Area R Liquid Propellant Rockets Designed, Tested at NOTS

Liquid-propellant motors power our biggest, highestflying rockets-REDSTONE, VIKING, AEROBEE. Popular magazines announce that at least the first two stages of a three-stage intercontinental ballistic missile planned

The engineer gets help directly

from two other directions in Area

R. The machinists, welders, and

electricians in the experimental ord-

and testing of motors, handling the

propellants, and keeping under con-

trol the multitudinous details of

running the bays, storage docks,

and instruments and various pieces

Final Test

When a rocket motor has been

lesigned, set down in experimental

sketches, made in the shop and

tested and refined in the static-fir-,

ing bays, it becomes part of the

weapon system, to be looked at and

tested by many groups on the Sta-

tion, the ballisticians, the damage-

evaluation people, the production

ngineers, etc. Then in the rocket

t is flight tested at the major Sta-

tion ground ranges, and is meas-

ured against the standards that will

make or break it as a military wea-

oon for standard service use

¥...

Liquid Propellant Test Vehicle

of handling equipment.

by our country will be liquid propellant motors. VANGUARD, the rocket that we swered by scientists working under hope will be the first man-made contract or by government agencies This is the slogan of the Staobject to leave Earth and move that specialize in certain of these through space, employs as its first problems, but most of the probtwo stages liquid propellant motors. | lems are solved by the Division's | ty Salon as set down by its These wonders, as we leisurely rechemists and chemical engineers view the world in print, seem dis-

Page Six

But we need not go afield to find scientists and engineers who study liquid-propellant rocket motors. They are here, and they may be your neighbors.

They are identified as the Liquid-Propellant Propulsion Division of the Rocket Development Department, and they work out of a sand colored office building about a mile from Michelson Laboratory, just off the road that fronts the Lab and runs out to the ranges.

Static Testing

Further down the road, at Area R, where the road branches to the various ground ranges, are the Division's static-testing bays, laboratories, storage buildings and machine shop. Here the immediate business of making and testing experimental ordnance goes on, and here chemists and chemical engineers study liquid propellants in the laboratory and in special "'rockets without wings" - devices that duplicate the inside design and operation of liquid-propellant rocket motors.

A simplified picture (see cut) of a typical liquid-propellant rocket helps to show what the work in Area R is like. Warhead and airframe are left to the explosives experts and aerodynamicists to design and test. Disregarding guidance, the rest of the rocket is the propulsion unit: (1) a pump to force propellants out of tanks through (2) the injector, a sieve that breaks the propellants into droplets or vaporizes them and shoots them into (3) a combustion chamber where they burn, forming hot, rapidly-moving gases, which flow out through (4) a nozzle, imparting thrust to the rock-

Gases Pushes Warhead

The amount of propellant that burns during an interval of time and how fast the gases formed by the burning propellants flow through the nozzle largely determine how fast the motor can push a warhead. Measure, therefore, the flow rate of the propellants through the injector and the pressure in the combustion chamber and you have a fair picture of the performance of a liquid-propellant rocket motor.

The engineer does not need a final design or a whole rocket to measure flow rate and combustion-chamber pressure. For one, he can brace the rocket motor against a concrete wall, put instruments on the motor, and then fire it. The motor, pushing on the wall, burns in place much as it would in flight. The procedure is called "static firing"; the co crete wall, a "static-firing bay."

Better still, at first, before he knows just what he wants the rocket motor to be like in detail, the engineer can merely run propellants from special tanks in the static-firing bay through pipes to an experimental assembly of injector, combustion chamber, and nozzle. He can then brace this chamber with a jack, attach instruments (pressure gages and flow-meters) and the propellant feed lines to it, and burn propellants in it as in a complete motor.

Two Propellants

There are usually two propellants: a fuel and an oxidizer. Commonly used oxidizers for rockets are liquid oxygen, concentrated nitric acid, and hydrogen peroxide. These materials, rich in oxygen, are unstable in contact with organic matter: fuels such as gasoline, ethyl alcohol and analine. A good combination of oxidizer and fuel for rockets burns rapidly and produces large quantities of gas.

Before ozidizers can be used this date Lieutenant (jg) Thomas shades including pink, blue, etc. successfully in a modern rocket, J. Hudner became the Navy's first | Besides the many responsibilities much must be learned about them, Congressional Medal of Honor win- of the profession, the social element and a host of questions pertaining ner in the Korean War, when he of such an establishment is genermust be answered.

Some of these questions are an- | a Negro, who was shot down.



"Keep the young ladies young, and the older ones thinking they're young!" tion's Navy Exchange Beaucompetent manager, Camilla Morris.

This energetic young woman exemplifies her motto for remaining vouthful in practice as well as in nance shop make to order his new heory. motor designs. They make the spe-

In addition to serving her cliencial static firing equipment, fit and tele, managing the salon, supervisservice the instruments, and repair ing three operators, and maintainwhat sometimes blows up. The ordnance crew works the static-firing ing her home, Camilla has her husband Art, an employee in Propelbays, doing the actual setting up

Camilla Morris

lants and Explosives Department, three children, and one grandchild. This full schedule restricts her from participating in such favorite sports as horseback riding, tennis, and basketball, however, she does manage to ride one of the family's two Camilla was first employed at the Station salon as an operator in June, 1948. Three years later, the managership position had to be filled and Camilla was selected because of her 15 years of manageroperator experience in the field.

Although the present beauty shop ocation was first occupied in the spring of 1945, today's modern esablishment was not always this way. When Camilla was first employed, the staff consisted of six operators, with only three shampoo booths, three odd-colored barber chairs and other haphazard equipment and furniture. The shortage LOADING-Ordnancemen load the easy-to-handle SIDEWINDER on to of adequate working equipment re sulted in embarrassing situations for both the staff and the clientele Probably those who had played the old parlor game of "musical chairs' fared pretty well! However, the chance element was eliminated when the salon was redecorated and quipped in December, 1950.

Camilla's talent for beauty culture was manifested at an early age. When she was a little girl, Camilla's mother would frequentl let her long hair down over the back of a chair and the future beauty culturist would wet her mother's hair and shape it into fingerwaves. After her teachers found out about her ability, they would frequently find some pretext to keep her after school, and these sessions invariably resulted in a "hair-do" for teacher.

When the time came for Camilla o choose a career, the matter was imple. The training course necessary to obtain a beautician's license merely allowed her to be paid for a phase of work she'd been doing gratis for years.

After all these years of catering to milady's beauty problems, Camilla still contends her job to be the most rewarding of any she might have chosen. Her favorite operation s hair tinting-one of the most highly specialized in the business. she makes an effort to attend the annual State conventions to keep up with modern equipment and procedures. The latest innovation is a

uratively.

