

# School Construction Plans in Final Phase

The final phase of architectural planning is now in process for the construction and rehabilitation project of school facilities in the China Lake School District.

The target date for the construction project to start has been set for September 1963.

Complete preliminary plans are now in the hands of the Command of the Naval Ordnance Test Station, the Housing and Home Finance Agency, the California State Department of Education, and the China Lake District. Final plans will result from considerations of these groups.

**Two-Phased Project**  
Two phases of construction are included in one project number under Public Law 815. The first phase included new construction at four school campuses. Desert Park will be made a complete school with the addition of nine classrooms, a multi-purpose room, cafeteria kitchen, faculty room, storage facilities, administration area, and playground equipment. A new kindergarten unit will be added to the Vieweg campus.

Richmond School will have an expansion of its administration area to include a faculty room and one new kindergarten unit will be added to the campus.

The Murray School will have the addition of a shower and locker room, an art room, and a shop for use by the seventh and eighth grade pupils.

The second phase of the contract includes the rehabilitation of the Groves School to eliminate fire and safety hazards and to expand administrative facilities. The expansion of District Central Administrative area located at Murray School is also included in this phase of the construction program.

**Problems Involved**  
Temporary adjustments of school zone assignment, teacher assignment and instructional facilities will be necessary during the 1963-64 school year until the new construction and rehabilitation is completed.

The increase in school enrollment and the loss of Groves

School for this school year during its rehabilitation will force the use of every available temporary classroom in the district.

The cooperation of the Naval Ordnance Test Station Command which made available the Rowe Street huts for school use during the 1963-64 school year, has alleviated the necessity for double session schedules.

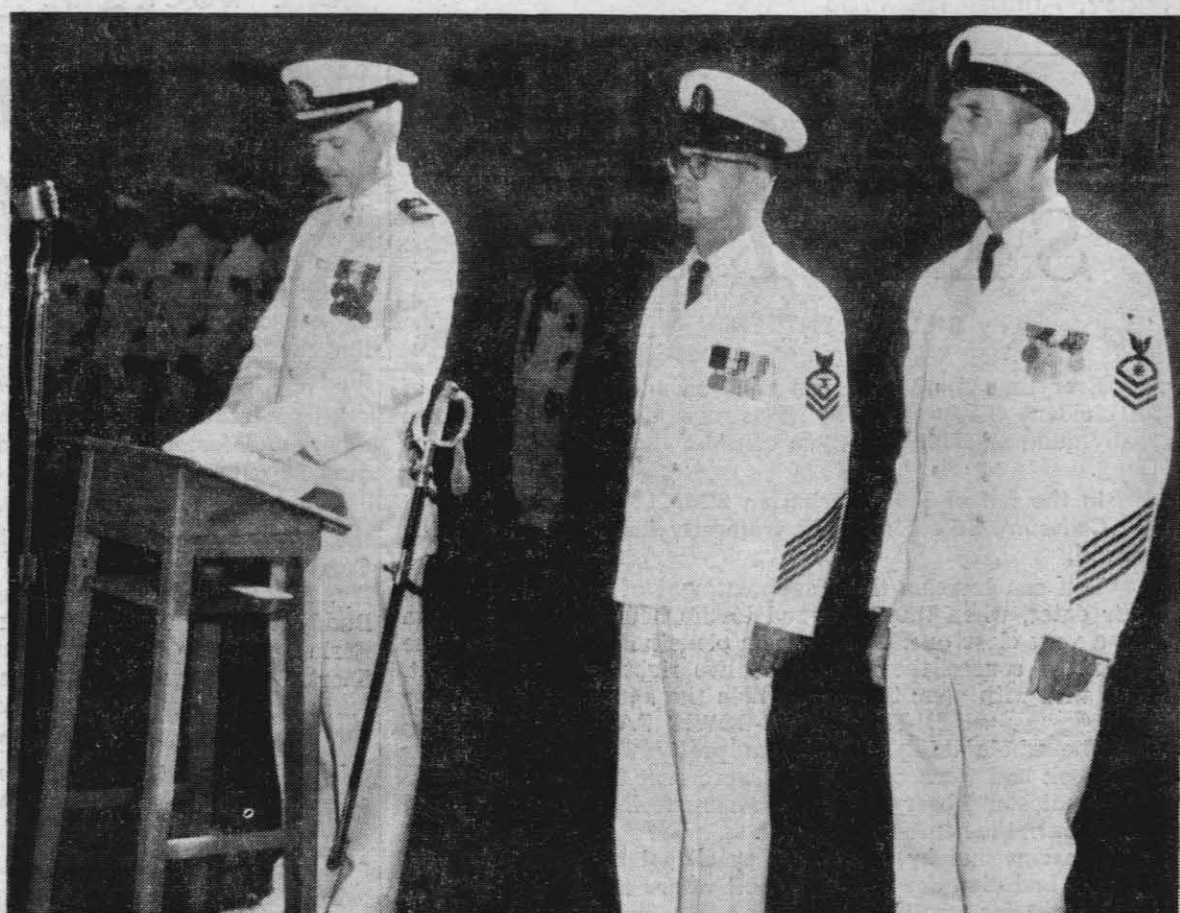
As a result, the Groves School organization will be carried on in the Dallas huts at both the Groves School and the Rowe Street facilities. Mr. Barker, the Groves School principal, will have his temporary office at Rowe Street, with administrative control of both campuses.

To provide adequate administrative services, the China Lake Board of Trustees has authorized a head-teacher position and additional secretarial time at the Groves School campus.

**Cooperation Appreciated**  
Every effort is being made by the China Lake Board of Trustees and the School Administration in their attempt to solve the operational problems faced by the district and still provide the best possible education for children. Problems in school zoning, actual class assignments, and transportation of pupils will be faced after the registration of kindergarten children and pupils new to the district has been completed by August 16.

Parents of eligible kindergarten children and children in other grades new to the district are reminded that registration is now in process at the district office located at Murray School. Children who were in attendance in the district at the close of the 1962-63 school year will not be required to register.

Some adjustment to the conditions faced during the school year will be necessary by pupils, parents, and staff. The cooperation of all persons involved will be greatly appreciated.



**RETIREMENT CEREMONY** for Richard H. Smith, FTC, USN (center), was held at the plaza adjacent to Enlisted Personnel's Headquarters building on Monday. Cdr. L. B. Shultz, CO, NOTS Enlisted Personnel, reviews Chief Smith's 21 years of service. At right is Donald M. Smith, QMCS, Chief Master at Arms. Another retirement ceremony was held yesterday for John J. Lewis, EMC, USN, who completed 20 years of naval service.

## LaV McLean To Host Party For JP Wives

LaV McLean, wife of the Station's Technical Director, will again host the annual coffee and swim party honoring Junior Professional and summer employees' wives to be held at the Officers Club pool Wednesday, Aug. 21, from 9:30 a.m. to noon.

Women of the community are invited to attend the function to become better acquainted with the wives of our JPs and summer employees.

Swim attire and low shoes will be appropriate.



**CHIEF SMITH** returns the salute of his fellow chiefs as he prepares to go ashore following the impressive ceremonies.

## SHOWBOAT

**FRIDAY AUG. 16**  
"COME FLY WITH ME" (109 Min.)  
Delores Hart, Hugh O'Brien  
7 p.m.

(Comedy in Color) A slick fast moving laughter about three airline hostesses, a pilot, a smuggler and a rich Texan plus the international background of Paris, Vienna, etc. Don't miss!  
(Adults and Young People)

**SATURDAY AUG. 17**  
— MATINEE —  
"ARROW IN THE DUST" (80 Min.)  
Sterling Hayden  
1 p.m.

SHORT: "Pluto's Housewarming" (7 Min.)  
"Iron Horse No. 8" (16 Min.)

— EVENING —  
"DRUMS IN AFRICA" (92 Min.)  
Frankie Avalon, Mariette Hartley  
7 p.m.

(Adventure in Color) Engineer and the boss's nephew encounter hair-raising adventures in their trek to inner Africa where a ne wrairroad is to be built. Wild native slavers. Action Galore!  
(Adults and Young People)

SHORT: "Grin and Share It" (7 Min.)  
"Scheming Schemers" (16 Min.)

**SUN.-MON. AUG. 18-19**  
"LIST OF ADRIAN MESSENGER" (98 Min.)  
George Scott, Dana Wynter  
7 p.m.

(Mystery) A taut thriller about an arch criminal intent on eliminating 11 persons who could fail his plan for a huge fortune. Tony Curtis, Burr Lancaster, Kirk Douglas, Robert Mitchum and Frankie Sinatra all have guest roles. A New Twist!  
(Adults and Young People)

SHORT: "AFSM No. 613A" (14 Min.)  
**TUES.-WED. AUG. 20-21**  
"CALL ME BWANA" (103 Min.)  
Bob Hope, Anita Ekberg, Edie Adams  
7 p.m.

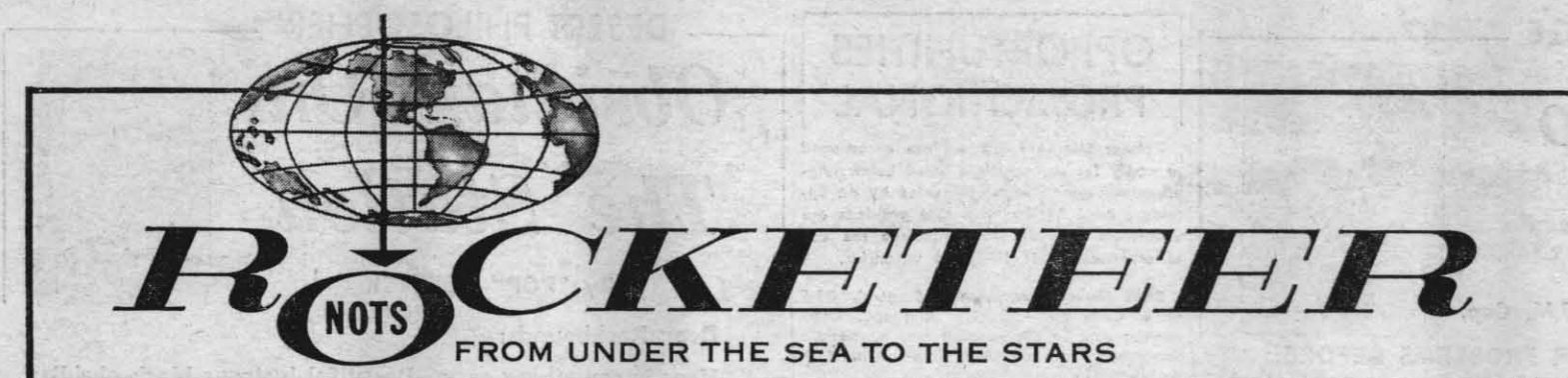
(Comedy) Phony author explorer reluctantly heads expedition into Africa to recover off-course government moon rocket secret data. Wild animals and foreign agents needle Bob's heroic (?) efforts.  
(Adults and Young People)

SHORT: "Bied Piper of Guadalupe" (7 Min.)  
**THURS.-FRI. AUG. 22-23**  
"TAMMY & THE DOCTOR" (89 Min.)  
Sandra Dee, Peter Fonda  
7 p.m.

(Comedy Drama in Color) Now the cute little shanty-boat girl joins a hospital as an aide and almost perils its smooth functions as she attends her duties and a romance.  
(Adults and Young People)

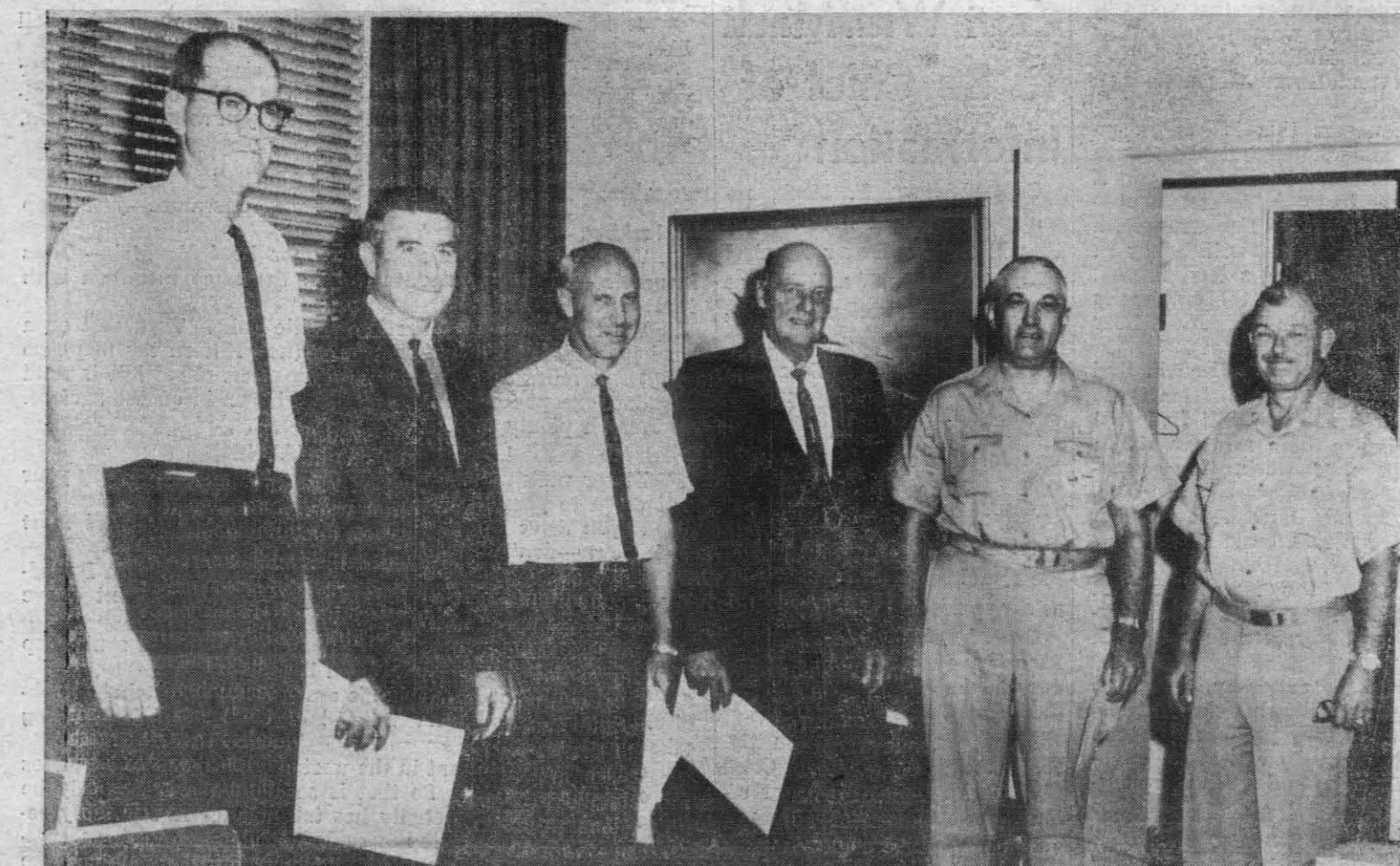
SHORT: "Strangled Eggs" (7 Min.)  
"Funny Four Legs" (10 Min.)

