

repair manuals for domestic

and foreign cars, how to cus-

tomize cars, sports cars, and

safe driving as well as the per-

sonal experiences of such fa-

mous drivers as Stirling Moss.

on the subject of cars to be

added to the library are: Shell

book of Epic Motor Races, by

Roberts; Unsafe at Any Speed,

ACROS

1-Junctures

6-Squander

American

12-Place where

15-Showy flower

17-Note of scale

bees are kept

11-Native

14-Want

18-Number

(abbr.)

31-Frocks

43-Calm

47-Arrows

48-Crippled

19-Haste

CROSSWORD PUZZLE

1-Scoffs

2-Paradise

3-Succor

4-Parent

6-Liquid

7-Imitated

9-Symbol for

tantalum

10-Mistakes

(collog.)

5-Broke südden!

8-Title of respect

Three of the newest books

A Pass in Review ceremony 11-2, announced that the pubin connection with the Com- lic is invited to attend the cermandant, 11th Naval District emonies which will be held in Annual Inspection is scheduled the parking lot east of the Enfor Saturday, December 3, at listed Men's Club on Blandy Avenue

Capt. H. J. Hartman, CEC, LCdr. R. D. Malone, CEC, USN, Public Works Officer, USNR, Commanding Officer, will conduct the personnel in-

Talk at Meeting Dr. David Jahsman of the Drummond Medical Clinic is scheduled to speak to members of the Indian Wells Val-

Nurses To Hear

ley Nurses Club at their meeting in the Clinic at 7:30 p.m. Monday, Nov. 28. Dr. Jahsman is to discuss various types of arthritis at the meeting. All nurses in the Valley are invited to attend.

Bake Sale Is Set

The Rosary Altar Sodality of the NOTS Catholic Parish will hold a Bake Sale Friday December 2, from 9 a.m. until 6 p.m. in front of Von's Market. Women from the entire congregation are cooperating in this extended effort to raise funds for the Blessed Sacrament Chapel Station's of the Cross.

Aetna Insurance Man Will Visit Station

Howard Keenan, a representative from Aetna Insurance is scheduled to be aboard the Station on Monday and Tuesday of next week, November 28 and 29. He will be available for consultation at the Community Center from 9 a.m. to 4:30 p.m., according to J. T. Haycock, Acting Head, Employee Management Relations.

GEBA Assessment 121 **Due for Death Of** Frank G. Campbell

Members of GEBA-CLMAS are informed that assessments number 121 and 49 are now due as a result of the death of Frank G. Campbell, a retired employee of the Rehab. Dept. who died in the Ridgecrest Hospital November 16.

Payments of \$1.20 may be mailed to Joseph M. Becker, Secretary - Treasurer, at 77-B Renshaw, China Lake.

GEBA Assessment 120 Waived for Death Of Adrian M. Davy

No assessments will be levied due to the death of GEBA-CLMAS member Adrian M. Davy, retired employee of Roads and Grounds Dept.

Secretary - Treasurer Joseph M. Becker announced that Davy died Saturday, November 5, at San Bernardino.

Archery Tourney For Local Youth Set on Dec. 10-11

Young China Lake bowmen are invited to gather for the 15th Annual Junior Archers' Tournament set for Saturday and Sunday, Dec. 10 and 11, at Joe Stone's archery range, 57-B Rowe St.

Contestants will be China Lake marksmen in the age groups 9 to 11 and 12 to 15, who have participated in the elementary school archer program or in Stone's year-around archery program during the year. They will let fly for first, second and third - place trophies for each age group, donated by the China Lake Bridge Unit of the American Contract Bridge League.

Further information is available from Joe Stone at ext.

NOVEMBED "ASSAULT ON A QUEEN" (106 Min.) Frank Sinatra, Virna Lisi

7:00 p.m. (Crime/Drama in Color) Fast-paced thriller about a group that plans a bizarre plot to rob the H.M.S. Queen Mary on the high seas. Frank as a deep sea diver and Virn as the girl with a treasure map lead the suspense. Exciting! (Adults and Mature "Zoom at the Top" (7 Min.)

SATURDAY

NOVEMBER 26 MATINEE--"CALL ME BWANA" (103 Min.)

Bob Hope 1:00 p.m. Shorts: "Strive With Father" (7 Min.) "Capt. Kidd No. 13" (16 Min.)

"BEACH BLANKET BINGO" (99 Min.) Frankie Avalon, Annette, Jody McCrea 7:00 p.m.

(Comedy/Music in Color) The beach gong take to the thrills of sky-diving as well as the surfboards and run into trouble with a motorcycle gang. AND there's music for the bikini-clad lovelies that abound to do Watusi. It's fun! (Adults, Youth and Mature

Short: "Casanova Cat" (7 Min.)

SUNDAY-MONDAY NOVEMBER 27-28 "THIS PROPERTY IS CONDEMNED" (110 Min.) Natalie Wood, Robert Redford

7:00 p.m. (Drama in Color) The steamy Tennessee Williams story of a small town girl, the belle of the wrong side of the tracks, who does most anything for a chance to leave home. Her railroad-man romance and spite-ful marriage during the depression makes this deep south story wild and bawdy characterizations, strong dialogue.

NOVEMBER TUESDAY Concert: Rosalyn Tureck-8:15 p.m. WEDNESDAY NOVEMBER 30

'IN HARM'S WAY" (159 Min.) John Wayne, Kirk Douglas 7:00 p.m.

(Sea-War/Drama) Follow the dramatic ca-reer of Navy Captain Wayne from Pearl Harbor Command to desk routine and combat command. Live with his problems of a disappointed Jr. Officer son, a devil-maycare executive officer, a nurse with passion saving his task force. Here is the war at sea in heavy detail, of men, women who wait for them. (Adults, Very Mature Youth.)

URSDAY-FRIDAY DECEMBER 1-2 "THE TEN COMMANDMENTS" (220 Min.) Iton Heston, Yul Brynner, Debra Paget 7:00 p.m.

(Historical Drama in Color) The famed lassic by Cecil B. DeMille returns to tell of the life of Moses from his fall as general of the armies and banishment to the burning desert to his glorious deliverance of his people. Every minute a spectacular treat, every second an interesting bit of drama or action. (Adults, Youth and Ma-

present Frederick L. Richards, editor of the Rocketeer, at its Monday meeting, November 28, at 8 p.m., Community Center, after a short business meeting conducted by Maxine Booty, club president.

Richards' talk, "From Camera to Canvas," is designed to explain how color slides aid artists and illustrators in com posing paintings.

Before coming to China Lake, Richards was associated with the advertising profession in the Los Angeles area for many years as an art director and consultant in the graphic arts field. His work was exhibited in the Museum of Modern Art, New York, and at the Art Directors Club, Los Angeles.

rom	PLACE STAMP HERE
)	



GARY K. FISHER

Fisher Awarded Masters Degree Through UCLA

Gary K. Fisher, Code 3072, has become the 41st Station employee to be granted the M.S. in Engineering by UCLA through the Off-Campus Program at China Lake. His degree was awarded on the basis of his thesis which is titled, "Experimental Investigation of the Shock Response of a Uniform Beam Carrying a Spring Mass System."