Marine Development Group

April 12, 1957



CHECKING OUT-Four electronic specialists of the Marine Developnent Group, located in Room 219 in the Lab, check test equipment with the aid of an oscilloscope which indicates visually the changes in a varying current. Pictured (l. to r.) are: M/Sgt. Donald C. Albright, S/Sgt. Thomas Moscoe, T/Sgt. Chester L. Cannon, and M/Sgt. Stanley J. Lis. The Group has played a prominent role in the development of the SIDE-WINDER-launcher test set, and they also check, maintain and repair the electronic parts of the missile system.



missile carrier that was designed by the Group and can also be adapted to carry SPARROW, another Navy air-to-air missile. Shown (l. to r.) are: M/Sgt. Carl S. Jolly, M/Sgt. Mike Wicczerzak ,and S/Sgt. Dornis Whitwam. The men also familiarize visiting Marine Air Wing personnel with the fundamental operations and latest developments in the SIDE-WINDER program.



April 13, 1957-Six years ago on brand of hair dye which offers 36 SIDEWINDER PILOT-Marine Corps project pilot Capt. Robert Howard, who heads the Marine Development Group, gets set to take off on a SIDEWINDER firing test in a North American FJ-4 "Fury." Captain Howard arrived from Japan in January to replace Capt. T. E. Murto their properties and performance landed his plane in an attempt to ally recognized. Women "let their phree, who formed the Group in September of 1954. The Marine Developrescue a fellow pilot, Jesse Brown, hair down" literally as well as fig- ment Group is under the administrative cognizance of the Marine Barracks Department.



Vol. XIII, No. 15



ies of rally events.

quartet.

Tickets were drawn by persons out have failed. attending the rally for a chance to Following the program, the Quarperform a legal misdemeanor. Win- | ter Midget Racing Association parner of this event was 11-year-old ticipants formed a parade and tour-William Knoblauch. He was allow- ed the Station. The midget cars

The last meeting of the NOTS Ski Club will be held on Tuesday, area. Eight midget cars participat-April 16, at 8 p.m. in the main room | ed in the parade with drivers rangof the Community Center. The meeting will include an informal sport dance to popular records after the business meeting. This will constitute the last organized get-together until the annual Ski Club banquet to be held in May. This 'weekend, the Club | January 8 of this year, and permisis holding its annual slalom meet- sion was recently granted by the ing at the Mammoth Mountain Station Command to build a race ski resort. Ski Club officers for the 1956-57 old contractor's area. The club's season are: Ed Swann, president; primary objective is to stimulate John Chatfield, 1st vice-president; Frank Bailey, 2nd vice-president; in an organization interested in P. T. McCarmick, treasurer, and teaching good driving practice and Anne Woolfenden, secretary. sportsmanship. Membership is open

to China Lake, the NOTS Civic Concert Association recently announced its schedule for the 1957-58 season-a schedule that will include such noted performers as Blanche Thebom, Leonard Pennario and Jussi Bjoerling.

This year's concert series ended performers of the Metropolitan Op-Monday night with a concert by era; combining artistic excellence coloratura Adela Gebr. Miss Gebr with dramatic intensity. She is overcame an unsure debut on Mo- scheduled to appear on October 8. zart's "Allelujah," and although her It will be a return appearance at tone seemed slightly fragile and NOTS for Leonard Pennario, a dyher technique somewhat mechaninamic young pianist who has gained cal in the first half of the program, greatest prestige through his recordings. Mr. Pennario will appear she did return with a much more lyric and confident second half, on December 3. with a program that was less de-The Paganini Quartet is schedmanding and yet more entertaining uled for January 7, 1958, and the

for the Station audience.

son ended happily.



U.S. Naval Ordnance Test Station, China Lake, Calif.

April 12, 1957

a second parade through the housing area at 10:30 ed Quarter Midget Racing Association.

MIDGET SPEEDSTERS-These youngsters will lead a.m. tomorrow. They are members of the newly-form

Clean-Up Campaign Projects Underway Midget Racers Lead Parade Tomorrow

were appropriately decorated with

placards-publicizing the campaign

The quarter-midget racers met at

Bennington Plaza to start the 12-

mile parade through the housing

ing from four to ten years old. The

posters and several pulled miniature

trailers with riders or animated

Newly Organized

The new club incorporated on

track on the SNORT road in the

father-son or family participation

objectives.

clean-up figures.

Clean-Up Week officially opened ed to turn on a false fire alarm last Saturday when Station resi- which sped firefighters, equipment dents braved sand-laden winds at and an ambulance to the scene in Bennington Plaza to witness a sera matter of seconds,

Highlights of the program were ed to instruct the group on the students in Burroughs High School importance of the proper usage of music classes, led by George Car- fire alarm boxes, mainly-fire son, providing the music, and the alarms should be turned on im-"Dusty Four," local barbershop mediately on discovery of a fire.

NOTS Ski Club Holds Last Meeting



William Knoblauch

Legal Culprit

interested persons and car racers were decorated with clean-up ownership is not a requisite to membership.

Because of the interest shown in last Saturday's parade, the club has and follow the same route.

and Danny Krausman, 4 years old. Schuyler and Mrs. Sylvia Winslow. 'nical Information Department.

NOTS-Developed Ordnance Demonstrated at Weapons Meet

I Centro

A significant portion of the week air-to-ground flight program con- Demon gave this two-plane section ducted for visiting dignitaries in a fire power total potential of 180 iques perfected at this Station an F3H. were demonstrated.

F9F-8 Grumman "Cougars" made

Art Festival On Tomorrow

More than 400 entries will be on exhibit Saturday and Sunday after-County Art Festival.

day, and they will be judged Sat- and launcher of 2.75 rockets. urday morning with ribbons denoting first, second, third place particular field.

Judges for the etwit will be D. tro. N. Phillips, Arlene Woodburn, Wil- Flying a NOTS F9F-8 "Cougar," verne Ryan, Adeline Pratt, and Jim LCdr. John Eakin made pair-drops Stidham of Bakersfield, and Jan of the Mk 81 low-drag bombs Freear of Kernville. Donald Fay demonstrating the versatility and will be in charge of arranging the accuracy of the Mk 10 Bomb Didisplay of art contest entries. In rector System developed ,by Diviaddition to the paintings, there will sion 1, Aviation Ordnance Departbe an exhibit of ceramics.

A grand sweepstakes winner will The demonstrations were made be chosen from among all entries from 20,000 feet slant range with a peen invited to hold a repeat parade and it, along with all other first 40 degree dive angle. The Bomb Diomorrow, April 13. The club plans place winners, will be sent to Bak- rector display in the hangar was Festival finals to be held May 4-12 H. Keith of Division 1, headed by Drivers in last week's parade at the Cunningham Memorial Art J. C. Keyes of AOD. were: Bobby Hoagland Jr., 5; Becky Gallery. Local residents that have Manning the SIDEWINDER and Cook, 8; Terry Cook, 7; Gene Hart, been selected as judges for this other NOTS exhibits were Francis 10; Frank Bachinski, 8; Steve competition are: Dr. George Leit- C. Wentink of the Experimental Schrieber, 8; Julian Almarcz Jr., 8; | mann, Dr. Pierre St. Amand, Philip | Office and Ray A. Sinnott of Tech-

The second annual Weapons, firing runs in which each aircraft Meet was held last week at the Na- launched 28 "Mighty Mouse" rockal Auxiliary Air Station, El Cen- ets from four Aero 6A launchers. ro. Hosting this all Navy air-to-air These were followed by a section and air-to-ground competition of F3H McDonnell "Demons" firing vas the Fleet Air Gunnery Unit of the new Aero 7D combination ship per-launcher packages. Four Aero 7D and two Aero 6A ,packages ong series of events was a daily loaded under the wings of each which in-service ordnance items de- rockets, the first time the 19eloped at NOTS and delivery tech- round Aero 7D has ben fired from

This impressive pass was follow-Among the Fleet weapons utiliz- | ed by an even more impressive exed were the current multiple ample of a close air support wealaunching of the 2.75 FFAR. Two pon in a firing run by a Douglas AD-5 "Skyraider" slamming 194 rockets from eight Aero 7D and six Aero 6A launchers into the ground target. To date, no Navy or Air Force aircraft has bettered this record of rockets fired in a single firing run.