# 237 Civilian Employees Honored For '1-63'



VOL. XVIII, NO. 32 NAVAL ORDNANCE TEST STATION, CHINA LAKE, CALIFORNIA Friday, August 16, 1963

## Meritorious Service Lauded



**CITED**—Four of the seven civilian coordinators for "Project 1-63" receive their Meritorious Civilian Service Awards from Capt. Charles Blenman Jr., ComNOTS. Left to right are T. R. Bates, Supply Dept.; H. H. Wair, Test Dept.; W. H. Hampton, Technical Presentations; R. A. Appleton, Test Dept.; Capt. F. F. Reck, Project Director; and Capt. Blenman. Not present for picture were W. N. Sorbo, Public Works; A. B. Christman, TID; and "J" "T" Bibby, Public Information Office.

## Highest Award Presented Asst. Coordinators

In the wake of President Kennedy's recent visit to NOTS, Captain Charles Blenman, Jr., Station Commander, this week gave special recognition to 237 civilian employees for their outstanding contributions to making the presentation to the President an unqualified success.

Heading the list were seven employees who acted as Assistant Coordinators for various aspects of Project NOTS 1-63, as the operation was named, under Captain F. F. Reck, the Project Coordinator. They were presented with Meritorious Civilian Service Awards, the highest award which the Station Commander is authorized to grant.

The recipients are: Robert A. Appleton, Test Department.

Ted R. Bates, Supply Department.

"J" "T" Bibby, Public Information Officer.

Albert B. Christman, Technical Information Department.

William H. Hampton, Technical Presentations Coordinator.

William N. Sorbo, Public Works Department.

Henry H. Wair, Test Department.

In addition, 44 employees who had made major contributions to the Project received Certificates of Group Achievement for their services, and 186 other employees received Letters of Commendation signed by Capt. Blenman.

In connection with the presentation, Capt. Blenman pointed out that, while these persons had made contributions which were identifiable as superior, the overall success of the operation was the result of the combined efforts of the Station forces as a whole and that all hands can well take pride in a job well done.

Letters recognizing outstanding performance of duty and contributions by military personnel and/or activities were previously issued.

## Council Hears Soothing Report on FM Booster

Chances of getting an experimental FM booster for better reception in the China Lake-Ridgecrest area seem a bit brighter following a report to the Community Council by President William Hattabaugh at last Tuesday's meeting.

Hattabaugh told of his conversations recently in Washington with two officials of the Federal Communications Commission, and recommended that these steps be taken:

1. Gather data required in the application for the FM booster license.
2. Organize a community staff committee to petition residents of Indian Wells Valley in support of a "public interest" phase of the application.
3. Seek support of the AM stations in Ridgecrest.
4. File the formal application with the FCC.

"While it was pointed out that ours was the only request the FCC had received for an FM booster, the FCC men did agree that the request by the Navy in 1951-52 for a TV booster also

**Fall Semester Education Schedules On Pages 5, 6, 7, 8**

## Kelly Goes to Penn State To Study for Doctorate

Howard Kelly, one of NOTS' veterans, left for Pennsylvania State College this week to begin study toward his Ph.D. in aeronautical engineering under a fellowship for advanced education sponsored by the Navy and Penn State.

Kelly, who has been here since January of 1946, most recently was employed as a consultant to the Aeronautics Division of the Weapons Development Department. Prior to that he was in the former ballistics division of the Research Department. He is noted as an authority in ballistics and also in sea animal locomotion.

A graduate of the University of Wisconsin where he received his Bachelor of Arts degree in physics, Kelly went on to get his Master's degree in physics at Michigan State.

During World War II he taught at Stanford University and then came to China Lake.

Besides his work-a-day tasks, Kelly has been active in the Pony League here and also served on the Employees Welfare Association, the forerunner to the present Community Council, and on the Boy Scouts committee.

He and his wife, Dorothy, and their four children departed for the east Wednesday.



HOWARD KELLY

Sleep is something that always assumes more importance the morning after than it did the night before.

—National Safety Council

**CROSSWORD PUZZLE**

Answer to Previous Puzzle

1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22
23	24	25	26	27	28	29	30	31	32	33
34	35	36	37	38	39	40	41	42	43	44
45	46	47	48	49	50	51	52	53	54	55

**ACROSS**

- 1-Moccasin
- 4-Bottle-shaped vessel
- 9-Part of face
- 12-Girl's name
- 13-Climbing plant
- 14-Macaw
- 15-Separated
- 17-Weirder
- 18-Cravat
- 20-Repulse
- 21-Satellite of earth
- 23-Earth goddess
- 24-Prophecy
- 27-Beard of grain
- 28-Distance measure
- 30-Chafe
- 31-Preposition
- 32-Runs
- 34-Precede
- 35-Tidy
- 37-Mother of Apollo
- 38-Weaken
- 39-Mistake
- 41-Brother of Odin
- 42-Healthy
- 43-Puff up
- 45-Young goat
- 48-Back down
- 49-Has been borne
- 51-Man's name
- 52-Artist's stand
- 54-Hawaiian wreath
- 55-Manuscripts (abbr.)
- 56-Killed
- 57-Cloth measure

**DOWN**

- 1-Fruit seed
- 2-Girl's name
- 3-Cardboard box
- 4-Escape
- 6-Cooled lava
- 7-Dirk
- 8-Remains in charge of prison
- 10-Exist
- 11-Armed outfit
- 16-Metal
- 18-Sand bars
- 20-Mollify
- 21-A state
- 22-Proprietor
- 23-Female
- 25-Royal
- 26-Mine excavation
- 28-Member of Parliament (abbr.)
- 29-Heraldry: grafted
- 32-Scarf
- 33-Preposition
- 36-Places for combat
- 38-Seat on horseback
- 46-Edge
- 47-Bitter vetch
- 48-Unit of Portuguese currency
- 49-Lamprey
- 50-Nothing
- 52-A continent (abbr.)

Distr. by United Feature Syndicate, Inc. 5

For Use in Authorized Service Newspapers Only.

## Naval Academy Gets First Dean

Secretary of the Navy Fred Korth has appointed Marquette University educator Arthur B. Drought, Academic dean of the Naval Academy.

Doctor Drought will be the 118-year-old Naval Academy's first academic dean. He will serve as temporary academic dean at Annapolis on one year's leave of absence from Marquette.

As dean of the Academy, Drought will study the academy's organization, procedures and curriculum and recommend changes that would be necessary to establish the post of academic dean on a permanent basis.

Secretary Korth, in appointing the new dean said: "This is a significant event in the Naval Academy's long and distinguished history, and it is one of a series of steps taken by the Naval Academy to strengthen and improve its educational program."

This will be Doctor Drought's second stint at the Academy. In 1943 he substituted for a member of the engineering faculty. He served as a navy radar instructor in 1944-45. The doctor also headed a research group at the aeronautical and radar laboratory, Naval Air Experiment Station at Philadelphia during WWII.

From \_\_\_\_\_

PLACE STAMP HERE

TO \_\_\_\_\_

CHAPLAIN'S MESSAGE

Talks To Teenagers

By FR. JOSEPH A. COSTA, O.F.M. Cap.



MILLIONS HAVE HAD YOUR PROBLEMS BEFORE. Do your parents treat you as a baby, deny you responsibility, act as though you can't take care of yourself? That's probably been a major complaint of teenagers since Cain and Abel. Do they put on too much pressure—expect more of you than is reasonably possible? Dozens of youngsters you know probably could make a similar complaint. Do you fear that you are not attractive to the opposite sex, worry that you will not achieve your full growth as a man or woman? Countless other teenagers have similar worries. Millions of yesterday's teenagers had them. Millions of tomorrow's teenagers will have them too.

There is another gripe of teenagers that is heard constantly. It is: "My parents don't understand that times have changed." Teenagers undoubtedly will say it too about you if you become a parent. There is some truth in the statement—Times do change; but basic problems do not. For example, a generation ago a girl who rode alone at night with a boy in a horse drawn buggy was thought to be taking a terrible risk. Times have changed; people now use cars. But the problem is still there. The girl who allows her boy friend to park his car in a secluded spot takes no less risk than the lass of 1910.

Run down the list of your other problems. You will find that they really have not changed much, if at all, from those your mother and dad faced at your age. You will find that they, too, had difficulties in adjusting to their own parents, in getting along with friends, in their school work. They probably were as uncertain about their futures as you are of yours. The point of all this? Just that they have been through the mill. Now they are older and can look back, seeing how they could have done this or that better, and how they might have avoided this mistake or that. And if they knew then what they know now, they would have made fewer mistakes and errors and would have achieved a much greater success with their lives.

If you want to become an adult the easy way, therefore, take advantage of their experience. By following their advice, you will often be able to avoid pitfalls they perhaps fell into. If you use their experience to help you, you will reach adulthood much sooner, much more confidently and much more successfully than if you insist upon making the same mistakes that they did.

I do not wish to give the impression that parents are always right. They are not! But then, who is? They probably have their faults. Even now, they may not be able to see some problems clearly. They may have personality shortcomings or prejudices which prevent them from giving the best possible advice under all circumstances. But, I think you will agree that generally their batting average is pretty high.

You need not follow them blindly. If their advice proves wrong for some reason, you can adopt a mode of action which conforms more closely to your own experience. But if you reject their advice without really seeing whether it is good or not you will find more often than not, that you have been doing things the wrong way.

Missiles, Rockets Are Redesignated

NOTS-researched, developed and tested missiles, along with all military rockets and guided missiles with a combat-related mission have been redesignated under provisions of a Department of Defense regulation.

The Navy Operational TARTAR missile, for example, is now redesignated as the RIM-24A. This means it is launched from a ship (R), has an aerial intercept mission (I), is a guided missile (M), is the 24th model of a basic design (24) and is the first major modification model (A).

Under the DOD regulation, popular names of the missiles and rockets will not be changed.

Letters used to denote status are J, special test temporary; N, special test permanent; X, experimental; Y, prototype, and Z, planning.

Launch environment symbols are A, air; B, multiple; C, coffin; H, silo stored; L, silo launched; M, mobile; P, soft pad; R, ship and U, underwater.

Mission is indicated by D, decoy; E, special electronic; G, surface attach; I, intercept-aerial; Q, drone; T, training; U, underwater attack, and W, weather.

Vehicle type letters are: M, guided missile; N, probe, and R, rocket.

The Rocketeer

Official Weekly Publication of the U. S. Naval Ordnance Test Station China Lake, California. Captain Charles Blumman, Jr., USN Station Commander. "J. T." Bibby Public Information Officer. Jack G. Broward Editorial Advisor. Richard Gruenberg Editor. Budd Gatt Associate Editor. Chuck Mangold Special Services Athletic Director.

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 1950. Office - 50 King St., Bldg. 09279, Phone - 71354, 71655, 72082.



Christian Science (Chapel Annex) Morning Service—11 a.m. Sunday School—11 a.m. Protestants (All Faith Chapel) Morning Worship—8:30 and 11 a.m. Sunday School—9:30 a.m., Groves and Richmond elementary schools. Roman Catholic (All Faith Chapel) Holy Mass—7, 9:30 a.m. and 12:30, 5:30 p.m. Sunday, 6 a.m. Monday through Friday, 8:30 a.m. Saturday. Confessions—8 to 8:25 a.m., 7 to 8:30 p.m. Sunday, Thursday before First Friday—4 to 5:30 p.m. NOTS Hebrew Services (East Wing All Faith Chapel) Every first and third Friday, 8:15 p.m. Sabbath School every Saturday morning.

OPPORTUNITIES PROMOTIONAL

Present Station employees are encouraged to apply for the positions listed below. Applications should be accompanied by an up-to-date Form 53. The fact that positions are advertised here does not preclude the use of other means to fill these vacancies.

Staff Nurse (Medicine and Surgery), GS-5 or 6, Code 88 - General and specialized nursing care in the hospital and out-patient department. Full time and intermittent duty positions.

Apply for above position with Mary Morrison, Bldg. 34, Room 34, Ext. 72032.

Capt. Wm. Mack To Be Chief of Information

Capt. William P. Mack, recently selected for Rear Admiral, will relieve Rear Admiral John S. McCain, Jr., USN, as Chief of Information, Department of the Navy, on August 22 it was announced by Secretary of the Navy Fred Korth.

Adm. McCain, who has served as Information Chief since August of last year, will assume new duties as Commander, Amphibious Force, U. S. Atlantic Fleet, and will serve in that post as a vice admiral.

Capt. Mack, a former aide to Secretary of the Navy, is now on duty in the Joint Staff Office of the Joint Chiefs of Staff.

After graduation from the Naval Academy with the Class of 1937, he served in junior officer assignments aboard the battleship USS Idaho and on the staff of Commander, Battleship Division Three. He was gunnery officer of the destroyer USS John D. Ford at the outbreak of World War II and participated in engagements against Japanese naval forces in the Battle of Makassar Straits and the Battle of the Java Sea.

Capt. Mack also served as aide and flag lieutenant to Commander, Amphibious Force, U. S. Pacific Fleet, as executive officer of the destroyer USS Preston and as commanding officer of the destroyer USS Woodworth.

After World War II, Captain Mack had duty as officer-in-charge of the Naval Academy Preparatory School at Bainbridge, Maryland, as commanding officer of the destroyer USS Anderson, and as a staff officer afloat. In June 1953, he reported to the Bureau of Naval Personnel as commander detail officer.

There followed tours of duty as a student at the National War College, as Commander, Destroyer Division 22, and in the office of the Chief of Naval Operations. In April 1959, he was named naval aide to Secretary of the Navy Thomas Gates and continued to serve in that capacity under Secretaries William B. Franke and John B. Connally. In 1961 he became Commander, Destroyer Squadron 28. A year later he was ordered to the Joint Staff.