Fisher, a mechanical engineer, came to NOTS in January of 1963 from the Bethlehem Steel Company, Seattle, Washington. A native of Long Beach, California, he went to Oregon State College after serving a seven year hitch in the U.S. Navy. He was awarded the B.S. in Mechanical Engineering

The Fishers, including wife

at Oregon State in 1959.

Susan and three children, live

at 58-B Rowe Street.

Camera To Canvas

Subject of Meet

The Desert Art League will

34-Winglike 35-Portends 36-Symbol for xenon 37-Cover 38-Well-grounded 39-Music: as written 40-Epistle (abbr.) 41-Girl's name

11-Prefix: within 32-Stretch out 20-Tibetan gazelle 25-Dinner course 33-Chairs 35-Large bundles 13-Periods of time 21-Railroad 38-Opening 39-Dirk 41-Pronoun 42-Goal 44-Sun god 46-Note of scale 19-More certain 22-Stage extra 20-British prisons (collog.) 29-Men 22-Sweetening 30-Wing-footed 23-Young salmon substance 24-Confirms 26-Crucifix 27-Matured 28-City in Russia 29-Pertaining to the cheek 42-Dillseed 45-Foreigners.

For Use In Authorized Service Newspapers Only

Library Display Featuring Autos by Nader: and, Small Wonder, the amazing story of the Volkswagen, by Nelson. The library also has available two periodicals on the general subject of motoring,

which are quite popular. They are Hot Rod and Motor Trend. For those interested in motorcycling there is The Book of Motorcycles, Trail Bikes and Scooters, by Arctander and A Treasury of Motorcycles of the World by Clymer. Also

the periodical, Cycle World.

Answer to Previous Puzzle





Vol. XXI, No. 47

Naval Ordnance Test Station, China Lake, California

Friday, Nov. 25, 1966

Rock Site Studies See Man Installed **Under Sea Floor**

BY JOHN R. McCABE The rich, vast and relatively unexplored "inner spaces" of the earth's oceans are rapidly gathering public interest as an exciting new frontier for exploration and exploitation,

plane captains.

Officer.

and as new wealth and new uses of the oceans are searched out, a challenging concept for providing working outposts is coming under study. This latest of several con-

cepts for achieving undersea installations, called "Rock Site," calls for constructing spacious, self-supporting facilities under the bottom of the sea. The Rock Site concept is now being studied at NOTS under the leadership of Dr. Carl Austin, of the Research Department.

Working Undersea

Dr. Austin explains that a Rock Site installation would consist of a room or series of rooms excavated within the bedrock beneath the sea floor, and points out that such installations have already existed for decades, established by the mining industry to reach offshore mineral deposits. He offers, to show the practicality of the Rock Site concept, the example of a long-established iron mining operation off the eastern coast of Canada with seven and a half square miles of permanent floor space beneath the sea floor. Connected by a main access tunnel to the land, it includes a complete machine shop among its facilities.

He points out that this method of inhabiting the bottom of the seas differs greatly in permanence and working environment from the two other major concepts. One of these, the saturation diving technique, is being pursued in the Sea Lab her shares Rock Site the goal of achieving a one - atmosphere working space in the deep sea, but (Continued on Page 4)



Plane Capt. of Month

ADJ3 JERRY R. HOWARD

F-8 plane captain, received the weekends here, in which he new NAF honor for November. He has been at NOTS since May of last year, upon completing recruit training at San Diego.

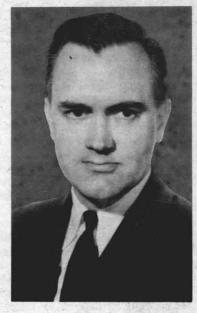
Faubion is a native of Pampa, Texas, and calls Breckenridge, where he attended high school, his home. He is a hunt-ADJ3 Charles M. Faubion, an er and fisherman on free 1967.



ADJ3 CHARLES M. FAUBION

takes full advantage of his bachelor status. He keeps his eye on continuing his formal education, and plans one day to attend the Abilene Commercial Business College. His brother, Billy Don, expects to receive his Ph.D. in chemistry from Texas A&M in January,

Annual Banquet Set for Nov. 30 **At Officers Club**



DR. FRANK E. GODDARD JR.

Dr. Frank E. Goddard, Jr., will be the subject speaker -"Space Exploration and the JPL Role" - at the Annual Banquet and Installation of Officers of the China Lake Chapter. American Ordnance Association on Wednesday, November 30 at the Commissioned Officers' Club.

Dr. Goddard received his B.S. degree in Aeronautics in 1937 from MIT and his Ph.D. in Aeronautics from the California Institute of Technology.

Following graduation he be came associated with the Consolidated Aircraft Corp. in San Diego as an aerodynamicist. Later he joined the Glenn L. Martin Co. of Baltimore as head of the Aerodynamics Research Group. After seven years with Martin, he accepted the post of staff engineer in the Naval Supersonic Laboratory at MIT.

Unlighted Bikes Are Night Hazard

The number of reports of youngsters riding unlighted bicycles after dark is increasing.

served at NAF since January

this year and is plane captain

of a TF-10-B "Skyknight." He

came to NOTS from ADJ "A"

School at Memphis, and

brought his wife Gwendolyn

Tennessee, is an active sports

enthusiast at China Lake and

plays football with the NAF

Chargers, who traveled to Long

Beach last Saturday for 11th

Naval District tournament

playoffs. He is also a boxer and

Plane Captain for November

Howard, a native of Sharon,

and son Jerry, Jr., 2.

fight enthusiast.

With Christmas coming on, and the certainty that many. bicycles will be given as gifts, parents should make the young riders aware of the dangers of riding at dusk. They should not be allowed to ride after dark unless the bicycles are equipped for nighttime riding.

ed with an approved neadflective tape on the rear fen- careful. der and on the sides of the 2. Be familiar with standard light or reflectors are intact. tension 71635.

frame will give additional protection

Bicycle riders are governed by the same rules as automobile drivers. The following is a list of the "rules-of-the-road" a left turn against fast moving that the parent should review with the rider.

1. Always ride on the right side of the road way in the same direction as other traffic, in single file. While in this Each bicycle must be equip- lane, watch carefully for cars adjusted if necessary so that dinner will follow at 7:30 p.m. about to pull from the curb. light and rear reflector or tail If someone is behind the wheel to apply a firm braking pres- be on sale at the door, howevlight. Liberal application of re- of a parked car, be especially

hand signals and use them. In heavy traffic however, the bicycle should be walked around the crosswalk. Never get into the fast center lane or attempt vehicles

3. Be sure to stop at all stop signs whether there are cars opment. around or not.

The brakes should be checkit is low enough for the foot Tickets at \$3.75 per person w sure. Be sure that the head- er prior reservations should be light is burning and the tail made by calling Code 002, ex-

Dr. Goddard joined the staff of the Jet Propulsion Laboratory in 1949 as Chief of the High-Speed Wind Tunnel Section. In this position, he was responsible for the JPL program in aerodynamic research and high-speed wind tunnel operation. At the present time he is the Assistant Director for Research and Advanced Devel-

A social hour will be held ed occasionally and the seat at 6:30 p.m., and a Prime Rib



See Page Three Story On Blue Angels Appearance At NAF

'Rock Site' Forsees Manned Stations Under Ocean Floor Dr. Carl Austin Gives Description of Idea

(Continued from Page 1) calls for the use of bottom-sit- well. ting structures, either fully the bottom.