The Aero 6A launcher has been in general service use for the last three years. The Aero 7D has reoons at the Burroughs Cafetor- cently moved from the research ium in the ninth annual Kern and development stage into production and is being procured in These works of local artists may quantities for both the Navy and be viewed from 1 to 5 p.m. each Air Force as a combination shipped Locally Developed

These launchers were developed and honorable mention placed on under the cognizance of Orson L. the entries judged best in their Mitchell and Steven M. Little, Weapons Application Branch, In Ser-There will be 250 elementary vice Weapon Support Division of school entries (100 more than last the Engineering Department, John year) 40 high school, 60 adult com- Chatfield and Rod Lubben of China petitive entries, and 50 adult non- ake were in charge of the rocket ompetitive (professional) entries demonstration at NAAS, EL Con-

ment.

to start the parade at 10:30 a.m. ersfield for the Kern County Art manned by R. L. Forrester and M.

Community Church Choir To Present 'Good Friday' Proaram

resent a liturgical pa Station Chapel.

sion of Our Lord Jesus Christ, Ac- crowds at Jesus' trial and the Ro- S. Bach. cording to St. John," by Heinrich man soldiers at the crucifixion. Services are open to the public,

in Christian church music written rection of George A. Carson, will Mrs. John Reid will read the bib- between the "cathedral sound" of Friday, April 18, at 8 p.m. in the the choral exclamations of the more liberal settings of the paschoir as it successively assumes the sion of the late 17th century com-The work is entitled "The Pas- role of the church authorities, the posers generally associated with J.

NOTS Community Church Choir

1957-58 Concert Series Has Thebom, Bjoerling, Pennario Continuing to bring the best in concert entertainment

Robert Joffrey Ballet for February Rossini's "Una Voce Poca Fa" 4. The series should end up in fine was easily her best number of the fashion on May 1, when the great evening, while "Voices of Spring" Jussi Bjoerling appears. Regarded by Strauss, and Gershwin's "Sum- as the world's outstanding lyric mertime" were also delivered quite tenor, Bjoerling is the only star of adequately. Although not quite on the Met who sings also for La Scala, a par with the artists who have the Royal Opera of Stockholm, and preceded her to the concert stage San Carlos in Naples.

this season, she seemed to evoke The spring ticket sales campaign as much applause. Thus, the sea- opens on May 6 at the same prices as this year's series. Advance reser Next season's concert series prom- vations may be made by mail: ises much. Mezzo-Soprano Blanche NOTS Civic Concert Association, Thebom is one of the most popular P.O. Box 129, China Lake.

The 24-voice choir of the NOTS Shutz, leading German composer. This passion is from that period Community Church, under the di- of the 17th century. ssion on Good lical text which is heard between carlier Italian composers and the



Published every Friday at the

UNITED STATES NAVAL ORDNANCE TEST STATION CAPTAIN F. L. ASHWORTH, UNITED STATES NAVY

Commander he Rocketeer, an authorized Navy publication is printed weekly by Hubbard Printing, Ridge two lectures today on the Internarest, Calif., with appropriated funds and in compliance with NAVEXOS P-35, Rev. November, tional Geophysical Year. The event Propellants and Explosives Depart- lishments are guite busy. And it is 1945. The Rocketeer receives Armed Forces Press Service material which may not be reprinted is sponsored by the American So- ment; recently gave a talk at White not difficult to prove that a great without AFPS permission. All photographs are official U.S. Navy photos, unless otherwise ciety of Civil Engineers, desert rescified. Deadlines: News staries, Tuesday, 4:30 p.m.; chotographs, Tuesday, 11:30 a.m. BUDD GOTT W. E. JACKMAN PHILLYS WAIR Asst. Editor Staff Writer

Nova Semeyn, Annex Correspondent (foothill, phone Ext. 35). Art by Illustration Group, NOTS engineers. Tonight's open Board of Civil Service Examiners look as though something is being Technical Information Department. Photography by Rocketeer Photo Staff-T. E. Long, PH2; Ken Antholt, PH2. Photographers for the Pasadena columns are-Shav Monsen, A. E. Block, the Community Center at 7 p.m. and Jeanne Smith Office Building 35, Top Deck - Telephone 71354, 72082, 71655

Superintendent's Notes

By DR. EARL MURRAY, Superintendent of China Lake Schools

Americans should not be too concerned over recent re- mology, and gravity for the Inter- editorial that one of Uncle Sam's ports that the Russians are far ahead of us in training scien- national Geophysical Year. tists and engineers, Dr. Lee A. DuBridge, president of California Institute of Technology, said in an address entitled "Scientists and Engineers: Quantity plus Quality." More College Preparation

IWV United Fund Drive Annual Report

1957, annual report, total cash contributions were \$22,-

Our objectives and programs should be geared to what we need, not to what the Soviets are reported to be doing, he said. The USSR may simply be catching up for more devote more student time to prepthan a century of technological ne- aration for college, Herold C Hunt, glect and backwardness.

Dr. DuBridge suggested that America needs more engineers but "let us do what we can at our task without getting hysterical about their numbers." He pointed out that modern demands are infinitely various and unpredictable, calling for a multitude of specialties and specialists. Universities should not try to turn out such a bewildering variety of specially trained people.

Courses in colleges should provide a broad base from which the student can proceed in any one of many directions. A broad curriculum of studies in basic principles of science is called for, he believes, liberal arts," he said. "More such along with adequate experience in training in the final years of high nontechnical fields such as the hu- school would spur students to go on manities and social sciences.

explore new fields and to alter one's so many of them fail-possibly becourse in the light of newly discov- cause of inadequate preparation in ered interests and talents," he said. the high school."

ors, summed up last year's UF ef- selves.

fort and R. C. O'Reilly, China Lake

that whereas certain changes af-

Commander K. C. Wallace, a

member of the board of directors.

stated that the United Fund board

would give further study to the new

directive affecting this year's cam-

paign could be readily surmounted.

according to Cdr. Wallace, and a

plan will be submitted proving sat-

mand and the community at large.