His selection to the rank of rear admiral was approved by the President on May 30, 1963.

He's Fuming

Don't Snooze Where They Make Booze! That could be the moral of this story.

A winery apprentice in France climbed into an empty wine barrel for a nap and passed out from the fumes. He was found an hour later by a fellow worker, revived and taken to the hospital with a king-sized hangover.

'DESERT PHILOSOPHER' Obsidian On The Station



By "POP" LOFINCK

Dear Rockhounds:

Here is something easy. Beautiful lustrous black obsidian. Mostly silica—volcanic glass. But much harder than commercial glass—it will cut glass.

It's already polished—so you save that labor. It has a hardness of "seven" so it doesn't get all scratched up and lose its polish.

It has a conchoidal fracture—that means curved, shell like.

So you just find a piece the right size and curvature for your pendant or ring setting—grind the edges off in the lapidary shop, to fit your setting. And there you've got a cabochon. You've got it made.

JUST KEEP ON LOOKING

To find a piece the right size and curvature—just keep on looking.

Where? One good place is Sugar Loaf Mountain—Glass Mountain—Obsidian Mountain—all the same mountain with three different names.

Where? Go a mile north of Little Lake. Turn east on a road just this side of the cinder pit (Red Hill on the map), go about five miles northeast—that's the place. That hill is solid obsidian, except for the sand that has blown in on the surface. So there is plenty of it.

LET THIS BE A WARNING

Better walk up the narrow road up the hill and lug your loot down to your car. Good exercise.

If you drive up the hill and can't turn around and must back down—don't blame me—I warned you.

On the way you will pass a sign that reads Station Boundary—but you are safe if you don't go beyond the point where the road is blown up.

Or you can go up a little adjacent canyon to the south—up to where the canyon is obstructed by boulders.

Much of the obsidian in this area contains cristobalite bubbles. That is a collectors' item—but not so good for making cabochon pendants.

Obsidian is abundant in the western United States but does not occur in the east. So that is something. It will only be found where volcanic activity has taken place in relatively recent times—and where it has cooled too quickly to form crystals. Parenthetically, someday you might get an escort to take you in through the gate toward Coso Hot Springs and around the hill above the upper end of this narrow road you were on.

INDIAN LAND FOR THOUSANDS OF YEARS

The Indians quarried obsidian in this area for thousands of years, for making arrowheads, knives, scrapers, etc. Interesting! That trip requires an escort to keep you from getting messed up with duds—or to keep you from getting a foot badly burned at Coso Hot Springs where the ground caves in.

Now—back to where we were at the lower end of the narrow road.

On the way out to Highway 6, a road goes off to the south near the pavement. It leads to Fossil Falls—an ancient waterfall—drive as far as you can, then hike down to the waterfall.

That's about a day . . . and a mighty interesting one. No column next week—I'll be away on a special project. So long.

Commemorative Medallions Go On Sale Tomorrow At WESCON Show

Medallions commemorating President Kennedy's June 7th visit to NOTS will go on sale this weekend.

On-Station residents may purchase coins at the Maturango Museum, either Saturday or Sunday, 2 to 5 p.m.

The coins, sponsored by the Navy League of the Indian Wells Valley, will be sold at the Jolly Cone from Saturday on.

The price of the coins is \$1 each. Coins will be held for those who have reserved them. After reservations have been accounted for, medallions will be sold to anyone desiring them, with a limit of five to a customer.

Concurrently, distribution will be made to all the eligible NOTS personnel who did not receive a medallion from the first order.

NOTS to Operate NACODE Station At WESCON Show

A fully operational NACODE satellite tracking station will be set up by NOTS engineers at the WESCON show, Aug. 20 through 23, at the Cow Palace in San Francisco, according to Leroy Marquardt, head of the Test Department's NACODE project.

Accompanying Marquardt to the Western Electronic Show and Convention will be Ralph Smith of the Test Dept., and James Harrison, Sol Chavez and Pat Murphy, students from New Mexico State University who have been working on the project here, and Ray Sinnott of TID.

GEBBA Assessment No. 74 Is Now Due

Members of the Government Employees Benefit Association and the China Lake Mutual Aid Society are reminded that assessment No. 74 in the amount of \$1.20 is now due following the death of Public Works' employee Edward E. Silva.

Assessments should be mailed to the secretary-treasurer Joseph M. Becker, 77-B Renshaw.

Strange Signs

Most drivers are used to seeing deer and cattle crossing signs. (There's even a "Buffalo Crossing" sign here at China Lake!) But, down in Florida in Everglades National Park is a warning sign that's startled many a motorist — "Alligator Crossing" . . . —Family Safety

RIM SHOTS

By BILL VALENTEEN



Everytime football season rolls around, I'm reminded of an incident that was pretty disastrous at the time, but was really quite amusing when you consider the background of the thing.

In the fall of 1955, during an SC-UCLA midtown clash at the Coliseum, SC's Theta Chi fraternity house burned to the ground.

You can imagine the disappointment of the brothers and their dates, when they returned to the house, after the team lost a very close one, to find their plans had gone up into the smoke. Of course, the Betas, who live right across the street, were wild with glee; this didn't help the situation either.

'BURN-THE-HOUSE-DOWN' PARTY

The whole thing worked out pretty well, though. After the shock had worn off, pledges were sent thither and yon to buy wienies and beer and the unfortunate incident was turned into a burn-the-house-down party.

It seems that by the time they all got back to the house, the fire had died down to the point where the coals were just about right for roasting.

Anyhow, while all were giggling and holding hands, etc., somebody asked, "What happened?" After some pretty wild speculative thoughts passed through the crowd, the fire company showed up with the responsible person furiously waving and clutching one of the ladders on the No. 1 engine. Terribly worried and out of breath, he volunteered the information.

FIREMAN, SAVE MY FRAT!

It seems that this person was left in charge of the final preparations for the big blast they were going to have after the ball game. While he was in the kitchen, the radio caught fire somehow in the lounge. The first thing he did, of course, was try to call the fire department. But to his chagrin, and everybody's detriment, the only phone on the premises was a pay phone and this person only had a half a dollar. Finally, he ran the three blocks to the fire alarm box, which, incidentally, took a few minutes because he didn't know where it was, and summoned the fire department.

There has been a new house built since, and everything is actually even better than it was before. Needless to say, however, this person did one heck of a lot of pushups before the whole incident finally cooled down.

By the time this season reaches another of those monumental conflicts between the two LA giants, a lot more heat is going to be generated in the Southern California campus.

TOUGH SCHEDULE FOR TROJANS

Before the Trojans take on UCLA again, they are going to have to take on one of the toughest schedules in their long gridiron history. Their first five games — Colorado, Notre Dame, Ohio State, Michigan State and Oklahoma — will force them to have to prove early in the season that they do have one of the finest football teams in the country, and that they can again repeat as the National Collegiate champions.

The coming SC-UCLA clash is shaping up to be the most important conflict of the year.

UCLA doesn't have as tough a schedule as USC, but the Bruins don't have to face the Trojans until the very last of the season, and by then, even the junior varsity will have had enough seasoning and preparation to topple the most formidable opponent. There should be a real "race for the roses" in the PCC this year.

In any case, the coming collegiate football season should be decidedly exciting especially in Los Angeles. Let's hope, however, when the Bruins do meet the Trojans on that cool November day in the Coliseum, that the only thing that goes up in smoke will be the gin-soaked breath of the spectators. Keep smilin', Sport! See you next week!

Scene and Heard

Bill Mazerowski, hero of the 1960 World Series, has been moved into the clean-up spot in the Pittsburgh Pirates line-up. "Maz" thinks it's easier than hitting in his usual number eight spot in the order. "With the pitcher coming up next," says Mazerowski, "the opposing pitchers really bear down on the number 8 man."

American League umpire Al Salerno used to be a State Policeman but he has nothing against speeding up ball games. Salerno thinks slow pitchers contribute to injuries. "When a guy is taking his time pitching, the infielders as well as the batters find it tough to stay on their toes," says Salerno. "Then bang, the pitch or the ball is right on top of you!" Salerno would rather umpire behind the plate in the second game of double-headers because the "ball-strike" assignment keeps you alert. Working both games on the bases in the hot sun can get a little tedious according to Salerno . . .

Commissioner Ford C. Frick was the annual keynote speaker at the Hall of Fame Ceremonies in Cooperstown. It was Frick, while president of the National League in 1935, who suggested the establishment of the National Baseball Hall of Fame and Museum. Sam Rice, one of the players admitted to the Hall of Fame this year, remarked it was good to get the roses while he could still smell them . . .

Frank Frisch, a Hall of Famer, hit a home run in the first All-Star game player in 1933. Frisch didn't get too many headlines though. Babe Ruth also hit a round-tripper in the game at Chicago. Frisch had just nine Major League home runs in his career . . .

Merchants Team Runs Off With Softball Title Again

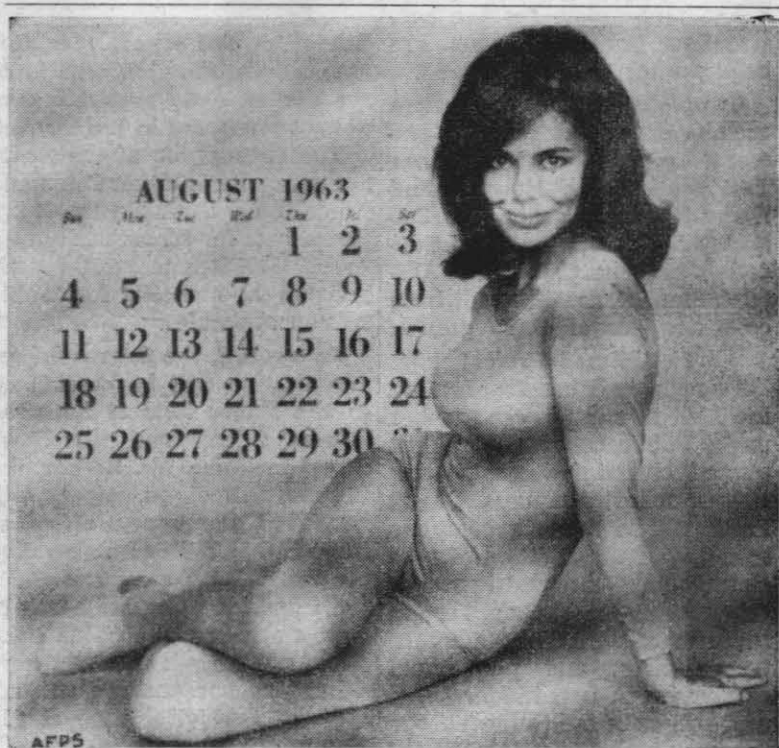
The Station intramural softball season ended last week with the Ridgcrest Merchants winning the championship.

The Merchants team had another undefeated season, winning 28 games.

Trophies will be awarded to the following players: Dennis Craiger, Bob Forster, Bill McCulley, Max Smith, Bob Kickman, Buddy Deffes, Kaven Fowler, Earle Roby, Bob Crawford, Tom Short, Bert Anderson, Bill Marten, Ray Blackwell and Win Johnson.

The Merchants team has entered the Barstow City Tournament to be played the first week in September.

The Military section of the league was won by NAF whose team finished in second place. Team members who will be presented trophies are: Mike Miner, Frank Lueder, Willie Clement, Tommy Tomlinson, Tex Stewart, Art Greninger, Jim Martin, Larry Lister, Oren Summer, Roger Litcheild, Mel Attaway, Dan Kirkendall, Joe Simmons, Joe Blunt, and Chuck Landsberg.



ROME'S LOSS, HOLLYWOOD'S GAIN—Pity the poor Roman photographers who let Georgia Moll get away from them. Ah, but that's Hollywood's lure for you. The Italian-born beauty is Armed Forces Press Service's Calendar Girl . . . yours, too.

Winter Bowling Leagues Forming

Winter leagues are now being formed for bowling at Bowling Alley No. 1 on the south side of the Post Office building.

The alleys will be open the first week in September. New Brunswick Scoring pins will be used. New rental bowling shoes will be available. New house bowling balls will be put in play.

The lanes, approaches and pin decks are being completely resurfaced. The price of bowling is 25 cents a line. Shoes rent for 10 cents a pair. There is no charge for the use of house bowling balls.

For further information, call the Special Services Office, Extension 71791 or 72017.

July Was Cool! Top Was 100.7, Minimum, 64.6

July temperatures at China Lake were well below normal, the Atmospheric Study Branch of Instrument Operations Division reports.

The mean temperature for the month was 82.7 degrees, and the average maximum and minimum were 100.7 and 64.6. Both the mean and the average minimum are new low records. Norms are and 71.1 (minimum).

Low relative humidity and generally clear skies permitted strong radiational cooling at night, so that the average temperature range of 36 was five degrees above normal and again set a new record.

Relative humidity averaged 16 per cent, also a record low and well below the normal 23 per cent. There was no precipitation.

August is usually only slightly cooler than July, with a mean temperature of 84, an average maximum of 100 and average minimum of 68.

The prevailing wind direction and average speed during July were south-southwest, 9 miles per hour (normal is southwest at 10 wph).

The peak gust was west-southwest, 40 mph. The record is northwest, 66 mph.

SPORTS QUIZ

1. With what sports do you associate: (A) The Budweisers, (B) Peter Collins-Phil Hill, (C) The Montreal Alouettes?

2. The British, French, Australian and U. S. titles are the Big Four in Tennis. One of them is not played on grass. Which one?

3. In horse racing, the infield is where (A) the spectators stand, (B) the horses parade, (C) the steeplechase hurdles are located.

4. What form of horseracing do these champions participate: (A) Kelson, (B) Henry T. Adios, (C) Su Mac Lad?

5. In his pro career former heavyweight champ Gene Tunney fought one man five times. He won twice, lost once and twice there was no decision. Who was his opponent?

(Answers to Quiz)

1. (A) Bowling, (B) sports car racing, (C) Canadian football.

2. The French championship.

3. (A) Where the spectators stand, (B) the steeplechase hurdles are located, (C) Su Mac Lad, trotting.