"An installation with several "could be a major community with full family and recreational living facilities as comfortable as those in any city build-

"Located along the mid-Atlantic ridge or on selected sea- try, including t u n n e l boring mounts (undersea plateaus) machines. elsewhere, the potential for research from this type of site becomes large, since the site, though immobile, is also independent of surface weather conditions," he adds.

Potential of Rock Site

Dr. Austin lists many advantages of the Rock Site concept some of the critical responses likely to be encountered by the challenging idea.

"As soon as someone proposes to do something differently," he notes. "a flurry of argument breaks forth as to why,' and 'what good is it,' and 'obviously, it is impossible or it would have been done already.' These discussions are healthy for all concerned as they take some of the shine off of new ideas and they get other persons besides the original idea - formers involved in contributing thoughts, problems, and solutions in support of the original concept."

Aside from possible use as military stations or bases for exploration, Dr. Austin points out that a Rock Site installation could have great value for commerce and industry.

The industrial implications of a successful Rock Site installation, he says, would be far reaching and of great national importance by providing permanent petroleum drilling sites not only on the deep continental shelf but in areas beneath both intermittent and permanent ice cover. These same types of drilling sites could serve for the production of geothermal steam and brine, enabling in the near future the exploitation of deposits such as those now suspected in the floor of the Red Sea.

For hard minerals productions, Rock Site installations would enable undersea mining to be conducted beneath a considerable depth of water and great distances offshore. By the use of observation towers plus scrapers and dewatering locks, Rock Site mining installations would enable the mining of seafloor nodules and offshore placer deposits without the constant hazards of wind and wave damage in surface - ship - type operations.

"Seaports" and Power

Rock Site, he proposes, could convert any coastline to a deep water port facility capable of handling petroleum products and mineral slurries to and from surface ships by means of hoses, with present technology, and if submersible cargo vessels eventually result, other less easily transportable

cargoes could be handled as

Rock Site installations acpre-fabricated or assembled on cording to Dr. Austin, would make ideal offshore nuclearpower-plant sites using convecsquare miles of useful floor be- tive sea water cooling, and neath 1,100 feet of rock," says could provide the working Dr. Austin, pointing to the ex- space and power needed for ample of the Canadian mine, undersea booster pumping plants for pipeline systems paralleling a coastline.

Dr. Austin emphasizes that such undersea mining can be done using tools and techniques already in wide use by indus-

Rock Site Compared

"As a government project, compared for example with many missile and space programs, the Rock Site concept of establishing permanent undersea installations does not appear to be highly expensive," he says. "Some of the over others, and recognizes advantages of the Rock Site method of sea-floor occupation over other types of sea-floor access and utilization are worth a specific mention."

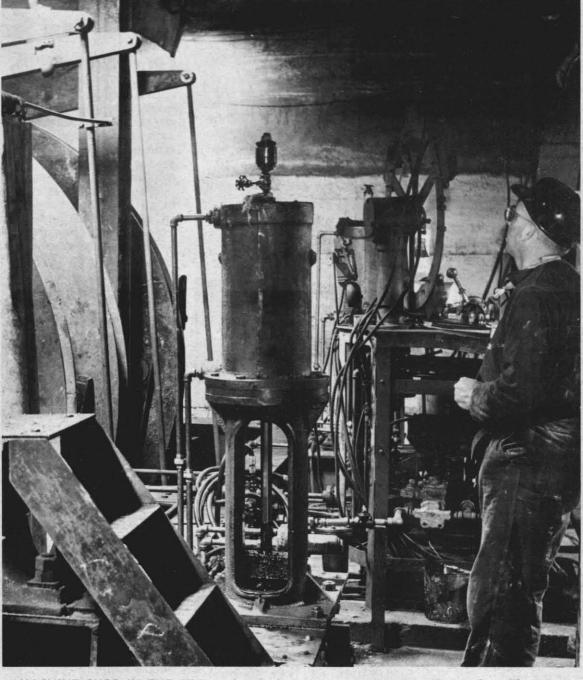
Comparisons with other seabase methods bring out many advantages of the Rock Site concept, in Dr. Austin's reckoning. Comparing Rock Site with surface-base methods such as the use of barges and platforms, he says that:

1. Weather and waves are not a hazard

2. All equipment is acces-

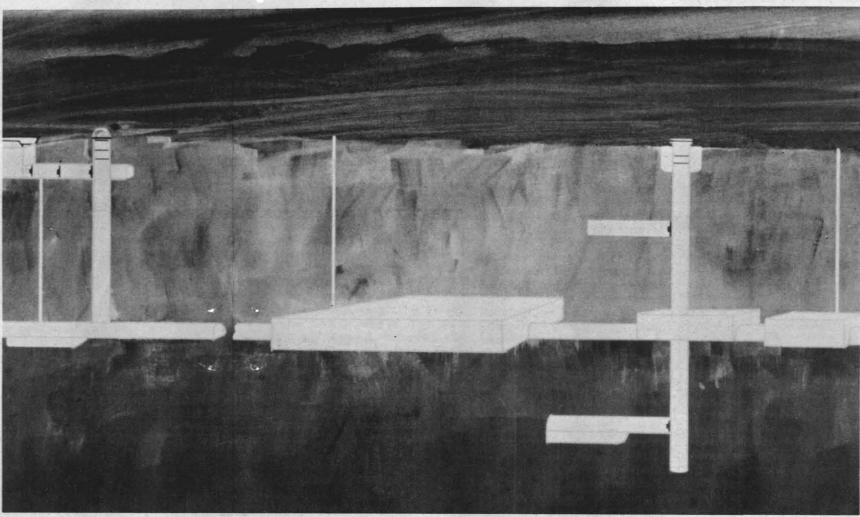


PROBING DEEP INTO SAN CLEMENTE — Core samples down to 1,000 feet are being taken here, at a shore location on San Clemente Island, to measure the feasibility of a Rock Site-type installation. Just offshore, other cores will be taken, not far from the place where the Greek freighter ran aground recently.

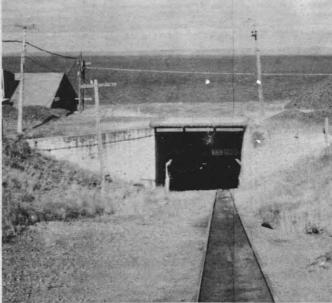


MACHINE SHOP IN THE SEA - Dr. Carl the coast of eastern Canada. The mine Austin watches operations in a hoist room, 300 feet below the sea floor, in a mine off

covers about 75 square miles of sea floor, and has thousands of miles of tunnels.