Captain F. L. Ashworth, Station

Commander, expressed his readi-

ness to examine such a plan, or

Fund submits it for approval.

proposal, as soon as the United

Amy Griffin, secretary of th

1956 United Fund board, proposed

that member agencies of the 1957

United Fund campaign make an

appears below.

nity.

for approval.

The time has come for high schools to shift their emphasis to undersecretary of health, education and welfare, said last April. In recent years, he maintained, we have been short-changing the collegebound high school student and overemphasizing education for the stu-

Needed in High Schools

dent who is quitting school to go to work. He pointed out that 48.7 percent of high school graduates in 1955 Suga? went on to some kind of college work. "We want to encourage all who are qualified to go on to do so,"

he said. Future graduates "will have to find their way in a complicated society and will need more of the broader training associated with the to college and enable them to do "There must be opportunities to better in their first year or so when

Officers and community members of the Indian Wells and posters; Helen Deis, Marvin

States panels on glaciology, seis-

have to be a wise old owl

Navy Incentive Awards Program

Dump Area Open

pits located just north of the

Pilot Plant has been opened for

use by residents, according

to an announcement from the

Parents are cautioned to keen

young children from playing in

Public Works Department.

this area.

Access to the refuse disposal

THE ROCKETEER

Two Technical

Dr. Frank Press, graduate o

Columbia University and presently

The afternoon lecture is sched-

Lectures Today

ASCE Sponsors

area branch.

Herb Shuler, Ext. 72024

rora and the Anarctic.

2067, Michelson laboratory for all

needed for a Civil Service employe tution. It was further stated in the ir teaching a night-school class. Whatever truth there was in the story, Dr. Hunter feels that "the Federal Worker.'

What are some of the other stim ali that nuture this seemingly wide spread conception of the Civil Ser vant? Certainly the past has something to do with it. During several WHO-O-O. says you periods of our government's history such things as "corruption" and the spoils system" have been outstand to think of a good Benny ing, and "politics" has long been word of dubious distinction. How ever, many changes have taken place since then. The merit system for hiring Federal employees has done very well at eliminating thos who are looking for a free ride.

On the other hand, as Dr. Hunte points out, "in our economy the word 'industry' suggests 'initiative and 'competition.'" Clearly, some thing should be done to change the attitude toward Federal employees Red Tape

Here at NOTS the problem crops up when the recruiters go forth to nterest young scientists and engi reminders; Ida L. Davis, recording neers in working at this Station secretary; Virginia Moody, for Many of the college graduates fee help in evaluating the campaign that industry will offer them a betprogress; Eleanor Field, for pre- ter chance to work without "rec paring illustrative matter, signs tape" engulfing them.

Dr. Hunter goes on to say "sur Valley United Fund held their annual meeting last Friday Backman. Bill Spattord, wayne that where personal knowledge Harsh and Bill Jackman for pub-Backman. Bill Spafford, Wayne veys of popular attitude have shown about a government job or agency

> How do you go about providing formation do you provide? Obvious hat aircraft companies and other succused

Are Civil Service Workers Second Class Citizens?

associated with the California In- there are others who look upon Civil Service workers in stitute of Technology, will deliver this light.

Oak, Silver Spring, Maryland, be- portion of their work is under govfore the Fourth Annual Meeting of ernment contract the Associated Boards of U.S. Civil Now, when you start listing the uled for 1 p.m. in conference room Service Examiners. (Dr. Hunter is number of industrial concerns that a member of the Pasadena Joint are kept busy by NOTS it begins to lecture and dinner will be held in for Scientists and Engineers.)

by calling Charles Martin, Ext. and Engineering." He quoted an 72273; Frank Brady, Ext. 72958; or editorial in the San Francisco Chronicle (January 6, 1957) which Dr. Press will show slides and publicized a ruling of the Civil Servdiscuss the satellite, seismology, ice Commission that, since last Nooccanography, magnetism, the au- vember, permission is no longer He is a member of the United to hold office in a religious instihelpers still had to get permission pefore moderating a town meeting editorial and its accompanying caroon have firmly established, in the minds of Chronicle readers, the label of 'Second Class Citizen' on the

Impression Factors



Dr. Hugh W. Hunter, Head of scientific and engineering estab-

done here. The recent SIDEWIND-He discussed "Prestige Values of ER release has done much to in-Dinner reservations may be made the Federal Programs in Science form the nation that Philco wasn't alone in the development of that missile-that Philco, in fact, was an extension of NOTS in that in-

> From Ldea to Product Here, the basic ideas are coneived, the designs are made; development and test work is carried on: and finally the manufacturer is handed a package along with lenty of technical advice and assistance. And yet NOTS keeps a good slice of industry busy! The lassified sections of newspapers are always filled with demands for engineers, physicists, chemists, mathematicians, technical writers and a host of others with technical cnow-how

Sure, the pay is usually better in ndustry. But where does the money ome from? Dr. Hunter says "The neaviest competition in the salary field is offered by industries using the taxpayer's money, obtained from overnment contracts negotiated, upervised, and evaluated by gov-

Steps Needed

Dr. Hunter feels that there should e further steps taken by the govrnment in assuring that salaries re competitive with those in in ustry. He also feels that research ind development management unler the Federal system is lacking. 'f a professional man is to work for he government on salary rather han fees, Dr. Hunter says that "It ecomes important to the scientist ind engineer, therefore, that his superiors impose no restriction that vill compromise his professional inegrity, or place his professional caeer in jeopardy. As a result, he eels he must have reasonable freelom of choice and action, a sympathetic and component review of is efforts, intelligent decisions in which he has participated, and a ogical, consistent, long-range-polcy framework within which to

Greater Prestige

hat Dr. Hunter made in his talk, ind it seems clear that adherence o his proposed methods will help to ring greater prestige to the Fedral employee. The process willike integration-take time. Evenually, however, everyone will realze that the Federal government is ust another employer, but with lore restrictions than the ordinary mployer; that it must, in a sense. ean over backwards to avoid the ery things of which it is often

TEN-YEAR PIN RECIPIENTS-Twelve employees of Propellants and \$22.817.54 Explosives Department earn 10-year service pins. Recipients (l. to r.) are: Genevieve Johnson, Hans Kafer, Harold Crow, Roy A. West, Rob-2,931.30 ert Barkley, Quinten Johnson, Joseph Loach, Roland W. Reynolds, Wal-

\$25,748.84 ter F. Beck; Harold J. Stavers, Otto W. Schneider, and Alma Koch.

government establishment. He said no campaign New members elected to the the Burroughs High School board for example. Most people are award fecting agency membership status United Fund board of directors helped with the kick-off rally. were indicated, in addition to pro- are: Maxine Howell, Evie Ashburn,

collection" type of campaign this Max Braswell, James Judin, Chap- Robert A. Blaise, Ray Becker, Robyear, the new campaign would fol- lain James Hester, Capt. Charles ert D. Emerson, James Sims, Rose low the general pattern as previ- K. Phillips, and Ernest George. ously established in the commu- Individuals who contributed Roglin, and Edward Sopke. Others much of their time to the United | were K. Day, Mrs. F. O. Henderson,

Fund drive were: Dorothy Bodwell Thomas J. Reese, and Cdr. K. C. for typing and sending out pledge Wallace, member of the board.