4. Kelson, handicap thoroughbred racing, (B) Henry T. Adios, (C) Su Mac Lad, trotting.

5. Harry Greb.



LCDR. WALTER P. JOHNSON retired on Aug. 1 after 20 years of active service. Since March, 1960, he served as Maintenance Officer, Safety Officer and Legal Officer at NAF. After a vacation in the East he will reside in San Bennie, and children, Philip, Fernando Valley with his wife, 11, and Pamela, 8.

# NOTS Pasadena News

Virginia E. Lane — Ext. 481

## Respect Your Flag

Do you respect your Stars and Stripes and render the courtesies to which the flag is entitled, or do you scurry for cover at its unfurling to avoid the inconveniences of being detained?

The flag is displayed at NOTS Pasadena from 8 a.m. to sunset. A suggestion was made to accompany the raising of the flag with music or a bugle call. Since this is a laboratory with substantially a civilian population, this has been considered inappropriate. However, it is felt that personnel might be reminded of the privilege of showing a great respect to the National Flag.

Laws have been written to govern the use of the flag and to insure a proper respect for

the Stars and Stripes. Custom has decreed certain other observances in regard to its use.

During the ceremony of hoisting or lowering the flag, or when the flag is passing in a parade or in a review, those present not in uniform should remove their headdress with the right hand and hold it at the left shoulder, the hand being over the heart; women should place the right hand over the heart.

Reserve a corner of your memory for:

"I pledge allegiance to the flag of the United States of America, and to the Republic for which it stands, one Nation, under God, indivisible, with liberty and justice for all."

## Rewarded



SUSTAINED SUPERIOR PERFORMANCE in their respective fields of endeavor earned certificates and monetary awards for three Systems Development personnel. Don Cozen, Division Head (l), makes the presentation to (l-r) Paul F. Reichert, Mechanical Engineer and Head of the Engineering Branch; Donald D. Ayers, Electronic Engineer in the Engineering Branch; and Jesse M. Rowe, Head, Airborne ASW Branch. —Photo by Rick Teunis (SA)

## Former NOTS Officer Commands USNRDL

Capt. Donald C. Campbell, who was engaged in rocket fuze research at NOTS Pasadena in 1945, is the new Commanding Officer and Director of the U. S.

Naval Radiological Defense Laboratory, San Francisco. He replaces Capt. E. B. Roth, who retired after 24 years of commissioned service. Capt. Campbell served at USNRDL previously from 1955-1959, and for the past four years has been at the Bureau of Ships as Director of the Laboratory Management Division.

A second generation "California Native Son," Capt. Campbell was born in Pasadena. Upon his graduation from the California Institute of Technology (a mechanical engineering major) in 1941, he was commissioned in the Navy.

From 1947-1952 he was in Washington, D. C., with the Armed Forces Special Weapons Project.

Capt. Campbell and his wife, the former Janet R. Parich of Pasadena, and their four children reside in San Mateo, Calif.



CAPT. D. C. CAMPBELL

## Ships To Host Visiting

The following ships will host general visiting in the Long Beach area during the month of August from 1-4 p.m.: 17-18 Aug. — Destroyer USS

Cowell (DD 547). 24-25 Aug. — None. 31 Aug. - 2 Sept. — Guided Missile, Light Cruiser USS Tokpa.

## CENTREX Comes to NOTS



FROM THE BEGINNING—(from left), Lynne Jordan, Head of the Communications Branch, "listens in" to the very first telephone model. A little more realistic instrument that some of us may admit remembering is put to work by Edie Merriss, Assistant Communications gal. Hilda Walbert, Assistant Telephone Su-

pervisor, chats on a once modern version. The antique models were supplied by Harry Rich, Pacific Telephone Co. Service Engineer for NOTS, displaying the most recent instrument which is the type serviced by the modern CENTREX switchboard. —Photo by Art Block

The dream of CENTREX is nearing reality at NOTS Pasadena. The first truck loads of equipment were delivered last Friday in preparation for early installation.

**Navy First**  
Installation of CENTREX will be a "first." No other Naval establishment in the United States boasts its own such system.

The target date for complete installation of the new system is late October.

If you have suffered inconvenience in your telephone service, pity the poor operators who have

been long suffering with an overloaded switchboard and an occasional "unfriendly growl" from their customers.

We will keep you posted as the system progresses and urge you all to attend the sessions and become familiar with the new system.

Without proper instruction in its operation, CENTREX can be dubbed "complex." An hour of your time in advance can save you many befuddling hours later.

**Outgrown Present System**  
The ever-increasing require-



SPANKING NEW SWITCHBOARD will feature the latest thing in key pulse dialing. Installation is progressing rapidly.

## CENTREX Training Sessions To Be Held

Lynne Jordan, Head of the Communications Branch, has announced that CENTREX training sessions for all station personnel will be held beginning approximately one week before the completion of CENTREX installation.

The sessions, which will be conducted in the Bldg. 7 large conference room, will include a movie explaining the CENTREX system and its operations, together with some actual demonstrations on the operation of a CENTREX telephone, such as, transfer of calls and placing of long distance calls.

The success of the CENTREX conversion depends on all employees being familiar with the proper operation of their telephones. All hands are encouraged to attend a one-hour training session.

ments have far outgrown the manual PBX system currently servicing the Station. The present system requires the service of an operator for each call—incoming, outgoing, and inter-office, thereby causing countless delays and valuable time lost, particularly during rush hours. The risk of emergency communications being delayed is ever present.

**Proposed System**  
CENTREX service will solve our telephone ills. CENTREX is the most modern, mechanized, complete communications service.

Direct Inward Dialing — Incoming calls, local or long distance, can be dialed directly to an individual station user, thereby bypassing the switchboard attendant.

Direct Outward Dialing—Outgoing calls, local and long distance, are dialed directly by telephone users.

Intercommunication — All telephones can dial any other telephone within the CENTREX system.

Individual Station Billing—All long distance calls will be itemized monthly by station number, showing the city and telephone number called, date of call and cost of the call.

Call Transfer — All incoming calls, local and long distance, may be transferred from one telephone to another with or without the aid of the switchboard attendant.

Machine Intercepting of Vacant Numbers — Calls to disconnected or non-working station lines are intercepted by the equipment and answered by an appropriate recording.

**Tie Lines Retained**  
Present manual tie lines to SCI, China Lake, and Morris Dam will be retained.

**Rhymes of the Tim**  
HAVE FUN IN THE SUN BUT DON'T GET OVERDONE! ...Agert-APPS

# \$65,325 Awarded Employees Under Incentive Program During 3-Month Period

Three hundred and nineteen Sustained Superior Performance Awards and 45 Superior Achievement Awards amounting to \$65,325 were received by Station employees under the Incentive Award Program for the period of April 1 through June 30.

Nine employees were recipients of \$300 awards. They were Gordon Draper of Central Staff, H. G. Wilson and William Hampton of the Commander's Office, and Carl Schaniel of Weapons Planning.

Also, David Livingston and James Oestreich of AOD, Frank Knemeyer of Weapons Planning, Bob Blaise of Propulsion Development, Thomas Lang and William McBride of Research, and Ivar Highberg of the Test Department.

Public Works topped all departments with 49 employees receiving awards, Aviation Ordnance was second with 42, and Propulsion was third with 38. Awards authorized for NOTS employees for the second quarter are listed by departments as follows:

**SUSTAINED SUPERIOR PERFORMANCE AWARDS**  
Office of the Commander

\$300 each — H. G. Wilson and W. H. Hampton. \$200 — Nona Turner. \$150 each — Betty Armstrong, Dovie Hampton, and Joan Raber.

**Weapons Planning**  
\$300 — Carl L. Schaniel.

**Central Staff**  
\$300 — Gordon Draper. \$250 — Francis Fletcher. \$200 each — Judith Gray, Barbara Johnson, Evelyn Peck, Jean Reed, Mary F. Smith, and Joan Thorpe.

**Naval Air Facility**  
\$250 each — Narry Myers and James Heflin. \$200 — Donald Hart. \$150 each — Edith Haley, James Freund, Arthur Hinkley, Jack Kirkpatrick, Jack Leslie Jr., and Neal Wilson.

**Supply Dept.**  
\$250 — Keith Thompson. \$200 each — Vernon Hayes, Dominic Reale, and Bill Mitchell. \$150 each — Buelah Glidewell, Thomas Healy, Mary Seaman, Jeanne Spencer, Woodrow Bertine, and Dallas Knight. \$100 each — Deanna Bingham, Cristina Ceccia, William Gilmar-

tin, Andrew Moody, Archie Plante, and Dominic Rusciollelli.

**Test Dept.**  
\$300 — Ivar Highberg. \$250 each — Philip Ankeney, William Balmer, Amy Griffin, Richard Murphy and Walter K. Smith. \$200 each — John Ammon, John Anderson, Robert Brown, Melton Capps, Gordon Doyel, Jack Godett, Zeva Goken, Lyle Johnson, Mel Miller, Robert Stedman, William J. Stronge Jr., Frank Massaro, and Lowman Moors.

\$150 each — Grace Whaley, Walter Becktel, William Cowan, Albert Guerrero, Walter MacFarland, and Ernest Stevens. \$100 each — Barbara Elliott,

Madelyn Hartnett, Elva Higbie, Barbara Miller, Sandra Wyndra, Bronson Eukel, and John Monckton.

**Aviation Ordnance**  
\$300 each — David Livingston and Edwin Park. \$250 each — Robert Allen, Lynn Barker, John Brown, Robert Clapp, Art Clayton, Henry DeMoss, Joe Dorgan, Robert Forrester, "B. A." Fouse, Robin Fuller, Everett Hill, William McCulley, Charles Newmyer, James Oestreich, James Richardson, Eugene Robertson, Richard Seely, Ivan Wertenberger, and George Wright.

\$200 each — Stephen Barber, Leo Gibbons, Samuel Haun, Ron Hise, Marvin Jeffris, Stephen Saks, George Thompson, Florence Vann, Nils Wagenhals, Claude Wilson, Charles Cook Jr., Ben Mahoney, and Leonard Terlar.

\$150 each — Louise Baird, Lillian Fletcher, Geraldine Miller, Doris Quick, Jean Rollingson, Al Benton, Willie Guise, and Donald Todd.

**Weapons Development**  
\$300 — Frank Knemeyer. \$200 — James Lee.

**Propulsion Development**  
\$300 — Bob Blaise. \$250 each — Cecil Abernathy, Jack Palulak, George Rice, Hubert Ross Jr. \$200 each — Billy Bessee, Theodore Herling, Charles Hire, Herbert Jones, Lawrence Maschhoff, Frederick Santangelo. \$150 each — Mabel Eden, Gertrude Hamilton, Lily Koch, Shirley Sima, Bert on Anderson, Pleasant Aulds, Alfred Celestine, John Christy, Chesley Clark, James Curran, Guy Graham, Lawrence Hartley, Charles Keene Jr., Ira Mahoney, Edgar McDuff, John Morosin, Frank Ptacnik Jr., Robert Rasmussen, Eugene Richison, J. C. Thayer, Cecil Thompson, Jack Warren, Basil Young.

\$100 each — Margie Cowley, Elsie McDaniel, Jeannette Crawford, Lois Pinkerton.

**Research Department**  
\$300 each — Thomas Lang and William McBride. \$250 each — Walter Caffery, Gordon Greene, Lee Humiston, Cass Roquemore, William Steele, Harold Turner. \$200 each — Andrew J. Ballew, Oreste Lombardi, Margaret Scherer. \$150 each — Edith Fallis, Reta Roquemore, Duane Pearl, Terance Roan. \$100 each — Verla Walker, Harold Angle.

**Engineering Dept.**  
\$250 each — James Bowen, Edward Chapin, Jules Duffes, Glen Hollar, Alfred King, Charles McGuire, David Newman, Peter Nicol, Raymond Reed, Vincent Taylor.

\$200 each — Leonard Barke-meyer, Carlos Beagle, Kenneth Cattoot, Floyd Furnish, Vernon Gallaher, Donald Johnson, Thomas Jones, William Kelly, Leonard LaRosa, Jr., Milton Ritchie, Albert Sievert, Erwin Stiefel, Cecil Chamberlain, Eugene Gibson, Lawrence Hahn, Clinton Hill, John Hinds, Jack Hocker, Colburn Ingle, Albert Kleinknecht, Arthur Pakkama. \$150 each — Mildred Anders, Margaret Craig, Daniel Branson, James Egbert, John Harn, Nor-



MANAGEMENT INTERN PROGRAM certificates of completion are presented by Capt. Blenman to James Fare and Robert Root (right).

## Fare and Root Complete Management Intern Study

James Fare and Robert Root, both of the Employee Development and Research Division of the Personnel Dept., were presented their certificates of completion in the Management Intern Program here this week.

Capt. Blenman, ComNOTS, made the presentations. Fare has accepted a position as management analyst with Central Staff. Root is an administrative assistant in the Aviation Ordnance Dept.

Both men entered the Management Intern Program last January. Fare had just been discharged as a lieutenant in the Marine Corps at Camp Pendleton. He is a 1959 graduate of the University of Washington with a BA degree in Sociology. Fare and his wife, Carmen, and their 14-month-old daughter, Sheryl, lives at 220 Toro.

Root joined the program here after completing some graduate work in psychology at Fresno State. He had earned his BA in Psychology there in June, 1961.

Root was in the Navy from 1951 to 1955 and was discharged as a yeoman, second class. He

## Film Society Picks Movies For New Season

The newly-elected officers of the China Lake Film Society met recently to select outstanding films for viewing by residents of the area during the 1963-64 season.

As in the past, the 10 films of the program will be shown in the Community Center, on the second Monday and Tuesday of every month, September through June.

Full program prices of \$5.00 for civilian and \$5.00 for military personnel, with half-program prices of \$3.00 and \$2.00 for civilian and military personnel, respectively, remain unchanged for the current program. Selected foreign language and drama students will be offered complimentary tickets for each movie in the program. Military personnel can purchase single admission tickets at the door for \$35. Tickets and information concerning the films may be obtained from:

## Dental Officer Reports Aboard

Lt. Thomas J. Proteau has reported aboard as Assistant Dental Officer at the Station Hospital. Prior to reporting here Lt. Proteau served as Asst Dental Officer aboard the USS Hornet (CVS 12) for two years.

He is a graduate of Washington State College and the Uni-



LT. THOMAS J. PROTEAU

versity of Washington where he earned his B.S. and D.D.S. degrees.

He and his wife, Catherine and their two children, Claire, 4 and Thomas, 1 are now living on the Station.