ROCK SITE INSTALLATION — This isolated ocean-bottom site, in artist's conception, shows access lock (upper right), sumps, glass sphere observation dome and transportation lock for small vehicle operations (upper left) and watertight doors. Such a site could be equipped with a nuclear reactor, cooled by sea water, for power and life-support.



with a large diameter boring machine, without the use of air-contaminating explosives. The machine here passed from harder to softer rock.

MODERN TUNNELLING -

Dr. Carl Austin examines

the side of a tunnel dug

sible to ordinary technicians and laborers.

3. The working volume or space can be expanded cheaply to meet future operational needs, once the original installation is made.

4. The Rock Site installations can be placed at great depth beneath the sea floor; their openings can be numerous and scattered; and access to the in- and their families for extendled by the base occupants. If made large enough to serve as desired, reactor waste heat can be internally stored or dissipated into the earth by means of fluid injection into deep, permeable zones in order to Rock Site studies, the underprevent an undesirable heating sea installations could be startnear the sea-floor installations, some heat will be needed to or from ship - mounted drillmaintain a comfortable installation, since rocks near the sea either surface vessels or subfloor will probably be at or mersibles, he forsees. near the deep ocean temperature of only a degree of two conditions or depths or other centigrade.

avoided.

With respect to bottom-Rock Site installations show the following advantages:

1. Water mass "weather" is not a problem for Rock Site installations but people working on the sea floor will have on structures, and numerous out of the way of storms and other water "weather" prob- ice. lems

2. The working volume is "thick - skinned," and can be quite large, avoiding the tendency for "thin-skinned" struc-

tures to suffer catastrophic flooding and high leakage rates given even minor structural damage. A leak developing through several hundred feet of rock can be grouted from within (injected with a cementing material) by means of drill holes, a leak developing through an inch or two of steel is apt to be hard to control, especially from inside. 3. Damage from accidental

ship activities is far less. 4. All facilities and equipment except the outside of the lock-tube door are accessible at all times to ordinary techni-

cians and laborers. 5. Damage from drift ice and ice-flow groundings is avoided.

6. Structures within the sea floor can easily be made large and comfortable enough to permit the quartering of crews stallation is absolutely control- ed periods of time, and can be supply and repair depots for large submersibles.

How to Install

According to Dr. Austin's of the surrounding water. With ed from shore sites, as with present day mining operations, ing rigs. The ships could be

Varying with the weather conditions found at a Rock Site 5. Surface hazards such as location, entrance to installaaccidental ship-caused dam- tions isolated from the land age and floating hazards are could be accomplished in two ways, he proposes.

The site could be connected squatting structures, he says, to a surface entrance hatch by an "air umbilical" tube, or locks mounted on the sea floor could be provided for submersibles, or both could be used. The air umbilical access tube could also be hinged at the to contend with currents, shear sea floor, to swing downward,

> Dr. Austin points out that at present, the best examples of mine floodings and of mine operations within zones of high water pressures are to be found on land, with one of the most noteworthy under the desert in central Nevada.

Research Proceeds

NOTS is now progressing with drilling and geophysical operations to determine the nature of the sea floor geology in a promising type of offshore location off San Clemente Island. This project will be reported later in the Rocketeer.

Dr. Austin observes that interest and efforts are building up rapidly toward the day when the oceans and the riches beneath them will be opened to man's use.

"Permanent manned installations at the bottom of the sea is a goal that is being actively pursued by many nations, by many governmental agencies within our own nation, and by various industrial concerns," he observes.

"Furthermore, the Rock Site concept competes with no existing Navy projects;" he adds, "rather it complements many. In particular, Rock Site-type installations can provide the working spaces from which saturated diving and submersible technology can be exploited to their fullest, freed at last from the problems of surface support and rough weather."





INDUSTRY UNDER THE SEA - Today. heavy machinery operates daily in many hundreds of square miles of undersea rooms and tunnels in mines around the world-

in dry, spacious safety. As it happens, the worst examples of mine flooding have occurred under dry land. Interest in manned installations bottom-side is gaining rapidly. Page Five

Page Six

ROCKETEER

Friday, November 25, 1966



PRINCESS BARBARA, posing with her parents, Jo and Jim Beckley, holds the official bouquet of roses received when she was selected as a 1967 Tournament of Roses Princess. -Photo by PH2 R. W. Spencer

P8054.

ior year.

a scholarship to PCC.

In June of this year, she

pons and underwater detection

Beguties Abound At Pasadena

Rose Princesses, past and present, are part of the NOTS Pasadena family. Barbara Beckley, daughter of Jim Beckley (Planner and Estimator in P80941) and his wife, Jo, was recently selected as one of the six Rose Princesses who will reign with Queen Barbara Hewitt during the 78th Tournament of Roses festivities. Barbara celebrated her 20th birthday last week on November 17th.

Dianne La Lone, 19, Secretary for the Fire Control Branch, P8054, headed by Ed Perry, was a princess in last year's Royal Court.

Barbara, an "A" student in her sophomore year at Pasadena City College, is majoring in Business Administration and plans to finish her education at San Diego State.

A true Californian, she was born in Alhambra, attended the same grade school her mother attended and graduated from Alhambra High School as did her mother and father. service organization). With

During her high school Honors at Entrance, she held years, Barbara was active in La Estrellita, a Tri High Y Club; she was a delegate to married Joel La Lone, culmin-Model Legislator in Sacramen- ating a four-year courtship. Dito in 1963 and 1964 (a YMCA anne and Joel are presently Youth in Government Pro- continuing their education at gram); and as a graduation Los Angeles State College. Both gift from her parents she qual- major in English in their Junified and participated in a 35day tour of the United States For many years, NOTS has as part of the YMCA American Heritage Tour.

Princess in 1965. Very active and development of highly so- must be submitted when apin the Association of Women phisticated antisubmarine wea- plying. Students, she served as Vice President during 1965-66 term and presently works with Publicity for that organization.

marriage in June) is the daugh- well as brains. ter of Mr. and Mrs. John Merrill of Altadena. Also a native Californian Dianne was born City College.

Combining studies with ex- ographic says.

BY RAY HANSON Milt's Marauders, with 28 wins and 12 losses, hold a nar-

row three-game lead in the NOTS Wednesday night bowling league. The second - place Quiet Five are within easy striking distance, however, with a record of 25-15. The third-place Low Bowls own a 23.5 - 16.5 mark, while the What-NOTS are fourth with 23-17. This league obviously will go right down to the last week, as usual, and any one of these teams could win it all. In fact, with 19 weeks to go, nobody's out of it yet!

High scores for the 10th week are as follows: team series, Cy's Cynics, 2912; team game, Channel Kats, 1052; men's series, Wayne Taggart, 628; women's series, Norma Sayre, 628; men's game, Ron Preston, 250; women's game, Lyn Herwig, 240.



A PLAQUE stating his tour of duty with NOTS and a farewell handshake is received by CWO-4 William E. O'Connell (r) from Captain G. H. Lowe, Officer in Charge, Pasadena.

val career on December 1, sephine, have a son, Michael, Chief Warrant Officer William who teaches at Alexander E. O'Connell was feted at a Hamilton High School in Los farewell luncheon last Friday. Angeles and a daughter, Mary,

B&M Division Machinist aboard College. Mary also plans to the Guided Missile Cruiser, teach. USS Providence (CLG-6). Previous to that he was with the U. S. Naval Shipyard, Long Beach, as a Ship Superintendent.