IWV UNITED FUND DRIVE 1956-57 ANNUAL REPORT Federal directive, contact prospec- Agency Amount tive agency members for 1957, and American Cancer Society \$ 2.344.68 submit a proposal for this year's American Heart Society. 1.334.00 campaign to the Station Command | American Red Cross 3.052.00Boy Scouts 4,171.00 Technicalities within the Federal Desert Area Emergency Relief 779.00 Desert Area Family Services 2.858.00 Girl Scouts 3.019.00 Indian Wells Valley Recreation Council . 850.00 isfactory to both the Station Com- Rand Cemetery 197.00

United Service Organization	182.00
Grants to above affiliated agencies	18,792.68
Funds forwarded to "Write-in" agencies	1,610.34
Fund set aside for 1958 campaign and	-
payment of bills for 1957 drive	2,033.22

Total cash Total pledged

express effort to plan their new budget requirements to coordinate Total receipts



China Lake Repertory Group, and the problem logically? Take NOT: Area captains who contributed to

Merriam, William Norris, Roy

evening at the Community Center. As of the April 5, licity articles. Edith Huse, for helping with the exists, there is also respect. This booth at the Desert Empire Fair; suggests that our best campaign to Jim Tracy, for brochure planning improve the reputation of govern able in quarterly installments. A recap of distributions and editing; Walter Mader, for ment employment is to provide in keeping the lights burning on B formation."



visions for an optional "on the job Kate Holloway, Cdr. Sheldon May | the success of the campaign were:



April 12, 1957

April 12, 1957

nment employees."

There were many other points

nity Center.



Christian Science

Sunday School-

Morning Service Episcopul: (North e Holy Communion Sunday School-9:30 a.m Morning Prayer-11 a.m. Protestant: (Station Chapel) Richmond elementary schools Sunday Saturday. 4 to 5:30 p.m. NOIS Hebrew Temple-Halsey Street Friday, 8 p.m.

THE ROCKETEER



By Helen Michel, Recreation Director

Tomorrow night Pug Pilcher's Band will set the tempo for dancing at the Community Center starting at 9 p.m. All adults on the Station are invited to attend this social affair sponsored by Special Services.

you tomorrow night! Las Vegas Trip

was told in the poem last week, will be complete! "we'll take the oncs who get here

first with the dough!" Those who want to go must have their money in to the Special Serv ices Office, Rm. 17, Housing Bldg by Friday, April 26. Everyone is excited over this trip and the shows are terrific! Still have room for few more, so call Ext. 71791. Photography Club

The Photography Club, Black and White group, will hold their monthly meeting in the Photo Hut at 8 p.m. on April 17. They are suggest ing that you bring your prints for comments at this time.

NOTS Hawaii Tour There's still time to join that con-- genial, fun lovin' gang of guys and gals going to Hawaii in July. Only

ten days of annual leave are re quired. Go now-pay later. Cal 71791 for more information Natural Science Club The China Lake Natural Science

Club will present an illustrated lecture on "Orchids and Their Culture' at their regular meeting Monday April 15 at 8 p.m. in the Commu

Dr. William S. McEwan, who raises orchids, will give the lecture. All interested persons are invited. Easter Vacation Trips Disneyland and Marineland dis

count tickets-are available for pleasure trips you may be planning during Easter vacation. Also, this is the time of the year

to enjoy the beautiful wild flowers in this area. Following the highway



SUPERIOR PERFORMANCE -June Brown, secretary to the USAF Development Field Representative, Maj. D. R. Sheller, receives a \$200 Superior Accomplishment award for outstanding efficiency in



•	· · ·
(Chopel Annex)	÷ ,
7:30 a.m.	
-11 a.m.	• •
end of chapel ar	inex)
-7:30 a.m.	•
0.20 m m	

Morning Worship-9:45 and 11 a.m. Sunday School-9:30 a.m., Groves and

Roman Catholic: (Station Chapel) Holy Mass-7, 8:30 a.m. and 4:45 p.m.

6:30 a.m. Monday through Friday; 8:30 a.m. « Confessions-8 to 8:25, a.m., 7 to 8:30 p.m

Saturday. Thursday before First Friday

Services every second Monday and four

Prizes will be given for a waltz across Tehachapi Pass to Bakers- tin E. Taylor, James F. Wolfe. and jitterbug contest-so we hope field or Highway 138 from Lancasto have many join us in this fun. ter to Gorman should take you No admission will be charged. See through an area with spectacular G. Daugherty, Andrew A. Bills.

colors and a beautiful variety of flowers. Detailed plans have been made Either of these rides would make Janet L. Radcliff, Sally S. Standard. for a NOTS trip to Las Vegas on a fine Sunday drive for the family-

the weekend of May 10, 11, 12. As and add a picnic lunch and the day Ruth M. Landreth, Aurelia A. Ar-

NOTS ON THE AIR KRKS (1240) NOTS NEWS 10:30 a.m.-12:05 p.m.-6:30 p.n Monday through Friday *CLEAN-UP CAMPAIGN RALLY" Friday, Apr. 12-8:05 p.m. Saturday, Apr. 13-4:15 p.m. MUSICAL MEMORIES 8 p.m. Tuesday **NOTS** Personality Interview * * * * "OBJECTIVE" Sponsored by the American Chemical Society. 7:45 p.m. — Wednesdav * * * * * * KRCK (1360) NOTS NEWS 12:10 p.m. daily * * * "CLEAN-UP CAMPAIGN 'RALLY" Sunday, Apr. 14-12:15 p.m.



Kiddies' Matthee (Special Movie) 1 p.m.' Saturday

APRIL "LIZZIE" (81 Min.) Eleanor Parker, Richard Boone Drama. Tale of a girl with triple-split pe nality, as a drab museum employee, a nor- to ordnance testing. mal sweet natured person, and a brazen man-

crazy seductive. Psychiatric, but interesting SHORTS: "Muscle Beach Tom" (7 Min.) "Speed Sub Zero" (10 Min.)

APRIL 13 'REVOLT AT FORT LARAMIE" (73 Min.) John Dehner, Gregg Palmer

Mix, trouble with the Sioux with work of Confederacy, and soldiers of Wyoming fort ject engineer in the Opto-Mechanisplit into north and south loyalties. A good cal Branch, Instrument Develop-SHORTS: "Cat in the Act" (7 Min)

'Merry Mixup" (16 Min.)

MATINEE "THE BLACK DAKOTAS" (66 Min.) Gary Merrill SHORTS: "Scalp Treatment" (7 Min.) "Overland Trail" No. 9 (15 Min.)

SUN .- MON. APRIL 14-1 "NAKED PARADISE" (71 Min.)

Richard Denning, Beverly Garland Gangsters rob South Pacific plantation pa oll and charter boat of unsuspecting captain for their getaway after hurricane wrecks theirs. Philippine's trip gets pretty lively Much action and drama.