## Graduate Study Awardee

(This is the fifth in a series of biographical sketches of seven Station employees who have been selected by BuWeps for one year of graduate training.)

Joseph J. Boyajian is one of three Aviation Ordnance De-

partment employees who have been selected by BuWeps for advanced study.

Boyajian will enter the University of California at Berkeley this fall to study for an M.S. degree in electronics.

A graduate of the US Naval Academy, Class of '57, with a B.S. degree in electrical engineering, Boyajian came to NOTS in February of 1960.

"I feel fortunate that I was selected for the program," the AOD electronics engineer commented. "I'd never been able to further my education without a great deal of sacrifice. This is really an opportunity."

Though born in Los Angeles, Boyajian lived at Los Gatos most of his life until he received his congressional appointment to the Academy.

It was at Los Gatos Union High School that he met Sharon Lowry whom he married in 1958. They have two girls, Dianne, 3, and Suzanne, 16-months. Both girls were born in Ridgecrest.

The family resides at 101-B Entwistle.



JOSEPH J. BOYAJIAN

(Continued on Page 4)

# NAF Pilot's Wife Tells Of Unusual Experiences As Airline Stewardess



"MORE COFFEE, SIR? . . . DEAR," Charlie Cossairt harks back to her days as an airline stewardess by treating hubby, Lt. Larry Cossairt, with "passenger-type" service in their China Lake home.

Charlie Cossairt travelled a distance equal to 10 times around the world to get to China Lake.

Now that she's here (yep, Charlie is a SHE), the ex-airline stewardess — and recent bride of NAF Pilot Lt. Larry Cossairt — is packing her flying career into book form.

Charlie (nickname for Charlene) says she'll title the book, "A Slight Delay." Airline passengers may understand that.

"The biggest problem I'm faced with is trying to condense three and a half years into several hundred pages," she adds.

A self-styled poet and a journalism graduate from San Jose State College, Charlie presents her experiences in anecdote form, spiced liberally with poetry she composed during and between flights.

**'Behind the Scenes'**  
With six chapters completed on her book, she has covered the glimmers of a stewardess' life, delays between flights, her training for stewardess duties, celebrity passengers with whom she has flown and a "behind the scenes" segment.

She told of a couple who boarded her plane at Chicago one evening, announcing that "they only wanted to stay for dinner!"

And, a lady-passenger who decided that the small luggage rack above the seats was just right for the baby she'd been carrying on the trip!

There was the time in Chicago that the entire Dodger baseball team chartered her plane for its return trip to the West Coast.

"I think they must've won their Chicago game if the jubilation was any measure of its outcome," she commented.

**The Famous and Infamous**  
Association with celebrity passengers was a "routine" occurrence on Charlie's plane.

"Most famous people — the successful ones — are just like you and I. No pretenses or vanities. It's the people still struggling for success and recognition who are most difficult," she philosophized.

An hour delay before a scheduled departure time had Charlie's passengers restless and tense, until she passed out a poem after the flight had been completed.

As usual, it was scribbled on

dinner napkins, and read: "My sister-stewardess and I would like to say, We're awfully glad you chose to stay."

And, though it's been a long delay, Honestly — flying — is the fastest way!"

Letters from passengers on that flight praised Charlie's sense of humor and personal interest in her passengers. And, brought accolades from her executives in the company.

**'Make Best Wives'**  
Acknowledging the claim in a magazine article, that airline hostesses make the best wives, Charlie commented that she doesn't know any of her former associate stewardesses who ended marriage by divorce.

"I guess it's the ability demanded by airlines that hostesses have the disposition for getting along with people. The well-groomed look that stewardesses acquire helps a lot in keeping hubby happy, too."

"We certainly gain a satisfactory mark in cooking meals," she boasted, claiming that the average stewardess prepares 7-700 hot meals aloft over an 18-month period.

Statistics compiled after checking with several of the country's biggest airlines backed up the fact that ex-stewardesses have one of the lowest divorce rates of any other women's professional group!

"Now, all I have to do is learn how Navy wives manage so successfully!" she quips.

**Farewell Poem**  
Married last June 1st at Treasure Island, Charlie presented her passengers, enroute to San Francisco from Chicago, a brief poem on napkins which marked the end of her stewardess career:

"To each of you I'd like to say, I've really been delighted To have such lovely people on my last trip for United.

For almost four years, many miles, with passengers I've flown, But now I'm being grounded — for a pilot of my own."



SCRAP DRIVE coordinators Archie Meyer, Mathias "Bud" Hugo, Ed Harris, Bill Hattabaugh and Cliff Wright (l-r) pose at the Ridgcrest swimming pool which will share proceeds of drive sponsored by Elks Lodge Cerebral Palsy Committee. Physically handicapped children also will benefit. The bottle-and-scrap pickup is set for Aug. 24.

## Incentive Awards . Area Scrap Drive Gets Council's Full Support

(Continued from Page 3)  
man Howarth, Aaron Kane, Theo Miller, Baldwin Nielson, Donn Reed, Hulcy Ridge, Harold Slagle, Earl Smith, Melvin Smith, David Tucker, Gordon Zurn.

\$100 each — Mary Ann Dedmon, Mary Jane Morgan, Crystal Rumpy, Maxine Talbot, LeRoy Willis.

**Personnel Dept.**  
\$250 — Bernard Silver, \$150 — Mary Chapman, \$100 — Terry Martin.

**Public Works**  
\$250 each — Gordon Hannon, Joseph Kraemer, John Strommen, J. L. Sakraida.

\$200 each — Robert Barling, W. H. Higbie, J. A. Richards, Harry Simpson, F. W. Dille, W. G. Ferguson, G. C. Hartzell, Edwin Hogue, Leo Lane, P. A. Phillips, Carl Porter Jr., Gerald Ray, W. C. Reynolds, C. W. Rock, A. H. Senn, M. L. Sullivan, J. W. Turner, Harry Willis.

\$150 each — Jerome Conner, Rita Haas, James Johnson, Donald Secor, Ann Stith, D. G. Watts, Andrew Asher, John Bacoch Jr., E. T. Bargarner, P. S. Burrell, Nolan Clawson, I. W. Coleman, Lynn Davis, Lowell Greene, Gerhard Hillebrand Jr., Alf Hoel, Cecil Howerton, Ray Kee, F. F. Kinsey, E. H. Larosche, C. O. Maxwell, Albert McGilvery, C. R. Mead, Robert Mullins, Oliver Olson, John Paulsen, Henry Peckham, Lawrence Perry, Jesse Pierson, F. E. Ray, J. N. Segler, Robert Wilks, Russell Wise.

\$100 each — Mildred Amos, Mary Cox, Barbara Hillebrand, Robert Owens, Ina Wiley, Donald Beach, William Brown, Pascha Hardy, J. R. Lewis, Jasper Storms.

**Technical Information**  
\$250 — Everett Baker, \$200 — Byron Butler, \$100 — Margaret Wall.

**Underwater Ordnance**  
\$300 — Douglas Wilcox, \$250 each — Fred Anderson, Guy Millard, A. Brooks Poynter, Paul Reichert, Jesse Rowe.

\$200 each — Donald Ayers, Joseph Berkich, Leslie Campbell, Marjorie Glaze, Albert Knight, C. II, Herman Torkelson, Joaquin Vergara, David Pruitt.

\$150 each — William Price, Domingo Sanchez, Geary Younce, William Hogan, \$100 — Beatrice A'Hearn.

**Superior Accomplishment**  
Awardees will be listed in next week's issue.

Following is a resolution passed by the China Lake Community Council at its meeting last Tuesday evening:  
"As a civic effort to demonstrate the need for summer swimming as a recreational activity in the Ridgcrest area, several generous individuals of Ridgcrest pooled their resources to underwrite the expense of opening and maintaining the pool, near Monroe School, for use by the general public.  
"In view of this thoughtful effort, the Elks Club has decided to include the swimming pool cost within its fund raising goal for the Handicapped Children's salvage drive this year. Proceeds from the drive are to be split; with half going to the Handicapped Children's fund and half to reimburse the cost of opening and operating the Ridgcrest Pool.  
"The salvage drive will be held on Saturday, Aug. 24, in the China Lake and Ridgcrest areas. The Council feels that in addition to aiding a worthy civic effort, local residents will have an opportunity to "clean out" garages and sheds that have accumulated so much material over the years.  
"It is emphasized that the drive is not intended to pick up unvaluable trash, but rather items of salvageable material that could be sold by the Elks Club, but is of little value to the individual resident.  
"Items which are welcomed are such things as bottles, scrap metal (all kinds), tubing, pipe, tires and other items of small value.  
"Residents who wish to participate in this drive are urged to call Mr. McKernan, FR 8-8801 or FR 8-7841; or Mr. Wright, China Lake 77643, and arrangements will be made to pick up the articles on the 24th. It is understood that several trucks with volunteer drivers have been assigned the collection task.  
"Why not take this opportunity to put your garage in order and, at the same time, help two very worthy local activities."



CPO WIVES INSTALL—New and retiring officers of the Chief Petty Officers Wives Club include (l-r, front) Mrs. Arthur Braley, outgoing president; Mrs. George Morrison, new president; Dixie Shannahan, 1961 president and installing officer, and Mrs. Walter Nydegger, secretary. In back row are Mrs. Paul Huge, vice president, and Mrs. Victor Davis, 1962 president. Mrs. Wayne Castle is the new treasurer for coming year.

# Wage Survey Teams Now Gathering Data

The Area Wage Survey in the Los Angeles market area got under way last Tuesday, William M. Blinkhorn, Acting Head of the Wage and Classification Division of the Personnel Department reports.

Blinkhorn is ComNOTS' representative here. Bernie Silver, Head of NOTS Pasadena Personnel Division, is alternate representative.

On orders of the Navy's Office of Industrial Relations, some 63 firms will be contacted for wage information concerning 47 Navy skilled and semi-skilled jobs in the General Wage Service.

Results of this sampling of private industry and Navy ratings will lead to a new Schedule of Wages applicable to all ungraded employees at NOTS, China Lake, and Pasadena. Data is collected by teams from participating activities.

Capt. Blenman appointed four employees to assist the Area Wage Survey Committee by collecting wage data. They are: Terry Haycock, Code 656, Personnel Management Specialist, and Dorothy Seaman, Code P659, Personnel Management Specialist.

Ungraded employees selected are Carroll M. Frick, Code 40112, Model Maker (Machining) and John O. Lindquist, Code P8094, Quartermaster Mechanic (Experimental Machine and Metal Shop). In addition, two ungraded employees were appointed to act as observers at all meetings of the Area Wage Survey Committee. These employees are William C. Russell, Code 5545, Machinist, and Norman F. Castleberry, Code P5313, Inspector (Tools and Gages).

All these employees and the activity representative and his alternate attended the second meeting of the Area Wage Survey Committee and a data collection training session on Aug. 12.  
St. Louis will serve as a squadron commander at Mather while Miller will have flight command duties and Wilson will serve as a flight leader.  
The local contingent will join several hundred other cadets from Northern California who will be attending classes in weather, navigation, aerospace education, customs and courtesies of the Air Force and other related subjects.  
If the schedule permits the cadets will participate in a flying navigator's workshop aboard an Air Force T-29.



TO ATTEND ENCAMPMENT—Seven of 11 China Lake Civil Air Patrol Squadron 84 cadets who will attend a two-week summer encampment at Mather Air Force Base pause during a tour of the Station before departure for encampment. Kneeling (l-r) are Hank McGlothlin, Pat Fullerton, Gary Smith, and Lance Curtis. Standing (l-r) are Bruce Wilson, Lou Smith, Dick Meyer and Bob Ivancovich. Navy provided airlift to Mather.

## Civil Air Patrol Cadets Leave For Mather Air Force Base

Eight cadets from the China Lake Civil Air Patrol Squadron 84 boarded an Air Force C-131 plane crewed by the Naval Air Transport Wing Pacific Thursday morning at the Naval Air Facility to fly to a two-weeks encampment at Mather Air Force Base.  
The local cadets will participate in two-weeks of Air Force instruction classes, on-the-job training, and orientation flights, according to Capt. Robert B. Thomas, Squadron 84 Commander.  
Three members of the Squadron preceded the flight group to Mather for advanced indoctrination, Cadet Capt. Tryone St. Louis, Cadet 1st-Lt. Larry Miller, and Cadet M/Sgt. Bruce Wilson.

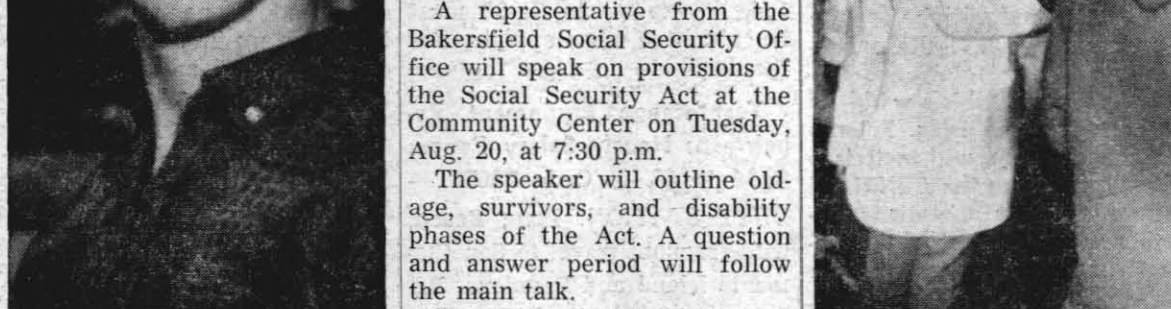
St. Louis will serve as a squadron commander at Mather while Miller will have flight command duties and Wilson will serve as a flight leader.

The local contingent will join several hundred other cadets from Northern California who will be attending classes in weather, navigation, aerospace education, customs and courtesies of the Air Force and other related subjects.

If the schedule permits the cadets will participate in a flying navigator's workshop aboard an Air Force T-29.

Exotic decorations and exciting music are on the agenda for the Hawaiian Luau at the Commissioned Officers Mess on August 23.  
Free Hawaiian Punch will be served on the Lanai between 6 and 7 p.m. Dinner will be from 7 to 9:30 p.m.  
Music for dancing will be played by the Continentals and a special prize will be awarded for the best Hula.  
Please make your reservations early.