He entered the navy in September 1935 as an apprentice seaman and received his commission in 1944.

Retiring from a 30-year na- O'Connell and his wife, Jo-O'Connell reported to NOTS who is a sophomore majoring in August 1965 from duty as in history at Harbor Junior

> Military decorations awarded him for service to his country include Good Conduct, China Service, American Defense, American Theatre, Asiatic Pacific, World War II Victory, Navy Occupation, National Defense, Korean Service, United Nations, Korean Presidential Citation, and Philippine Liberation

Following his retirement from the Navy, O'Connell will launch a new career with Westinghouse Electric Co. in Long Beach. The family will continue to reside in San Pe-



tra-curricular activities in high school. Dianne found time to **New AUTOVON** be a Song Girl, she worked on the school Year Book and was a member of the "Z" Club, (a

NOTS Pasadena AUTOVON Automatic Voice Network number will be changed to 898-1400.

PROMOTIONAL **OPPORTUNITIES**

To apply for positions, conenjoyed a well deserved repu- tact Christine Marchand, Pasatation of high caliber person- dena Personnel Division, Ex-At PCC Barbara was a Frosh nel and excellence in research tension 278. A current SF-58

Model Maker (Sheet & Plate systems. With the two lovely Metal), WB-14, No. JD-P32, young ladies as part of the Code P8084 - From blue-NOTS family, we must now be prints, sketches written and or-Dianne Merrill (before her convinced NOTS has beauty as al instructions, selects material, lays out work and fabricates models and fixtures. Uses metal working machines and George Washington was the hand tools. Assembles metal in Pasadena. She attended John only president who never liv- characteristics precision and Muir High School and com- ed in the White House. But he measuring devices and metal pleted two years at Pasadena did choose the site and approv- working tools. The duty station ed the design, the National Ge- is located at Morris Dam, Azusa, California.



BRITISH VISITOR - Francis S. Burt, Deputy Chief Scientific Officer at the Admiralty Research Laboratory, Teddington, England, (center), discusses programs of mutual interest on a recent visit to NOTS Pasadena with (I) Dr. J. W. Hoyt, Head Propulsion Division, and (r) William F. Madison of P8076.

Director of the Center for rill, who resigned in June. Computer Sciences and Tech- Mr. Ream will assist Navy Secnology, National Bureau of retary on matters of planning Standards, has been appointed and policy related to major Special Assistant to Secretary Navy program areas in manof the Navy.

tion held by Howard W. Mer- processing.

agement systems, management Norman J. Ream fills posi- services and automatic data

THE TOP OF THE LINE - These are the seven men responsible for one of the most outstanding flight demonstration teams in the history of aviation. Listed from left to right with their plane number are: LCdr. Jack Cougar, USN, No. 8; Lt. Norm Gandia,



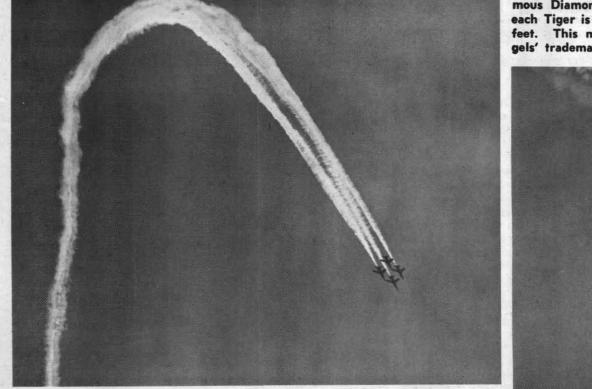
ing their 45 minute flight demonstration which made the non-flver desirous and the professional envious. Most of the 13 maneuvers demonstrated by the team during a show are the same basic maneuvers that are taught to every Navy pilot, with the exception that they are done with considerably more skill and of course, a lot closer to the ground. The team stresses that these maneuvers are routine and in no way constitute the term "stunt." There have been 87 Blue Angels since their start in 1946 with seven of them coming back for a second tour.

Friday, November 25, 1966

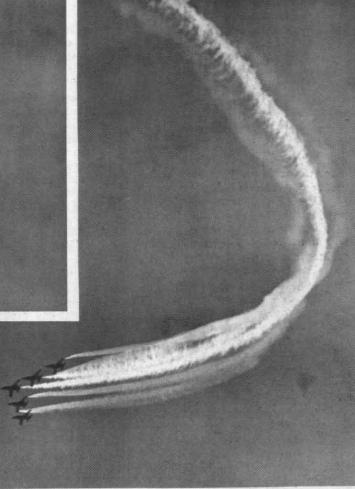
Blue Angels Show Draws Large Crowd

In the 20 years since their organization, the Blue Angels have earned a worldwide reputation second to none for their precision flying, and last week at NAF was no different.

The Pensacola, Florida based group, headed by Cdr. Bob Aumack, thrilled hundreds dur-



UP AND OVER-This appears to be the famous Diamond Roll. In this graceful roll, each Tiger is separated by only two to three feet. This maneuver became the Blue Angels' trademark early in their career.





ANXIOUS VIEWERS - Wherever you find the Blue Angels putting on a show, you'll find hundreds and even thousands of very interested spectators. Such was the case at NAF last week, even though the famed group could only spare 45 minutes. Although many had seen them before, it is always a pleasure to see them again. Eighty million have been thrilled since they started. -Photo by M. R. Reida, SA



USN, No. 6; Capt. Fred Craig, USMC, No. 2; Cdr. Bob Aumack, USN, No. 1; Lt. Clarence "Red" Hubbard, USN, No. 3; Lt. Frank Mezzadri, USN, No. 4 and Lt. Dave Rottgering, USN, No. 7.

-Photo by M. R. Reida, SA

REAL CROWD PLEASER - This is the final stage of the left Echelon Roll. This is a maneuver which the book says cannot be done. It has really established the Blue Angels as pilots' pilots. Note the vapor streaming from their wings in both pictures.

New Air Taxi Service Now Available For Government, Contract Employees

Last Monday, November 21, a pilot available at both locaair taxi service between Inyo- elers. kern and Los Angeles for Government and contract employees as Cable Flying Service commenced their operation.

The new air taxi is available to all Government employees on official travel orders and to contractor employees on Government business. Passengers will also be allowed to board a flight without travel orders if the traveler can provide a travel order number tract company.

preparations will be made for north-bound flights will leave passengers leaving Inyokern by at 10 a.m. and 9 p.m. and the portation Branch. For those 11:15 a.m. and 10 p.m. All leaving Los Angeles, Cable has flights will take approximately authority to utilize gate num- 50 minutes. ber 70 at United Airline's Sat- Further information and resat either airport, but will have tion at extension 71321.

marked the beginning of a new tions to assist embarking trav-

Persons arriving at gate 70 without reservations, should place a telephone call to Cable Flying Service utilizing the phone adjacent to the gate. A sign there will provide all necessary information.

Cable has \$1,000,000 liability insurance coverage and an additional \$100,000 coverage per seat. At this time, there is no additional insurance availaand/or the name of the con- ble for travelers to purchase.