SHORTS: "Boyhood Daze" (7 Min.) "Vista Vision Visits Norway"- (17 Min.) TUES.-WED APRIL 16-1

"DEADLY MANTIS" (78 Min.) Craig Stevens, Alix Talton

Giant pre-historic mantis (ant-like insect revives in glacier and starts havoc as it preys on a large city. Strictly action and suspens science-fiction picture. SHORTS: "Pest Pupil" (7 Min.)

"Wonders of Araby" (17 Min.) APRIL THURS "GIRL IN THE KREMLIN" (84 Min.)

Lex Barker, Zsa Zsa Gabor Drama. This is the Joseph Stalin story. SHORT: "Wonders of Washington" (19 Min.)

The school from which nobody perience.

AND

New Employees:

Technical Information-Mary Howell, Nadine K. Herling. Community Affairs-Ottilla May-

Public Works-Louis Avila, Anne Rockwell, Marikay Crenshaw, Mar-

Engineering-E. Ruth Elder, John . Wells, Margaret F. Craig, John

Test-Esther R. Ickert, Marilyn M. Hoover, Kathleen R. Hedrick, Central Staff-Mary F. Smith,

riola. Supply-Virginia M. Harmon. Personnel-Billy G. Largent.

Terminations:

Public Works-Francis W. Dauterive, Allen H. Chandler, Everett O. Florez, Brunchle, G. Saholt, Le Lapin, James B. Balford.

Supply-Michael Z. Columbia. Community Affairs-Virginia

Moody. Propellants & Explosives - William F. Thorn, Lincoln S. Gifford, Jr., Jesse Burklow. Personnel-Richard G. Seret-Jar-

ecki Central Staff-Barbara L. Thomp son, Elizabeth A. Westby.

Research-Frank H. Verhoek. Aviation Ordnance - Ray E.

Vaughn. · Technical Information-John H Wilson, Jr.

Personnel Training-G. Clifford Millard.

****** Job **Opportunities**

Editorial Clerk, GS-4. This position is located in the Illustrations and Reports Branch in the Rocket Development Department. Typing is required. Applicants will be required to pass a non-competitive yping test. For further informaon, contact Joan Klaus, Ext. 1471.

Mechanical Engineer, GS-12. This sition is that of senior project engineer in the Opto-Mechanical Branch, Instrument Development Division, Test Department.

The incumbent will be responsible for the applied research, development and design of photographic, optical, mechanical and electro-mechanical instruments and instrumentation systems applicable

The incumbent may exercise technical supervision over other engineers and draftsmen. Also, he will have available the services of a well equipped experimental shop facility. Interested persons should contact Fawn Haycock, Ext. 71577. Mechanical Engineer, GS-7, 9 and the outbreak between the Union and the 11. These positions are those of pro-

ment Division, Test Department. The duties of these positions to develop and design photo-optical mechanical and electro-mechanical mentation systems applicable to ordnance testing. Interested persons should contact Fawn Haycock

Ext. 71577. Secretary (Stenography) GS-5. Ann Carter, Ext. 72218.





Development employee earns a \$200 ment Department employee Superior Accomplishment award. Ceives a 20-year service pin

CHARLES BERNARD - Rocket PAUL W. CRAIG-Rocket Develop



devices, instruments and instru- 120 YEARS OF SERVICE-Employees of the Engineering Department receive service pins representing 120 years of government service. Recipients in front row (L to r.) are: Charles J. Mussler, and Albert V. Sievert, 10 years each. Shown in middle row (l. to r.) are: William L. Raffell, Frank N. Steed, Edward E. Braham, and Eugene Bushnell, 5 Secretary to Department Head. Call years each. Shown in back row (l. to r.) are: Joseph E. Stone, Maurice S. Cliffon, Anthony DePaolo, and William H. Olson; 20 years each.



over 204 years of active Nayal service. Pictured (l. to ser; W. P. Brown, EMC; and D. G. Woods, CSC.

204 YEARS OF SERVICE-Old timers shown at the r.) are: A. E. Lane, CWO; G. E. Bartram, MMC; B. ever graduates is the school of ex- military hall held recently at the CPO Club represent E. Church, AOC; G. F. Kenney, AMC; Lt. E. V. Kos-

Page Five

Photographs

Of the Week

\$300 BENNY SUGG AWARD WINNER-Carl C. Schwind, Rocket De

velopment Department employee, is congratulated by department head,

Dr. Howard A. Wilcox, as he is presented with a \$300 check for his im-

provement of a gas generator igniter to facilitate shipment and installa-



berry.

April 12, 1957

L. H. Perry Is

Exalted Ruler

In Elks Lodge

THE ROCKETEER

Page Three

News from Pasadena Annex



L. H. Perry

On the evening of April 1, more than 300 Elks, including about twenty NOTS Pasadena employees who are members of the Lodge, witnessed ceremonies during, which L. H. Perry, construction inspector at NOTS, was seated as Exalted Ruler of Monrovia Elks Lodge No. 1427.

Perry has been a member of that lodge for ten years, six years as an officer, having held every office up the ladder. In the past eight years, he has missed only three meetings. Perry has been a NOTS employee since 1946 when he converted to Civil Service from the General Tire and Rubber Company. He is presently in the contract branch of Public Works.

Green, Saskatchewan, Canada, he has lived in the Los Angeles area since 1922. He presently resides in Sierra Madre where he has lived for 33 years.

Perry served in the United States Army during World War II. Most of the three years were spent in the Pacific Islands where he built construction camps on the various islands.

Carolyn Brown On Fall Honor Roll

Carolyn Brown, daughter of Irene Brown of the timekeeping section, who is a senior and received a 3.73 grade average has been named to the honor roll at the University of Redlands for the fall semester.

The honor is accorded to the top 100 students in grade average. Four points represents straight A grades.

Carolyn, who is on a WAE appointment, worked here last summer and again during the Christmas holidays.



Credit Union Gives Hours Of **Business**

The NOTS Pasadena Employees Federal Credit Union Board this week announced that the Credit Union will be closed during the hours of 12-3 p.m. daily, excepting alternate Fridays (per annum paydays) when business hours are 1-2:30 p.m. as well as 3-5 p.m.

The reason given for the close of business during these hours is to allow the assistant treasurer, Mary Maxham, an uninterrupted period in which to handle the volume of bookwork necessary for the efflcient operation of the Credit Union. It is hoped that this procedure will reduce the extra help that has been required in the past and still offer efficient service to members. If members have urgent business which must be conducted during the hours in which the Credit Union is closed, they may call the treasurer, Harry Humason, or the president, Bill Derby.

> Monday, Wednesday, Friday 3-5 p.m. Alternate Fridays (per annum paydays) 1-2:30 p.m. - 3-5 p.m.

Business Hours

For convenience of members who are unable to get to the Credit Union during regular business Although he is a native of Mount hours, a slot has been installed for depositing payment or share books, which should be enclosed in a sealed envelope along with instructions on amounts to be applied toward either the loan or shares.

April 20 Is Day of **NOTS Easter Party**

Mark your calendar for Saturday April 20. That's the day of the ESO sponsored Easter party to be held from 1-4 p.m. at Eaton Canyon Park (Live Oak Park).