**Social Security Agent To Speak Here At Comm. Cent. Tues.**  
A representative from the Bakersfield Social Security Office will speak on provisions of the Social Security Act at the Community Center on Tuesday, Aug. 20, at 7:30 p.m.  
The speaker will outline old-age, survivors, and disability phases of the Act. A question and answer period will follow the main talk.  
Residents of China Lake and Ridgcrest are invited to attend.  
Following Tuesday night's meeting, Leland Embrey, district manager of the Bakersfield office, has arranged for a Social Security representative to speak on other phases of Social Security each third Wednesday of the month at the Community Center.



LYLE E. FREEDMAN, son of Mr. and Mrs. Robert Freedman of 56-A Ringgold, has been granted a scholarship to attend the Webb School of California in Claremont for the 1963-64 school year. Lyle attended Vieweg, Groves and Murray Schools here and was an Honors Student at Murray.

Ungraded employees selected are Carroll M. Frick, Code 40112, Model Maker (Machining) and John O. Lindquist, Code P8094, Quartermaster Mechanic (Experimental Machine and Metal Shop). In addition, two ungraded employees were appointed to act as observers at all meetings of the Area Wage Survey Committee. These employees are William C. Russell, Code 5545, Machinist, and Norman F. Castleberry, Code P5313, Inspector (Tools and Gages).

All these employees and the activity representative and his alternate attended the second meeting of the Area Wage Survey Committee and a data collection training session on Aug. 12.

St. Louis will serve as a squadron commander at Mather while Miller will have flight command duties and Wilson will serve as a flight leader.

The local contingent will join several hundred other cadets from Northern California who will be attending classes in weather, navigation, aerospace education, customs and courtesies of the Air Force and other related subjects.

If the schedule permits the cadets will participate in a flying navigator's workshop aboard an Air Force T-29.

Exotic decorations and exciting music are on the agenda for the Hawaiian Luau at the Commissioned Officers Mess on August 23.  
Free Hawaiian Punch will be served on the Lanai between 6 and 7 p.m. Dinner will be from 7 to 9:30 p.m.  
Music for dancing will be played by the Continentals and a special prize will be awarded for the best Hula.  
Please make your reservations early.



CHURCH YOUTH CAMP—Youths attending the All Faith Chapel Protestant Congregation-sponsored summer camp last week at Horseshoe Lake enjoy a campfire "songfest." Thirty-two youngsters and nine adults headed by Chaplain Robert Fenning attended the encampment. Success of this year's camp has warranted plans for another encampment.

# CLERICAL DEVELOPMENT CLASSES

**Nature of the Program**—Courses are provided in areas where needs exist for detailed procedures such as correspondence; areas where new clerical employees are oriented to the overall clerical processes and systems; and in areas where a basic understanding of the use of data or systems is helpful such as the introduction to computer programming and statistics. In addition to this program, the Bakersfield Junior College and the Burroughs Evening High School offer a variety of courses in the evening such as typing, accounting, etc. that may be of interest.

**Registration**—Registration for this Fall semester starts immediately and continues through 16 September 1963. To register, send one completed NOTS COURSE ENROLLMENT AND/OR TUITION REFUND CERTIFICATION (Form 11ND NOTS 12410/28) with the appropriate authorizing departmental signature to Code 654. Enrollees will be notified of class location and any pertinent information prior to the start of each course.

### Description of Courses and Schedules:

- General Clerical Orientation (2 hours) 0800-1000, Thurs., 19 Sept**  
Coordinator: Employee Development Division  
Familiarizes clerical employees with the various manuals (e.g., timekeeping), procedures, methods, and processes used at NOTS. Making appointments, telephone practices, and Navy filing procedures will be covered.
- Correspondence, Mail, File, Record, and Security Procedures (6 hours)**  
1300-1600, Thursday, 12 and 19 December  
Coordinator: Bob Kinzie, Command Administration

Covers the Naval Correspondence Manual, how to use the NOTS mailing system, requirements of classified document control, accountings, marking and stamping procedures, explanation of the Navy filing system, functions of custody control points, etc.

**Personnel Forms (3 hours) 1300-1600, Thursday, 16 October**  
Coordinator: Joe Doucette, Personnel Department  
Information and practice in the completion of personnel forms used by the departments such as PARs, benny-suggs, etc.

**Public Relations (12 hours)**  
Monday, 0930-1130; 16, 23 Dec.; 6, 13, 20, 27 January 1964  
Coordinator: J. T. Bibby

For those who consistently deal with individuals outside their own group, such as policemen, telephone operators, secretaries, clerks in service organizations and others dealing with the public. Presents material and focuses discussions on the techniques of effectively dealing with public groups, how to create effective working relationship, etc.

**Security Procedures for Office Practice (2 hours)**  
1300-1500, 23 October  
Coordinator: R. H. Bodwell, Security Department  
Gives information to insure the proper security procedures in handling classified matter for the average clerical employee. This information will be more detailed than the portion covered in the class on Correspondence, Mail, File, Record and Security Procedures.

**Supply Procedures (4 hours)**  
1300-1400, Thursday, 9, 16, 23, 30 January  
Coordinator: Ellen Young, Supply Department  
Organization and procedures of the Supply Department, including information on the different ordering procedures for purchased and stocked items and the completion of the necessary forms.

**Timekeeping Procedures (2 hours)**  
First Class, 1400-1600, 26 Sept. — Second Class, 1400-1600 27 Sept.

**Coordinator: Gordon Dunkel, Accounting Division**  
Timekeeping procedures, with emphasis on problem areas in job coding, preparation of time cards, relationships between labor worked and labor distribution, leave regulations, and compensatory and excused time.

**Travel Procedures (5 hours)**  
0800-1030, Thursday, 3 and 10 October  
Coordinator: Kay Goodwin, Travel and Transportation Branch  
Focuses on the explanation and preparation of travel orders, claims, visitor clearances and other travel procedures.

**Computer Programming, Part I (12-15 hours)**  
Programmed Instruction: AutoTutor, Individually arranged  
Coordinator: Employee Development Division, Code 654  
This course comes in four parts; Part I is recommended for those who work with the various IBM systems such as Herbie, fiscal data, etc. Part I is an introduction to programming; it tells you what the computers can do and how to understand what they do.

**Improving Your Writing (6-12 hours)**  
Programmed Instruction: AutoTutor Individually arranged  
Coordinator: Employee Development Division, Code 654  
Improves grammar such as subject-verb agreement, reference of pronouns, etc. and is recommended to follow the punctuation course.

**Introductory Statistics (20-25 hours)**  
Programmed Instruction: Min/Max, individually arranged (Take-home study course)  
Coordinator: Employee Development Division, Code 654  
Provides statistical clerks (or clerks working with statistics for scientists and engineers) with a grasp of statistical fundamentals.

**Punctuation (2-4 hours)**  
Programmed Instruction: AutoTutor, individual  
Coordinator: Employee Development Division, Code 654  
A quick review and refresher course in basic punctuation.

# COURSE SCHEDULE - FALL 1963

- University of California at Los Angeles
- Science and Engineering Day Classes
- University of Southern California
- Supervisor and Executive Development Classes
- Journeyman and Technician Development Classes
- Clerical Development Classes
- Bakersfield College, Evening Division
- Burroughs Evening High School

## PREFACE

This Course Schedule provides detailed information about the classes open to NOTS employees at China Lake for this Fall 1963 semester.

The growth and development of people is one of the most exciting and important parts of the success of NOTS. We recommend that you use this Course Schedule, together with the Career Planning Manual revised in August 1963, in planning individual employee development programs.

Departmental Personnel Management Advisors are available to supervisors and employees for discussions of available development

opportunities, including rotational work assignments, correspondence courses and others not listed in this Schedule.

Additional copies of this Course Schedule and the Career Planning Manual may be obtained from Department Offices or your Department's Personnel Management Advisor.

RAYMOND A. HARRISON  
Acting Head, Personnel Department

# BAKERSFIELD CLASSES

**Bakersfield College Evening Division, China Lake, offers a variety of courses, many of which are appropriate for those employees interested in evening class opportunities. Listed below are the Fall Semester Classes that appear to be most related to the development of on-the-job skills of NOTS employees. For a complete listing see the BCED Fall Schedule. Copies of this schedule or counseling appointments may be obtained by calling FR 5-2348.**

**Registration:** Registration may be completed in the Burroughs High School Library on 23 August (8 a.m.-5 p.m.) and 22, 26, and 27 August (5-8 p.m.). Registration on these dates is important to insure a class size sufficient to hold the course. It is possible to register on the first day of class only if the particular class has had sufficient pre-enrollment to form. The semester begins during the week of 3 September.

### Description of Courses and Schedules:

- Business Law (3) Bus Ad 18A**  
Tues.-Thurs., 6:30-7:53 — Mr. Toombs
- Intro Bookkeeping/Accounting (3) Bus Ad 53A**  
Tues.-Thurs., 8-10 — Mr. Toombs  
Prereq: Math 51, can be taken concurrently
- General Inorganic Chemistry (5) Chem 1A**  
Mon.-Wed., 5:30-10 — Mr. Ward  
Prereq: "E" in high school chem and advanced algebra or "C" in Chem 2A and Math D and a qualifying score on a prereq. chem. exam.
- Intro Gen Chem Chemistry (5) Chem 2A**  
Tues.-Thurs., 5:30-10 — Mr. Sergy  
Prereq: High school algebra or Math A
- Intro to Geology (3) Geo 10**  
Mon.-Wed., 6:30-7:53 — Mr. Chipman
- Mechanics (3) Physics 1A**  
Tues.-Thurs., 6:30-9:30  
Prereq: Concurrent registration in Math 3A
- Technical Physics (4) Physics 60A**  
Mon.-Wed., 6:30-9:30  
Prereq: "C" in high school algebra or Math 53A or Math A taken concurrently.
- General Psychology (3) Psych 1A**  
Mon.-Wed., 6:30-7:53 — Mr. Quiggle  
Prereq: Qual score on College Aptitude Test or "C" in Psych 51.

**Applied Psychology (3) Psych 51**  
Mon.-Wed., 6-6:23 — Mr. Quiggle

**Intro to Soc Science (3) Soc Sci 53A**  
Mon.-Wed., 6:30-7:53 — Mr. Williamson

**Intro to Sociology (3) Sociology 1**  
Tues.-Thurs., 6:30-7:53 — Mr. Quiggle

**Principles of Econ (3) Econ 1A**  
Tues.-Thurs., 8-9:30 — Mr. McCoy

**Language Skills (3) English 51A**  
Mon.-Wed., 8-9:30 — Mrs. Sand  
Prereq: English Class Test

**Reading Improvement (1) Eng 52A**  
Mon.-Wed., 5:30-6:23 — Mrs. Handler

**Tech & Report Writ (3) Engl 54A**  
Tues.-Thurs., 6:30-7:53 — Mr. Van Hagan  
Prereq: English XB Classification

**Public Speaking (3) Speech 1A**  
Mon.-Wed., 6:30-7:53 — Mr. Lawson  
Prereq: Pass grade in Subj A Exam or English Class Exam or "C" in English XB

**Elementary Algebra (3) Math A**  
Tues.-Thurs., 6:30-9 — Mr. Schult

**Plane Geometry (3) Math B**  
Mon.-Wed., 6:30-9 — Mr. Rambis  
Prereq: Math A or 1 yr. in high school algebra

**Plane Trigonometry (3) Math C**  
Tues.-Thurs., 8-9:30 — Mr. Ewing  
Prereq: Plane Geometry and advanced high school algebra or Math D.

**Mathematical Analysis (3) Math 1**  
Tues.-Thurs., 6:30-7:53 — Mr. Ewing  
Prereq: Math D or equiv and Math C

**Anal Geometry and Calculus (3) Math 3A**  
Tues.-Thurs., 5-6:23 — Mr. Ewing  
Prereq: Math B, C, D, or equiv. A qualifying exam in prereq math for this course given. Those who fail must enroll in Math 1 before Math 3A.

**Business Mathematics (3) Math 51**  
Mon.-Wed., 8-9:30 — Mr. Ewing

**Technical Mathematics (3) Math 53A**  
Mon.-Wed., 5-6:23 — Mr. Ewing

**Adv Technical Math (3) Math 53C**  
Mon.-Wed., 6:30-7:53 — Mr. Ewing  
Prereq: "C" in Math 53A-B

**Begin Typing (3) Office Skills 50A**  
Mon.-Wed., 6:30-9 — Mr. Gilkinson  
Prereq: Beginners or one semester of high school typing

**Intermed Typing (2) Off Skills 51**  
Mon.-Wed., 5-6:23 — Mr. Gilkinson  
Prereq: One semester of typing

**Office Prac. (3) Off Skills 53A**  
Tues.-Thurs., 6:30-9  
Prereq: "C" in 1 yr. of typing

**Industrial Drawing 30A**  
Mon.-Wed., 7-10 — Mr. Drow

**Industrial Drawing 30A**  
Tues.-Thurs., 7-10 — Mr. Ingram

**Standard Red Cross First Aid (1) Phys Ed 31A**  
Mon. 8-10, Nov. 4 for 9 Weeks — Mr. White

- OTHER COURSES**
- Basic Design (2) Art 3
  - Elem Photography (3) Art 33A
  - Theatre Lab (1) Drama 27
  - English Fund (3) English XA
  - English Fund (3) English XB
  - Read and Compos (3) English 1A
  - Intro to Amer Lit (3) English 30A
  - Elem German (4) German 1
  - El. German Conver (2) German 30A
  - El. Russian Conver (2) Russ 32A
  - El. Span Conver (2) Span 32A
  - Elem Public Writ (1) Journ 11A
  - Class Piano (1) Music 5A
  - Public Sch Music (3) Music 9
  - College Choir (1) Music 14
  - Intro to Philos (3) Philos 6A
  - Intro to Life Sci (3) ES 11A
  - Gen Biology (3) Life Sci 53
  - Modern Dance (1/2) Phys Ed 5M
  - Health Education (2) Heal. Ed 1
  - Swimming (1/2) Phys Ed 6S
  - Intro to Geography (3) Geo 1A
  - History of U. S. (3) Hist 17A
  - California Hist (3) Hist 18
  - Educ and Voc Plan (1) Orient 1

# BURROUGHS CLASSES

**Burroughs Evening High School offers a variety of courses, many of which are appropriate for those employees interested in evening class opportunities. Listed below are the Fall Semester Classes that appear to be most related to the development of on-the-job skills of NOTS employees. For a complete listing see the BEHS Fall Schedule. Copies of this schedule or counseling appointments may be obtained by calling FR 8-5601 or FR 5-4476.**

**Registration:** Registration may be completed in the Music Wing of Burroughs High School on 21, 22, 23, and 26 August (noon-7 p.m.). Anyone over 18 years of age or a high school graduate may attend. The semester begins 3 September.