At the present, two daily Reservations and necessary flights are scheduled. The the NOTS Travel and Trans- south-bound flights leave at

ellite. Cable will not have a ervations may be obtained by ticket or information counter calling Travel and Transporta-

To Feature Talk On Public Lands

their next regular meeting for sportsmen. Monday, November 28, in the Rowe Street Hut at 7:30 p.m.

for the Public.'

throughout the west. Many of refreshments will be served.

The Indian Wells Gem and these lands enclose favorite ar-Mineral Society has scheduled eas of hobbiests as well as

Sharp is a member of the California Federation of Mineralogical Societies committee The speaker will be Herman which is cooperating in studies Sharp of Sacramento. His talk of the problem with the buwill be "Saving Public Lands reau in an effort to retain this land.

At this time the Bureau of Persons interested in keep-Land Management is planning ing public lands for the pubextensive sales of public lands lic are invited to attend. Free

Page Two

CHAPLAIN'S MESSAGE

Do Not Disturb

By Senior Chaplain Paul Romantum

These are familiar words which are used in places of lodging to enable us to get extra rest. In their place they perform a good function for all of us.

Many of us use these words in those areas of life which affect our moral fiber and spiritual growth. We conveniently hang these words on the door to our minds and say "Do Not Disturb" our conscience or our spirituality.

If our Christian religion is to be taken seriously, it must become a disturbing influence in our everyday experience. Christian teachings have always disturbed people who have taken them seriously and have attempted to apply them to their own life as they related to others.

One of the most disturbing portions of the New Testament is the Sermon on the Mount (Matthew 5-7). If you haven't read these three chapters lately, try reading them in a personal way applying the teachings to your own life. There isn't an area of life that these teachings do not touch in a very alarming way. They were disturbing words when Jesus uttered them and they ought to disturb us now.

Too often we put out our "do not disturb" sign saying, "these teachings are impractical for us in our day and age." We recognize them as great teachings but hasten to apply them to others who need them so much more.

Our convenient consciences rationalize our failures for we do not want to be disturbed. Many say they live by the Golden Rule which is one verse only in these three chapters and quickly write off the rest as irrelevant and unnecessary.

Unless Christians are deeply disturbed over our failures to make Jesus' teaching personal, our cause is a lost one.

We ought to participate in worship, prayer, and meditation expecting to be disturbed and then do something about our failures in a constructive way. This will become the sound base on which to build moral and spiritual strength.

Bach Master Rosalyn Tureck To Give Concert Recital Here



MISS ROSALYN TURECK IN SOLO - The famed Bach interpreter will present a solo recital for the China Lake Civic Concert Association's second offering in its 1966-67 season. Some tickets to the concert at 8:15 p.m., Nov. 29, at the Station Theater are available by calling the Box Office after 7:30 the evening of the concert. Adult tickets are \$3, \$2.50 and \$2; high school and elementary student tickets are halfprice. The AAUW will sponsor an after-concert reception honoring Miss Tureck in the East Wing of the Chapel.

STATION LIBRARY LISTS NEW BOOKS

A complete list of new books is available in the library. Fiction

Burchardt-Shotgun Bottom. Hartog-The Call of the Sea. Mair-The Douglas Affair. O'Connor-All in the Family. Silverberg-Earthmen and Strangers.

Non-Fiction Campbell-Whom God Hath

Joined Asunder. Cook-Floodtide in Europe. Kissinger—Problems of National Strategy. Lorenz-On Aggression Nadeau-City Makers.

ROCKETEER



Clerk (Typing), GS-301-6 or GS-301-5, Code^{*} 9500 — Provide secretarial services and clerical support to the Office of Patent Counsel. Duties include advising applicants on legal procedures, processing of legal on legal processing or regat forms for patent applications and awards, setting up and maintaining controls on sta-tus and follow-up on patent cases, typing and preparing reports to ONR and respon-sible for general office management. Duty Station is China Lake, but home office is ONR in Washington. Qualifications - Typ-ing required and shorthand skills prefer-red. One year general experience and two years specialized legal secretarial skills for the GS-5 level, additional 6 months specialized for GS-6 level.

Personnel Clerk, (Employee Relations) (Steno) G5-4 or 5, Code 651 — Provide sec-retarial and clerical services to the Em-ployee-Management Division staff. Duties include dictation, typing, gather background information for adverse actions and grievances, preparing reports, correspondence, etc. Qualifications: One year general and two years specialized in personnel clerical experience for GS-5. One year specialized required for GS-4. Shorthand required for both levels.

both levels. File applications for above with Sherry Scheer, Bldg. 34, Rm. 26, Phone 71577. Mechanical Aeronautical Engineer, GS-9 to 12, Code 4563 — Incumbent will be con-cerned with development work on the FAX Program. Will be required to design exper-iments and collect and assess data. Will design and evaluate stabilization devices. Will study terminal effects and assess va-rious target damage.

ious target damage. Physicist GS-9 to 12, Code 4563 — Will be concerned with developmental work on the FAX Program. Will design experiments, collect and assess data; design and evalu-ate stabilization devices. Will study termin-al effects and assess various target dam-

age. File applications for above with Naomi Campbell, Bldg. 34, Rm. 28, Phone 72218. Electronics Mechanic JD No. 185-15 Code 5527 — Constructs, modifies, tests, and re-pairs electronic devices used in the testing and development of guided missiles and as-pocietad equipment.

sociated equipment. Supervisory Electronic Engineer (Instru-mentation), GS-12, Code 5515, PD No. 555-053 — Incumbent is Head, Standards and Calibration Laboratory Branch, Engineering Department and exercises technical and administrative supervision of the Branch. He is responsible for calibration, inspection, and repair of electronic equipment proces-sed by the Branch for on-Station customers. sed by the Branch for on-Station customers. Must have engineering degree or equival-ent. More desirable academic backgrounds are electronic engineering or physics. How-ever, a general engineer with a strong elec-tronic equipment background may qualify. File application for above with Joan Cheever, Bldg. 34, Rm. 34, Phone 71514.

Electrical Engineer, GS-9, 11, or 12, Code 3023 — Incumbent will perform electrical engineering duties in connection with de-sign of facilities for classified fire control projects including computers, launchers, ra-dars, missile checkout, and interconnecting equipment including communications and

instrumentation. File application for above with Loretta Dudley, Bldg. 34, Rm. 34, Phone 71471. Mechanical Engineer, GS-9 to 12, (one va-cancy) Code 4033 — This position has the responsibility for the design of airframe and structures for free fall weapons within Code 4033. Experience in aerodynamics is desired. A degree in Engineering with three or more years of progressive and responor more years of progressive and respon-sible experience with Engineering or a re-lated field.