There'll be games, prizes, egg hunts, clowns, refreshments consisting of ice cream and soda pop, and Mr. Easter Bunny himself will be on hand to give away balloons to good little girls and boys.

Nick Saines, who is in charge of arrangements for the event, reports that the children will be divided into groups; one group of children up to six years of age, another for the 6-10 year group, and another for ten and over age group. Supervisors for the groups will be Marie Bingham, Francis Donnelly, Julius | phy). Stegman, and A. E. Nowlin.

Schedule Set For Lunch-Time Shows

The lunch-period entertainment O have



NAVY LOG-The Navy Log production company is shown on location at Morris Dam where they shot an episode in "The Saga of Irving Cohen."

Morris Dam Is Replica of Rhine River In Navy Log Television Film Production

The "Navy Log" production company, Gallu Productions, recently spent two days at Morris Dam shooting a television film. Title of the episode is "The Saga of Irving Cohen."

Rhine River.

The story deals with the crossing

of the Rhine by the Allies during

World War II and in the film, Mor-

ris Dam serves as a replica of the

According to the ABC-TV Press

Information Department, the date

on which it will be seen on the air

Three divers at Morris Dam took

part in the film. They are Jose M.

Martinez, Jr., BM2, who played the

part of the coxwain of the boat;

Nunzio S. Fileccia, HM1, who was

part of the boat crew in the film;

and Harold Eynon, BM1, who played

the part of a frog man in the film.

has not yet been determined.

New Employees And Promotions

P2521. Miss Virginia Moody, clerkstenographer, GS-3.

P8026. Miss Ida L. Davis, clerk stenographer, GS-3. Promotions

P4509. Sadie G. Lieberman to editorial clerk (general) (stenogra-

P801. Barbara V. Perrine to mathematician, GS-7.

P8055. Eugene B. Osuch to launcher design engineer, GS-13. P8087. Clark E. Albin to electronic technician (general), GS-9.

P8092. William C. Shealy to production specialist, GS-9, and Rich**AOA** Members Visit Station, See Facilities

NOTS Pasadena was host two days this week to members of the Underwater Ordnance Division, American Ordnance Association including personnel from the Bureau of Ordnance and Office of the Secretary of Defense.

. The Bureau of Ordnance sponsored a meeting of the Underwater Ordnance Division. American Ordnance Association on April 10-12 at the Huntington-Sheraton Hotel in Pasadena, and arrangements were made for the group to visit the Naval Ordnance Test Station, Morris Dam; Aerojet-General Engineering Corporation, Azusa; and California Technical Institute, Pasadena, in connection with their meeting.

The group spent one and one-half hours on Wednesday afternoon at Morris Dam- and two hours on Thursday afternoon at the Foothill location.

NOTS Overseas Club Prepares for Trip To Europe Soon

The next meeting of the NOTS Overseas Club will be held on Thursday, April 18, 8 p.m., at the Odd Fellows Temple, corner Lime and Ivy Streets, Monrovia.

The group will discuss plans for their overseas trip to begin in five weeks which will take them through seven European countries.

Michael Alford representing the National Travel Service will be present to answer questions regarding the tour.

Leonard Semeyn, chairman of the Club, announces that persons interested in joining the tour are invited to attend. Although there is only one seat available, a waiting list is desired to replace last-minute cancellations, if any.

Anyone desiring further information, call Leonard Semeyn on Extension 208.

NFFE Meeting To Be Held Wednesday

The next meeting of the National Federation of Federal Employees, Local 1101; will be held Wednesday, April 17, 8 p.m., at Vasa Temple, 2031 E. Villa Street, Pasadena.

A discussion will be held on the tate convention which was held on May 3 at Hoberg's Lodge.

The evening's entertainment will be presented by Bill Galbraith of UOD's Torpedo Development Division who will show pictures taken . while in Key West, Florida. All NOTS employees and guests are invited to attend.

New Employees



Gerald F. Williams

BLUEJACKET - OF-THE- MONTH -Selected by personnel of the Long Beach Test Range as Bluejacket of-the-Month, for February is Gerald F. Williams, Fireman. This honor was bestowed upon Williams because of the initiative he has shown in his duties as engineman on a torpedo recovery boat. Gerry's home town is Phoenix, Arizona, and he received his boot training at San Diego. He plans to attend college hear his home town on completion of his enlistment.

If you never stick your neck out. you'll never get your head above the crowd.

been enthusiastically endorsed by NOTS Pasadena employees as can be seen by the attendance record at the programs. The presentations are held each Monday during the 12-12:30 p.m. lunch period in the Building 7 conference room with an attendance of approximately 100 employees.

The following programs have been scheduled for the next few weeks:

On April 15, John Sandy, P8023 will show pictures of Havana, Cuba, and Key West, Florida.

On April 22, Glenn Bowlus. P80262, will present a program entitled "How Not To See Europe." In answer to many requests, Harlan Murray will present a recall program on April 29. Mr. Murray's pictures feature the Indian country around New Mexico.

The program on May 6 will be presented by Florence Swope of Supply who will show pictures taken in Denmark, Italy, Scotland, and other parts of Europe.

Art Block of the photo lab will have the honor of presenting the final program of the season on May 13. Art will show first-hand pictures taken of the Wake Island Surrender. He will also show other slides and explain how he obtained various photographic effects.

ard L. Mardiros to engineering aid (general), GS-4.

Annex Vacancies

Physicist or Engineer, GS-13 P805, (Proposed). Incumbent will serve as head of the field branch, Missile Development Division, UOD. Responsibilities will include planning, conducting, and analyzing results of complete or partial missile test programs; designing new missile handling equipment for experimental use; and technical direction of contractors' efforts in design and manufacture of missile equipment. Incumbent must have progressive experience in analysis of ordnance test results, conduct of missile firings, scheduling of ranges, and planning of missile test programs. Knowledge must include fire control on ballistic missiles and missile handling and checkout equipment. Contact Marion Kelly, Extension 107..

Editorial Clerk, GS-4. This position is located in the Product Engineering Division, Underwater Ordnance Department. Incumbent will edit and type all documents under responsibility of the product engineering branch. Call Dorothy Seaman, Extension 103.



REWARDED-Leo J. Maguire (left) of UOD's materials and process branch is shown receiving a beneficial suggestion award of \$20. Presenting the award is J. H. Jennison (right), head of the Product Engineering Division, while Dom Veronda (center), head of UOD's Safety Committee stands by to congratulate Maguire. The award is based on an improvement in safety resulting from Maguire's suggestion to install a micro switch on the door to the X-ray machine. Federal employee suggestions and superior accomplishments under the Government Employees Incentive Awards program have saved the American taxpayers more than \$102,000,000 during a twelve month period.

Page Four

THE ROCKETEER

April 12, 1957



RIBBON-CUTTING CEREMONY-The official grand opening of the newly-decorated Enlisted Men's Club takes place as Capt. F. A. Chenault officiates. Participants in the ceremony (l. to r.) are: R. A. Smith, Lt. J. I. Huffman, LtCol. H. V. Joslin, LCdr. J. T. Waldron, and Capt. Chenault.



istic bar in the remodeled Enlisted Men's Club is the

main feature of the renovation. Shown in insert is Bob Haley, Club manager.