### Description of Courses and Schedules:

**Algebra 1 — Wed. 7-10 — Bartlett**

- Astronomical Inst Design — Tues. 7-10 — Bevis**
- Basic Electricity — Tues. 7-10 — Whitfield**
- Bookkeeping 1 — Wed. 7-10 — Toombs**
- Electronics — Thurs. 7-10**
- Industrial Trigonometry — Wed. 7-10 — Flagg**
- Mech Draw & Blueprint Read — Thur. 7-10 — McNeill**
- Plane Geometry — Thur. 7-10**
- Preparation for Algebra — Tues. 7-10 — Whittingham**
- Sheetmetal Layout — Tues. 7-10 — Flagg**
- Shorthand 1 — Tues. 7-10 — Ruhge**
- Typewriting 1 — Wed. 7-10 — Sasaki**
- Typewriting 2 — Mon. 7-10 — Prereq: Typewriting 1**
- Woodshop — Thur. 7-10 — Maxwell**

- OTHER COURSES**
- American Government 1
  - Arithmetic Review
  - Art 1
  - Art 3
  - Citizenship
  - Conversational French
  - Conversational Spanish
  - Debate
  - English Review
  - English 3
  - English for Foreign Born
  - Expectant and New Parents
  - Interior Decoration
  - Mosses
  - Needlecrafts 1
  - Needlecrafts 2
  - Sewing 1
  - Sewing 2
  - Sewing 3
  - Spelling and Vocabulary
  - Swimming
  - World Science 1

# U.C.L.A. SCHEDULE OF CLASSES

**REGISTRATION.** Registration will be held 0800-1200, Mon.-Fri., 3-13 September, in the Education Office, Room 1004, Michelson Laboratory. Registration fees are payable by check or money order at the time of registration. The amount of the fee is listed after each course.

**GRADUATE STUDENTS IN ENGINEERING.** The Department of Engineering, UCLA, requires all graduate students to complete 6 units of course work every semester until they have fulfilled the unit requirements for the M.S. Any student who completes less than 6 units is obliged to withdraw from the University, and must reapply for readmission if he wishes to continue at a later date. Leave of absence and in-absentia status are difficult to obtain.

**COUNSELING.** UCLA advisors will be available on 4 September (1100-1500) in the Education Office. Students are requested to contact the UCLA registrar in the Education Office for appointments.

**USE OF OFFICIAL TIME AND/OR TUITION REFUND ELIGIBILITY.** If an employee's supervisor certifies that the training is relevant to his present or projected work assignment, the employee may do one of the following: (1) If carrying 6 or more units, request permission via his departmental channels to use official time to study not to exceed 6 hours per week for 15 weeks; (2) If carrying 6 or more units and authorized to use 3 or less hours of official time to study for one 3-unit course, submit one copy of NOTS Course Enrollment and/or Tuition Refund Certification 11ND NOTS 12410/28 prior to the first class meeting to establish tuition refund eligibility for a second 3-unit course; or (3) Submit one copy of same form to establish tuition refund eligibility for each course prior to the first class meeting.

**REFUNDS.** Refunds will be made under the following conditions if tuition refund eligibility has been established: (1) Successful completion (a grade of "C" or higher) of a course; (2) Withdrawals prior to the second meeting of class and presenting admission form to the Education Office; or (3) Withdrawals after second meeting and before fourth meeting — tuition refund minus \$5 will be made by the University.

**WITHDRAWALS AND AUDITING.** The last day for graduate students to drop courses without penalty of failure is 25 November 1963. Petition forms are available in the Education Office. The last day for extension students to audit a course (no credit) is the first meeting after the mid-term. The instructor will request each student to indicate his desired status after the first mid-term grade report. Graduate students who have dropped a course and extension students who are auditing a course may continue to attend class without the obligation of submitting homework or taking examinations.

**TEXTBOOKS.** Each student is responsible for purchasing his textbooks. Order blanks are available in the Education Office. It is recommended that books be ordered early to insure receipt prior to the beginning of classes.

**ACCESS TO MICHELSON LABORATORY.** Students who do not have access to the Lab should register on or before 5 September so that they may be cleared for admittance to classrooms before the semester begins. Students unable to complete registration by 5 September should notify the Education Office giving: full name, mailing address, citizenship, and the name of the courses to be taken. NO UNCLEARED STUDENT WILL BE ADMITTED TO THE LAB CLASSROOMS UNLESS HIS REGISTRATION OR NOTICE OF INTENT TO REGISTER IS RECEIVED IN THE EDUCATION OFFICE BY 5 SEPTEMBER 1963.

**PREREQUISITES.** The titles of courses listed as prerequisites for the various courses in the Extension and Graduate Program are as follows:

- Engineering 4C, Introduction to Engineering Properties of Material
- Engineering 100A, Circuit Analysis
- Engineering 102B, Engineering Dynamics
- Engineering 105 A&B, Engineering Thermodynamics
- Mathematics 5A&B, Analytic Geometry and Calculus
- Mathematics 4A&B, Analytic Geometry and Calculus
- Mathematics 5A&B, Analytic Geometry and Physics
- Mathematics 6A&B, Differential and Integral Calculus
- Mathematics 37, Mathematics for Social and Life Sciences
- Mathematics 108, Linear Algebra
- Mathematics 110A, Advanced Engineering Mathematics
- Mathematics 119A, Differential Equations
- Mathematics 122A&B, Advanced Calculus
- Physics 1A, General Physics: Mechanics of Solids
- Physics 1B, General Physics: Mechanics of Fluids, Heat and Sound
- Physics 1C, General Physics: Electricity and Magnetism
- Physics 1D, General Physics: Light and Modern Physics
- Physics 2A, General Physics: Mechanics, Heat and Sound
- Physics 2B, General Physics: Electricity, Magnetism, and Light
- Physics 121, Atomic Physics
- Psychology 111, Psychological Measurement and Evaluation

## EXTENSION PROGRAM

**EXTENSION PROGRAM SCHEDULE.** Courses listed on the following pages are open to all students who satisfy the prerequisites.

(\*) Starred courses may, by subsequent petition, be offered toward the satisfaction of the unit requirements for the master's degree up to a maximum of 9 units.

- Engineering XL 103A, Elementary Fluid Mechanics (3) \$45.00**  
Instructor: K. Okachi, M.S., Aerospace Engineer, Weapons Dev. Dept.  
Tues.-Thurs., 4:30-6 p.m., M. L. Room 1000 (30 meetings — 10 Sept - 7 Jan.)  
Prerequisites: Engineering 102B and 105A  
Text: Venard, Elementary Fluid Mechanics, 1961, 4th ed. (Wiley)  
Introductory course in the principles of mechanics to the flow of compressible and incompressible fluids. Include hydraulic problems of flow in closed and open conduits.
- Engineering XL 108A, Strength of Materials (3) \$45.00**  
Instructor: J. Pearson, M.S., Hd, Detonation Physics, Grp, Research Dpt.  
Mon.-Wed., 4:30-6 p.m., M. L. Room 20108 (30 meetings — 9 Sept - 6 Jan.)  
Prerequisites: Engineering 4C, Math 4B or 6B  
Text: Shanley, Strength of Materials, 1957, (McGraw-Hill)  
Stress, strain, and elasticity; thin shells, welded and riveted joints; shafts and helical springs, beams, shear, moment, flexural stress, shearing stress, deflection, unsymmetrical loading; column-theory, combined stresses.
- Engineering XL 110B, Active Electronic Circuits I (3) \$45.00**  
Instructor: R. G. Sewell, M.S., Physicist, Weapons Dev. Dept.  
Mon.-Wed., 4:30-6 p.m., M. L. Room 1000 (30 meetings — 9 Sept - 6 Jan.)  
Prerequisite: Engineering 100A

**Text: Le Croisette, Transistors, 1963, (Prentice-Hall)**  
Amplifiers: untuned voltage and power, direct-coupled, broad band, tuned voltage and power; feedback. Oscillators, modulations, mixing, detecting; analog computing circuits. Design considerations.

**Engineering XL 136B, Control Systems Theory (3) \$45.00**  
Instructor: M. C. Creusere, M.S., Head, Armament Control Systems Branch, Aviation Ordnance Department  
Mon.-Wed., 6:30-8 p.m., M. L. Room 1011 (30 meetings — 9 Sept - 6 Jan.)  
Prerequisite: Engineering 186A

**Text: Truxal, Automatic Feedback Control System Synthesis, 1955 (McGraw-Hill)**  
Extended synthesis techniques; multi-pole control systems; additional problems in linear systems; analysis and synthesis of nonlinear control systems.

**Engineering XL 150A, Industrial Heat Transfer (3) \$45.00**  
Instr: R. W. Van Aken, M.S., Hd, Aerothermodynamics Br., Wemp. Dev. Dept.  
Tues.-Thurs., 6:30-8 p.m., M. L. Room 20108 (30 meetings — 10 Sept - 7 Jan.)  
Prerequisites: Engineering 105B

**Text: Kreith, Principles of Heat Transfer, (International Textbook)**  
Basic principles of heat transfer and their application to the design of industrial equipment. Steady state and transient problems of conduction by analytical and numerical methods. Free and forced convection. Transfer of radiant energy.

**Geology X 199, Mineral Associations (3) \$45.00**  
Instructor: C. F. Austin, Ph.D., Geologist, Research Dept.  
Monday, 6:30-9:30 p.m., M. L. Room 1000 (15 meetings — 9 Sept - 6 Jan.)  
Text: To be announced

The associations of minerals, how certain minerals occur together as a result of the environment at the time of formation or deposition, and the outcrop behavior of primary mineral assemblages.

**Mathematics XL 110B, Advanced Engineering Mathematics (2) \$35.00**  
Instructor: W. B. Stelwagon, M.A., Mathematician, Research Department  
Mon.-Wed., 4:30-6 p.m., M. L. Room 1001 (20 meetings — 9 Sept - 13 Nov)

**Text: Sokolnikoff and Redheffer, Mathematics of Physics and Modern Engineering, (McGraw-Hill)**  
Ordinary differential equations and orthogonal functions, partial differential equations, line integrals, Green's theorems, vector analysis, solution of equations.

**Mathematics XL 111A, Introduction to Higher Algebra (3) \$45.00**  
Instructor: C. A. Flanagan, M.A., Mathematician, Research Department  
Tues.-Thurs., 4:30-6 p.m., M. L. Room 1011 (30 meetings — 10 Sept - 7 Jan.)  
Prerequisite: Mathematics 108

**Text: Birkhoff and MacLane, A Survey of Modern Algebra, (Macmillan)**  
Integral domains, fields, polynomial domains, factorization theory, groups, vector spaces and linear transformations, rational and Jordan canonical forms, quadratic and hermitian forms.

**Math XL 137, Numerical Methods in Differential Equations (3) \$45.00**  
Instructor: A. A. Folt, M.A., Physicist, Weapons Dev. Dept.  
Tues.-Thurs., 6:30-8 p.m., M. L. Room 1017 (30 meetings — 10 Sept - 7 Jan.)  
Prerequisites: Mathematics 119A and 122A

**Text: Henrici, Discrete Variable Methods in Ordinary Differential Equations (Wiley)**  
Forward integration, error analysis, Milne, Runge-Kutta, and difference methods, systems of equations, higher order and nonlinear equations, two point boundary conditions.

**Physics XL 105, Analytic Mechanics (3) \$45.00**  
Instructor: A. G. Hoyem, Ph.D., Head, Aircraft Projects Division, Aviation Ordnance Department  
Mon.-Wed., 4:30-6 p.m., M. L. Room 1017 (30 meetings — 9 Sept - 6 Jan.)  
Prerequisites: Physics 1A-B-C-D, or 2A, 1C-D, or 2A-B, Math 5A-B, 6A-B, or 3A-B, 4A-B

**Text: Fowles, Analytical Mechanics, (Holt, Rinehart and Winston)**  
Kinematics and dynamics (statics and kinetics) or particles, systems of particles, and rigid bodies.

**Physics XL 121, Atomic Physics (3) \$45.00**  
 Instructor: J. L. Thompson, Ph.D., Physicist, Test Dept.  
 Tues.-Thurs., 4:30-6 p.m., M. L. Room 1011 (30 meetings — 10 Sept - 7 Jan)  
**Text:** Eisberg, Fundamentals of Modern Physics, (Wiley)  
 Atomic nature of matter and atomic composition. The propagation of electromagnetic waves and their interaction with matter. Special relativity. Atomic spectra and electron distribution. Basic concepts of wave mechanics.

**Psychology XL 107, Advanced Psychometric Methods (3) \$45.00**  
 Instructor: F. Friedlander, Ph.D., Research Psychologist, Central Staff  
 Tues.-Thurs., 7:30-9 p.m., M. L. Room 1011 (30 meetings — 10 Sept - 7 Jan)  
**Prerequisites:** Recommended: Psychology 111, Math 3B or 37  
**Text:** To be announced  
 Application of higher statistical methods to psychological data.

## GRADUATE PROGRAM

**GRADUATE PROGRAM SCHEDULE.** The 100 series courses listed below are open to all students who have graduate status at UCLA. Courses in the 200 series are generally open only to graduate students who have rectified all grade-point deficiencies.

**Engineering 115B, Active Electronic Circuits**  
 Same as Engineering XI 115B. See above.

**Engineering 136B, Control Systems Theory**  
 Same as Engineering XI 136B. See above.

**Engineering 150A, Industrial Heat Transfer**  
 Same as Engineering XI 150A. See above.

**Engineering 245B, Properties of Engineering Materials (3) \$45.00**  
 Instructor: G. J. Plalm, Ph.D., Associate Head, Research Dept.  
 Tues.-Thurs., 4:30-6 p.m., M. L. Room 20108 (30 meetings — 10 Sept - 7 Jan)  
**Prerequisite:** Physics 121 (or equivalent)  
**Text:** Kittel, Solid State Physics, 1958, (McGraw-Hill)  
 Applications of solid state physics to determination of properties (other than mechanical) of engineering materials. Introduction to modern concepts. Specific heat, conductivity (conductors and semiconductors), dielectrics, magnetic properties. Electron theory of alloys.