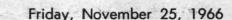
lated field. Engineer, Physicist or Mathematician, GS-11 to 13, Code 4070 — Carry out analysis In the field of combat use and design of Air to Air and Air to Ground weapon sys-tems. Determine the feasibility of proposed weapons systems. Provide basic information for use in the tactical utilization of weapon systems including target vulnerability stud-ies and the execution of special assign-

ments. Must have degree. Chemical Engineer, GS-9 to 12, Code 4033 - The incumbent shall be responsible for the development of flame fuels for use in Navy free fall weapons. Must have a de-gree in chemical engineering. A high degree of technical judgement, originality and redevelop and execute specific plans for tion for extensive and complex project assignments, recognize possible new approaches and devise new or improved techniques and methods for obtaining effective results.

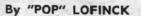
Mechanical or Aerospace Engineer, GS-9 to 11, Code 400511 — This position, located in the Missile Coordination Group, is that of a project engineer for the Shrike air-frame and launcher system. The incumbent nitiate and coordinate work perform ed by other station organizations and Shrike Missile contractors. He will have project responsibility for the design, development and testing of present and future configurations of the Shrike missile launcher system.

File applications for above with June Chipp, Bldg. 34, Rm. 26, Phone 72676.

Electronic Engineer, GS-9, 11, or 12, PAR No. 301-279 — The incumbent will func-tion as a Missile Weapon System Analyst in the Weapon Systems Analysis Branch. Specifically the duties are: (1) Planning of overall project activity (2) Analysis of math overall project activity (2) Analysis of main models of specific weapon system compon-ents (3) Analog and Digital Computer pro-gramming and implementation of m at h models and (4) Consulting and reporting to program managers of NOTS and NAVORD-SYSCOM. Knowledge in the following areas is required: Laplace and transformers, au-tomatic control extem theory and dipital tomatic control system theory, and digital and analog computer systems and their as-sociated programming techniques.



'DESERT PHILOSOPHER'-**Choose** Your Hobby



There is a club on this Base for almost every kind of hobby you can think of. Everyone should have a hobby - preferably a nature hobby — to relieve tension.

Rockhounding or collecting mineral specimens and gem stones would seem to be near the top of the preferential list. It's a good hobby. It takes you out in the boondocks - close to nature, looking for rocks.

And you have the fun of cutting and polishing gem stones in the lapidary shop on the Base. They have a motion picture showing the procedure of every stage. And other rockhounds will make helpful suggestions. They are very cooperative, and there are plenty of gem stones in "them thar" hills and on this surrounding desert.

Of course, if you collect big rocks - eventually your house is so full of rocks, you have to live in the garage. That's the negative of collecting.

When you cut and polish stones, you are creating a thing of beauty - a work of art - that doesn't fade, nor wear out, nor get mildewed, nor moth eaten - they make treasured presents - whether a ring setting or pendant cabochon or bookends or just a polished rock.

And psychiatrists tell us that using your hands has a therapeutic effect on the nervous system. The human race has used its hands for so many eons of time that using hands for accuracy has a normalizing effect.

Contact: Indian Wells Gem and Mineral Society. Henry C. Wittenmyer is president. Meets 4th Monday at 7:30 p.m. on Rowe Street. Residence Phone 75724-Office Phone 71324. Mail Box 5081 China Lake. Lapidary Shop open 6:30 to 9:30 p.m. Monday through Friday. Not open Saturday or Sunday.

PHOTOGRAPHIC SOCIETY

Photography is a good hobby. The China Lake Photograph-Society meets on the 1st and 3rd Wednesday. 7:30 p.m. at 361 McIntire. Contact C. H. Wilson, 208-B Ellis, Phone 76613-Box 5393, China Lake.

DESERT ART LEAGUE

Meets 4th Monday - Community Center, 7:30 p.m. or at Studio, 411A-B McIntire. Contact Lorraine McClung, 511-A Lexington - 724071.

CHINA LAKE BOWMEN

Expertness with bow and arrow, besides being an intriguing sport might serve you for survival some day.

Meets 1st Thursday. Outdoor Range, Bldg. 00922, CLPL Road. Indoor Range, Bldg. 00891, SNORT Road. Contact: Bob Stedman, 1803-A Withington. Mail: Secretary Madge Bryant, 1806-B Withington, Phone 375-4161.

GUNS AND AMMUNITION

Sierra Desert Gun Club - Meets 2nd and 3rd Monday, 7:30 p.m. Seabee Bldg. - Nimitz and Lauritsen. Contact: H. B. Mathes, 36-B Vieweg Circle, 375-2013. Mail Box 5276 China Lake.

Sandblasters Motorcycle Club - Meets 8:00 p.m. each Thursday, Contact: Lyle D. Rickets, 205 Toro St., 375-4021. Mail Box 5709 China Lake.

More about hobbies in next column. There are many more. Join the Maturango Museum and be an explorer and collector for the Museum of antiques and curios.

The book "Desert Ramblings" is expected to be off the press, at Maturango Museum, Saturday, December 3. It's not sure yet - but we are making every effort. Hope to see you there.



of the U. S. Naval Ordnance Test Station China Lake, California

Capt. John I. Hardy, USN Station Commande

"J." Bibby Public Affairs Officer Joan Raber News Bureau

Frederick L. Richards Editor

Staff Writers

David L. Kimsey John R. McCabe Staff Photographers Williams, PH1 David W. Hobbs

PH1 Gary D. Bird, PH3 Bryce T. Cacek, PH3 Jerry Willey, SA Michael R. Reida, and PH2 Ralph Robey (Pasadena). DEADLINES: News Stories.....Tuesday, 4:30 p.m. Photographs.....Tuesday, 11:30 a.m.

The Rocketeer receives Armed Forces Press Service material. All are official U.S. Navy photos unless otherwise identified. Printed weekly with appropriated funds in compliance with NavExos P.35, revised July



Christian Science (Chapel Annex)— Morning Service—10 a.m. Sunday School—10 a.m.

Protestant-(All Faith Chapel)-Morning Worship-8:15 and 11 a.m. Sunday School-9:30 a.m., Chapel An-nexes 1, 2, 3, 4 (Dorms 5, 6, 7, 8) lo-

Roman Catholic (All Faith Chapel)-

Holy Mass—7, 9:30 a.m., and 12:30 p.m. Sunday. Daily Mass-11:30 a.m. in Blessed Sacra-

ment Chape Confessions-7 to 8:00 p.m. Saturday.

NOTS Jewish Services (East Wing All Faith Chapel)-8 p.m. every first and third

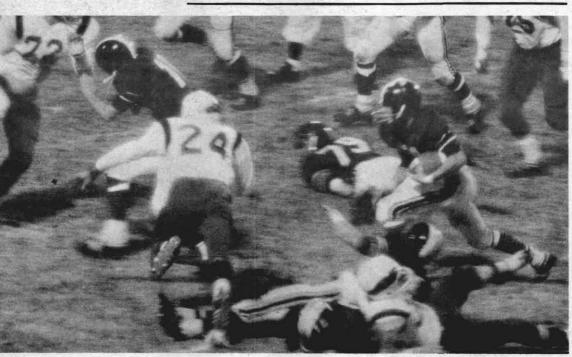
Sabbath School—10 a.m. to noon, every first and third Saturday.

Unitarian Fellowship - (Chapel Annex, 95 King Ave.) Sunday, 7:30 p.m.

zone.