Many Items Are Deductible **On Your Federal Tax Return**

If you decide to itemize your income tax return, here are some deductions you should be careful not to overlook. Interest paid on loans is deductible. This includes mortgages, automobile, appliance, home improvement or per-

sonal loans you may have. The part of "carrying charges" representing interest on installment purchases is deductible. Evidence such as a statement from the seller should be obtained to show the amount of interest you paid during the

taxes, are deductible. These in- or duty may be deducted if they clude state and local real estate, personal property, income, retail fares, automobile expenses, and (if sales, poll taxes and, in all but a in connection with over-night travfew states, gasoline taxes. You can also deduct auto licenses and registration fees, but not dog or hunting licenses.

Another type of deduction you can take if you itemize is your contributions to and "religious, charitable, educational, scientific or literary" organizations.

These contributions are deductible up to 20 per cent of your income, and up to 30 per cent if at least 10 per cent of your income was paid as gifts to religious organizations, schools or hospitals.

Gfits of property also can be deducted at their fair market value as of the time they were donated. Suppose, for example, you contributed to your church a share of stock which had doubled in value while you had it.

You can deduct, as a contribution, the full value of the stock at the time of the gift, even though you only paid half that much for it. At the same time you escape paying the tax on the capital gain which would have been realized if you had sold the stock instead of contributing it.

An individual is not permitted to deduct a contribution which he has pledged but not paid during the tax year. Contributions of services are not deductible, and blood donations are construed

Most taxes, other than fedarl | curred in connection with your job were not reimbursed. These include el) meals and lodging.

The expense of commuting between home and place of work is not deductible at all.

If you had certain expenses connected with your employment (other than travel or reimbursed expenses) you can claim them as miscellaneous deductions. Examples would be uniforms and insigna.

Other miscellaneous deductions clude the fee for preparation of your tax return, some alimony and a share of interest and real estate taxes paid by a cooperative apartment corporation of which you are a tenant stockholder.

The instruction book which comes with your tax forms gives further information. Help is also available by telephone or at offices of the Internal Revenue Service. You are urged to consult a properly qualified advisor if you decide to seek outside help.

LITTLE LEAGUE FATHERS

All the fathers of Little Leaguers are requested to bring hand tools, paint brushes and green paint, if they have any left over from previous painting, to the Little League diamonds tomorrow at 8 a.m. for a general paint and clean-up campaign.

No thoroughly occupied man



Area Speaker

Mary Ward will represent the Indian Wells Valley Toastmistress Club in the area speech contest to be held in Las Vegas tomorrow. Other members of the local club who will accompany Mrs. Ward to participate in the Las Vegas event are: Beverly Ann Ross, toastmistress; Dora Laughlin, table topics chairman; Margaret Quinn, teller; and Deleta Munn, timer.

Students Receive Shorthand Awards

Gregg Shorthand Speed Certificates of 120 words per minute were awarded Jeanne Parker and Linda Westfall, students in Burroughs High School advanced shorthand courses, this week according through Mrs. Doris C. Pierson, instructor.

The certificates are made in high schools of the nation to honor students who have demonstrated the ability to take unfamiliar dictation and transcribe with 95 per cent accuracy in five-minute e inations.

Physics Class Tours Michelson Seeing practical application of

principles in physics and science they have studied recently, two Burroughs High School classes completed a two-hour field trip through Michelson Laboratory this week.

Under direction of John H. Trent instructor, and guided by H. R. Richardson and W. H. Hampton, students of the physics and general science classes visited the optics and standards laboratories, the computer section and machine shops and sections of the chemistry division.

The student group also saw the lobby display of light measuring instruments devised by the late Albert Michelson, American Nobel Prize Winner in physics, for whom the Naval Ordnance Test Station laboratory is named.

Air Conditioning Nears Completion

All air conditioning units in the housing area have now been re-activated except for the Hawthornes, Bishops, the new dormitories, and a part of the commercial area.

.Tenants are reminded to keep entrances to air conditioning units free and clear of obstructions.

This major annual program should be completed soon.

EM Club Ceremony **Reveals New Look** For Whitehats

A formal ribbon-cutting ceremony with Captain F. A. Chenault officiating marked the grand opening of the newly decorated and remodeled Enlisted Men's Club last Monday, April 8.

The renovating project includes a new bar, furniture and decorations purchased with the profits generated by the club. The Public Works Department installed the utilities, and the drapes were made by the members of the newly organized Navy Wives Club No. 125 of China Lake.

This facility is one of the Special Services projects and manned by the 3rd Division of NOTS.

Among those present at the grand opening were: Capt. F. A. Chenault, Station' Executive Officer; LtCol. H. V. Joslin, Commanding Officer of the Marine Barracks; LCdr. J. T. Waldron, Special-Services Officer; Lt. J. I. Huffman, Club Treasurer; Bob Haley, Club Manager; Ronald A. Smith and J. J. Hayden, Assistant Managers.

The Board of Advisors have recognized the fact that the problem of travel to large metropolitan areas for liberty is a complex one and they have striven to make the E. M. Club activity as informal as possible and of a type which pro-

vides the maximum in recreation. The E.M. Club sponsors bowling, basketball, football, and baseball teams in the Intramural League for the benefit 'of enlisted men's recreation.

Burroughs Student Wins Again In District Speech Contest

Speaking on his place as an educator in the world of 1976, Burroughs High School student Charles James went on this week to take regional first place in the 1957 Lions Student Speaker contest held at Lancaster. Winner previously of local and prizes of one \$1500 scholarship and zone contests, James will now com- three \$500 awards. In charge of the pete at the district run-off to be held in Los Angeles on May 3. Winner from this event will compete at the sectional meet in Catalina to determine state contestants. Stating that "Education controls the people," James went on to de-velop the contest theme of "My Place in the World of 1976" by picturing a world where he would cducate for brotherhood and the values of American democracy. "Today we spend more money building one battleship than we spend in the annual maintenance of all state universities," James pointed out, "and we spend more money preparing to kill each other than we do in teaching men to live." Describing the waste throughout history of men's wars, James concluded his speech with the optimistic assertion that by stressing a broader concept of education now and in 1976 America can realize unbounded prosperity through an educated populace since it has already **Charles James** the prerequisites of freedom of speech, assembly and education. contest held at local schools was Sponsored annually by the Lions Beverly M. Aherin, speech instruc-Clubs of California and Nevada, the tor and Maurice E. Westfall direct-Student Speaker Contest offers top ed the program for local lions.

All transportation expenses in- was miserable.



BENNY SUGG AWARDEES—Employees of Engineering Department earn Beneficial Suggestion awards. Shown (L to r.) are: Hardy C. Harris, \$30; Bernhardt Miller, \$25; Roy M. Kirk, \$10; Alvin B. Cles, \$75; and Edward H. Hammerberg, \$20. More than 25% of suggestions submitted are adopted.