Byrd received the handoff from Bessee and bulled, belted and clawed his way to pay dirt, completing his 51-yard offense for Burros. The extra point kick failed, but Burros led 6-0. Neither Palmdale or Burros were able to get a lasting offense going as the ball changed hands several times before the Birds punted to Goforth.

Goforth took in the Falcon punt on his own 34 and then scampered down the side line behind a screen of Burros blockers for a sizzling 65-yard return before being dragged down. Jim went on to score from the one-yard line on the next play. Gary Jack converted with his educated foot giving Burros a 13-0 advantage as the



ROCKETEER

Page Seven

Burroughs Slaughters Palmdale Squad 20-0

BY MIKE TAYLOR

The Burroughs High School Burros, under the direction of head coach, Bruce Bernhardi, flew over the Falcons of Palmdale High School at the Burroughs High Field last Friday night in a shut-out victory, 20-0. The Burros will meet San Gorgonio High School tonight at the University of Redlands Stadium in Redlands for their first game of the CIF playoffs.

BHS Rambles for 13

Palmdale tried an on side kick as the final game of the 1966 regular season got under way. The Burros took control of the pigskin on their own 49-yard line. Jim Goforth, BHS halfback, took the handoff from Gary Bessee for five yards to start the Burros rolling toward the end zone and the first six points of the game.

Bessee gave the ball to his fullback, Bill Byrd, on the second play from scrimmage. Bill rambled through the center of the Falcon line for seven yards giving the Burros a first down on the Bird 39-yard line.

The Burros made two more forth scampered ten yards for the second first down as he swept the right end. Stan Spurgeon drove six yards for Burros' third first down as the BHS Bandits clicked off gainers on their march to the end

Goes 65 Yards

first quarter came to a close. Neither team was able to maintain control of the ball for more than six consecutive downs in the remainder of the half. The Burros took their 13point lead to the locker room as the half ended.

The third quarter was much like the second as neither Burroughs or Palmdale were able to control the pigskin long enough for a score.

Final Blow

The final blow came with a minute and twenty seconds left in the fourth stanza when the Burros took possession on their 40-yard line. Bessee handed off to his charging fullback, Byrd, who blasted through the center of the Falcon line breaking away to outrun the Bird defenders in his 60-yard ramble to pay dirt. Gary Jack booted the extra point and the Burros went on to win a 20-0 victory and a chance to advance to the CIF playoffs.

Volleyball Team Will Open Season first downs on the 12th play-51-yard drive to pay dirt. Go- With Long Beach

The NOTS Rocketeer volleyball team continued intensive workouts at the Station gym this week. Coach Gabe Imer's club, which opens the season in Long Beach at the Terminal Island Invitational Tournament, December 10, expects to be strong competitors in area volleyball play in their first year of varsity play.

There are currently 12 candidates working out with the team, with several more players expected to join the club shortly. The Rocketeers will compete in several Southern California tournaments, and against member teams of the Mojave Desert Interservice League

The climax of the season will come February 18, when China Lake will host the Class A China Lake Invitational Tournament.

Interested volleyball players are invited to attend the practice sessions, conducted at 5 be at 7 p.m. with Code 45 facday at the gym.

The Indian Wells Valley Youth Football League held their annual Turkey Bowl Saturday night, November 19, and it was deemed a success by both the fans and coaches.

The first game of the evening was between the Chargers, headed by Don Scofield and the Raiders, managed by Tom Mathers. At half time the Raiders were leading 7-0.

It became obvious that coach Mathers had done his job well for the Raiders came back in the second half even stronger to whip the Chargers 19-0.

During the game, Sandy Smith, son of Sandy T. Smith of Ridgecrest, was in on so many tackles and plays that he was voted the best player of the game and received a trophy for his efforts from Ridgecrest Mayor Ken Smith.

The second hard - hitting game of the night was between Ted Freund's Bears and the Rams, co - coached by Bob Leighton and Dennis Garrett. On the first play of the game, David Williams, son of J. D. Williams of Ridgecrest, took the kick-off and ran it 91 yards for the first score. He went on to play an outstanding game and was voted the best player in the major league for this vear

Von's Market of China Lake, and K & R. Champs, and Victory Markets of Ridgecrest each donated a tom turkey to the event which were given away throughout the course of the evening.

Basketball Opens

The 1966-67 China Lake Intramural Basketball League gets underway Tuesday, November 29, at the Station Gym. Five clubs, representing Genge Industries, Code 45, NOTS, VX-5 and NAF have entered the league at this time, and should provide lots of action for local basketball fans. The strong NAF team, whose football Chargers dominate the local sports scene in recent weeks, will attempt to continue their mastery in the

opener against the formidable Genge Industries ball club. Tipoff for the first game will p.m., Monday through Wednes- ing Bobby Sidney's NOTS Desert Rats at 8:30.

BLOCKING ASSIST -Jim Goforth (with the ball) picks up his blockers as they spring him loose for a 65-yard punt return late in the first quarter. The Burros tallied 20 points in last Friday's contest as they

beat the Falcons of Palmdale High School. They will play San Gorgonio High school tonight at the University of Redlands in the first game of the CIF playoffs. -Photo by Mike Taylor



RECEIVES TROPHY — Sandy Smith, who was voted best player in the first game of the Turkey Bowl, is presented a trophy by Ridgecrest Mayor, Ken Smith.



OUTSTANDING PLAYER — Young Sandy Smith shows the skill and know-how that resulted in his being voted the best player in the Turkey Bowl game between the Raiders and the Chargers, held last Saturday.

USS Moore Takes Football Match In 16-14 Victory Over China Lake

BY ED RANCK

The USS Moore Rams end-Football crown Tuesday, with a 16-14 upset victory over the back, scoring on a brilliantly Rocketeers at the Long Beach Naval Station.

In one of the finest games of the tournament, the Rocketeers, who outgained their opponents by a wide margin, were twice stopped deep in enemy territory in the waning minutes of the game in a vain effort to pull victory out of the fire.

The Rams opened the scoring when they took the kickoff and marched 55 yards in five plays. The Rocketeers tied sending China Lake into the final threat.

lead for the first time 14-8. **Bob Kornegay carried three** yards for the conversion, howed China Lake's quest for the ever the play was called back Eleventh Naval District Flag on an illegal procedure penalty. The Rams came roaring executed 60 yard pass-run cn their first play from scrimmage. The conversion was good, and the game entered the final period with the Moore clinging to a slim 16-14 lead.

Led by the passing of Mike Mowrey who hit on 8 of 17 passes for 110 yards, and Brown who gained 106 yards in 12 carries, the Rocketeers kept the pressure on the Moore throughout the final period.

The Rocketeers mounted their final drive in the last two the score late in the second pe- minutes after a Mike Barnes' riod as Larry Brown swept interception on the China left end on a brilliant 35 yard Lake 15. With fourth down and run. Starting from midfield, six from their own 32, "T" Colthe Rocketeers opened the lins made a leaping catch of scoring in the third period by a Mowrey pass at the Ram 24 moving 48 yards in six plays, to keep the drive alive, howevwith Brown tossing to Bobby er time ran out a few seconds Sidney for the last six yards later, ending the Rocketeers

Best Players Are Named By Youth Football League