**Engineering 299-S, Research in Engineering (1) \$20.00**  
**Instructor, time and place to be arranged.**  
 Investigation of advanced technical problems.

**Engineering 299-T, Research in Engineering (4) \$65.00**  
**Instructor, time and place to be arranged.**  
 Thesis work for the Master's Degree. For students who have completed course work.

**Mathematics 111A, Introduction to Higher Algebra**  
 Same as Mathematics XL111A. See above.

**Mathematics 137, Numerical Methods in Differential Equations**  
 Same as Mathematics XI 137. See above.

**Mathematics 224A, Complex Analysis (3) \$45.00**  
**Instructor:** R. E. Smithson, Ph.D., Mathematician, Research Department

**Mon.-Wed., 4:30-6 p.m., M. L. Room 1011 (30 meetings — 9 Sept - 6 Jan)**

**Prerequisites:** Mathematics 122A and B  
**Text:** Hille, Analytic Function Theory, Volumes I and II (Ginn)  
 Covers the approximate equivalent of Ch. I-III of Alford Complex Analysis. Introduction to and rigorous treatment of the theory of complex numbers and functions, linear transformations, conformal mappings, Cauchy's theorem and its consequences, residue calculus.

**Mathematics 260, Quantitative Aspects of Communication Sciences (3) \$45.00**

**Instructors:** C. B. Tompkins, Ph.D., Professor of Mathematics, and Director of the Computing Facility, UCLA; and Mathematician, Communications Research Division, Institute for Defense Analysis, Princeton, New Jersey, (1962-63).

**J. F. Mount, Ph.D., Lecturer in Mathematics, UCLA; and Special Representative, University Department, International Business Machines, Inc., Los Angeles, California.**  
 Saturday, 9 a.m. - 12 p.m., M. L. Room 1011 (15 meetings — 21 Sept - 18 Jan)

**Prerequisites:** Knowledge of calculus and differential equations.  
**Text:** Hanecek, An Introduction to the Principles of Communication Theory, 1961, (McGraw-Hill)

A development of basic concepts of communications based mainly on a Bayesian (Savage) description of the objective of the communications. Current communications practice will be considered to be realistic, and idealizations beyond this practice will be presented as unconfirmed idealizations, but the presentation will be from a point of view of a careful mathematician (which differs from that of one who carelessly applies quantitative formulas without due consideration of the fundamentals). The mathematician will have participated in some practical aspects of the subject and will present practical aspects in careful mathematical formulation.

# SCIENCE & ENGINEERING DAY CLASSES

**NATURE OF PROGRAM.** These courses complement the Station's academic program of evening classes. The courses apply basic scientific and engineering knowledge and techniques to the special problems of weapons research, development, test, use, and production. The official time devoted to attendance and homework preparation will not exceed 4 hours per week for any student. A grade of "O" (outstanding), "S" (satisfactory), or "U" (unsatisfactory) is assigned to participants completing these courses.

**REGISTRATION.** Registration continues through 6 September. To enroll, submit one copy of NOTS COURSE ENROLLMENT AND/OR TUITION REFUND CERTIFICATION 11ND NOTS 12410/28 to Code 6503. Enrollees, approved by their Departments will be accepted unless otherwise notified by Code 6503. An enrollee who wishes to withdraw from a course must submit an In-Service Withdrawal Request, 11ND NOTS 2930 to the instructor via his supervisor.

**AUTHORIZATION CRITERIA.** No employee is authorized to participate in more than 16 weeks of courses (one 16 weeks course or two 8 weeks course) with an S & E designation in any one semester. Supervisors should consider the relation of course content to the actual or prospective work assignments of the employee. Enrollees are expected to attend classes regularly. CONFIDENTIAL CLEARANCE IS REQUIRED.

### SCHEDULE.

**S & E 6A, Terminal Ballistics, 8 meetings (16 hours)**  
**Wednesdays:** 0800-1000, M. L. Conference Room A. Starts 11 September  
**Instructor:** M. E. Backman, Research Physicist, Detonation Physics Group, Research Department

Introductory survey of the design of high explosive warheads and of their target-mechanisms. Safe handling, detonation, effects of high explosives, including blast, fragmentation, shock loading, and under water phenomena. The shaped charge and fragment ballistics. Target effects, including penetration, structural damage, and fire raising. Warhead design and principles of fuze operation.

**S & E 6B, Terminal Ballistics, 8 meetings (16 hours)**  
**Wednesdays:** 0800-1000, M. L. Conference Room A. Starts 13 November  
**Instructor:** M. E. Backman  
 Same general range of topics as the elementary course. Particular focus on rocket and guided missile design.

**S & E 14, Facilities, 8 meetings (16 hours)**  
**Tuesdays:** 0800-1000, M. L. Conference Room A. Starts 12 November

**Instructor:** I. I. Shull, Head, Engineering Div. Public Works  
 Designed to acquaint project engineers, managers, and administrators with procedures for obtaining facilities to support research and development programs, including: (a) Navy Dept. responsibility for providing facilities; (b) facilities planning and research programs; (c) design and utilities considerations; (d) specs and cost estimating; (e) architectural engineering and construction contracts; (f) coordination in integrating electronics equipment with facilities construction.

**S & E 18, Inertial Navigation, 8 meetings (16 hours)**  
**Tuesdays:** 0800-1000, M. L. Conference Room A. Starts 10 Sept.  
**Instructor:** J. W. Oestreich, Head, Weapons Systems Analysis Branch, Aviation Ordnance Department  
 Theory and selected applications of precision gyros, rate gyros, accelerometers, integrators, and computing techniques, from the standpoint of systems for inertial navigation of submarines, aircraft, and missiles.

**S & E 20, Technical Presentations, 16 meetings (32 hours)**  
**Thursdays:** 0800-1000, Stran Steel No. 1 Conference Room. Starts 12 Sept.  
**Instructors:** A. B. Cristman; E. E. Kirkbride; Presentations Division; D. T. McAllister; Consultant, Technical Information Department

Through lectures, group discussions, and workshops, this course covers the basic techniques of planning and developing different types of presentations. Primary emphasis is on presentations of a technical nature. Two different workshops provide an opportunity to either improve speech delivery or to develop a presentation related to the person's work. Recommended for project and administrative personnel who would like to do a better job of presenting their ideas and proposals.

**S & E 26, Fundamentals of Welding Engineering, 16 meetings (32 hours)**  
**Mondays:** 0800-1000, M. L. Conference Room A. Starts 9 Sept.  
**Instructor:** G. E. Metzger, Welding Engineer, Engineering Evaluation Branch, Engineering Department  
 Welding, brazing, and soldering processes. Metallurgical and mechanical effects of welding. Design for welding. Specifically arranged for engineers and scientists engaged in design.

**PROGRAMMED INSTRUCTION COURSES. Register with the Employee Development Division, Code 654.**

**PERT, (10-20 hours) Individually scheduled**  
 Presents basic PERT techniques of project planning, scheduling and control.

**Computer Programming, (30-50 hours) Individually scheduled**  
 What computers can do, how to talk to them, how to get data out of them, etc. Neither electrical circuitry or internal functioning of computers is covered. Part I - Introduction to Programming; Part II - Programming Techniques; Part III - Advanced Techniques; Part IV - Business and Science Applications, FORTRAN language.

**Computer Mathematics, (8-20 hours) Individually scheduled**  
 Provides an understanding of the octal and binary number systems used in electronic computers to perform math computations.

**Introductory Statistics, (20-25 hours) Individually scheduled**  
 Designed in two parts to provide a grasp of statistical fundamentals. Part A - Descriptive Statistics; Part B - Statistical Inference.

### DESCRIPTION OF COURSES AND SCHEDULES.

**P. A. 324, Problems in Public Personnel Administration (3) \$108.00**  
**Instructor:** Richard W. Gable, Ph.D., Associate Professor; P.A. Thursday, 4:30-7:10 p.m., M. L. Conference Room A, 15 meetings, beginning 26 September 1963  
**Prerequisite:** Admission to graduate status in the School of P.A. Evaluation of government personnel systems; classification, compensation, recruitment, examination, training, working conditions, incentives, performance ratings, and employee organizations in the public service.

**P. A. 391, Bibliography and Research (3) \$108.00**  
**Instructor:** Richard W. Gable  
**Thursday, 8:10-10:30 p.m., M. L. Conference Room A, 15 meetings beginning 26 September 1963**  
**Prerequisite:** Admission to graduate status in the School of P.A. Research methodology in the social sciences; survey of authorities and their writings; solving bibliographical problems; manuscript form.

# SUPERVISOR AND EXECUTIVE DEVELOPMENT CLASSES

**Nature of the Program—**The courses are designed to provide development opportunities for NOTS supervisors, executives, and potential supervisors so that they may perform their current jobs with greater expertise and to prepare for new and more challenging assignments.

**Registration—**Registration for this Fall semester starts immediately and continues through 16 September. To register, send one completed copy of NOTS COURSE ENROLLMENT AND/OR TUITION REFUND CERTIFICATION 11ND-NOTS-12410/28 to Code 654. The suggested levels of participation for some courses are noted but the final decision about nominations of any person to any course is the responsibility of the person's department. Nominees approved will be notified where courses are to be held.

### Description of Courses and Schedules:

**Fundamentals of Supervision (24 hours) Scheduled when needed by contacting the Department Personnel Management Advisor**

**Coordinator:** Departmental Personnel Management Advisors  
 Tailored to the needs of groups of supervisors within one or several departments. Material ranges from the basic procedural knowledge required to discussion of problems faced by supervisors in this course. The detailed course outline is determined by the group of participating supervisors and the coordinator at the opening session.

**Problem Solving Workshop (3½ days) Scheduled when needed by contacting the Department Personnel Management Advisor**

**Coordinator:** Departmental Personnel Management Advisors  
 Workshops designed for 10-15 supervisors or executives working together in the same organization or in the same problem area. Workshops will resemble a sensitivity training laboratory and will take place in a retreat type atmosphere. Will use services of consultants such as Dr. Jack Gibb, Dr. George Lehner, or Dr. Chuck Ferguson.

**The Supervisor and Employee Groups (12 hours) Scheduled when needed by contacting the Department Personnel Management Advisor**

**Coordinator:** Departmental Personnel Management Advisors  
 Designed for groups of supervisors within a department. Content and meaning of Executive Order 10988, Employee-Management cooperation in the Federal Service, and the local application of this program.

**The Supervisor and the Equal Employment Opportunities Program (12 hours) Scheduled when needed by contacting the Department Personnel Management Advisor**

**Coordinator:** Departmental Personnel Management Advisors  
 Designed for groups of supervisors within a department. Focuses on content and meaning of Executive Order 10925, establishing the President's Committee on Equal Employment Opportunities, with particular attention to the local application of this program.

**Management E Project Manager Seminar (24 hours) Begins week of 6 Jan**

**Coordinator:** Ted Gantsch, JPL; Ken Heyhoe, Central Staff  
**Suggested for:** Project Managers and potential project managers  
 Analyzes the role of the project manager and affords participants an opportunity to exchange ideas. Discusses relevant literature; includes some lecturing, a few experiments and participation in small group discussion.

**Seminar on Personnel Administration (12 hours) 0950-1130 Tues 5 Nov - 10 Dec**

**Coordinator:** Joe Doucette, Personnel Department  
**Suggested for:** Supervisory and potential supervisory personnel  
 Focuses on finding practical solutions to problems encountered by supervisors in working with people. Discusses items such as "how to hire someone, how to write P.D.s, what is a register, cert, etc."

**Employee Management Relations (16 hours) 0800-1000, Tues, 24 Sept - 29 Oct**

**Coordinator:** Austin Ross, Personnel Department  
 Emphasizes the philosophy of employee management relations at NOTS and considers supervisor-subordinate relationships in: adverse actions; performance appraisals; organized employee group relations; services; grievances and complaints; injury compensation; retirement, etc.

**Personnel Employment Actions (12 hours) 0930-1130 Fridays, 1 Nov - 2 Dec.**

**Coordinator:** Bob Patterson, Personnel Department  
**Suggested for:** Supervisory and potential supervisory personnel  
 Covers recruitment, examinations, reassignments, transfers, interviewing techniques and regulations requiring action by the supervisor.

**Security and Communication at NOTS (4 hours) 1300-1500, — 9 and 16 October**

**Coordinator:** R. H. Bodwell, Security Department  
 Deals with the criteria for determining what should be classified, at what level, why, and authorizing signatory responsibility of supervisors for security matters. A panel of research-engineering supervisors and security personnel will discuss practices at NOTS that permit needed communications while maintaining the security of classified material.

**Retirement Planning (20 hours - combined home study) 1st class, 1430, 16 Sept.**

**Coordinator:** Austin Ross, Personnel Department  
**Suggested for:** Employees within five years of retirement age  
 At the first meeting participants are given various retirement material to study at home; subsequent meetings are established at that time. Discusses topics such as challenge of later life, financial planning, the retirement system, living arrangements, etc. Employees who registered for the course last year are requested to register again.

**Engineering and Management (80 hours) Offered between semesters at UCLA**

**Coordinator:** Employee Development Division  
**Suggested for:** Senior scientists, engineers, and supervisory personnel  
 Station management will select 4. Prepares for more effective design, installation, and administration of systems (coordinating men, materials, machines, and money). Brochures describing the courses will be distributed to Departments in early-October.

**Personnel Management Institute (40 hours) 28 Oct. - 1 Nov.**

**Coordinator:** Ray Harrison, Personnel Department  
**Suggested for:** Supervisory personnel nominated by their depts.  
 Station management will make final selections. The basic framework of personnel management in the federal service. The role and responsibilities of supervisors for civilian personnel management and an examination of the tools available to them. Includes various outside speakers from the Civil Service Commission, OIR, etc.

**Basic Leadership Training Laboratory (4½ days) 1st class, 4-8 October; 2nd class, 2-6 December. Held in Kernville, Calif.**

**Coordinator:** Dr. George Lehner, Professor of Psychology, UCLA  
**Suggested for:** Supervisory personnel nominated by their Depts.  
 Develops participant's awareness to groups and his own influence on a group through theory presentations and structured conferences.

**Problem Analysis and Decision Making (40 hours) 14-18 October**

**Coordinator:** Kepner, Tregoe and Associates  
**Suggested for:** Senior project and supervisory personnel  
 Principles underlying good management in a "learn by doing" management situation. Focuses on problem solving, decision making and control setting.

**PERT (20 hours) - Programmed Instruction Text. Individually scheduled**

**Coordinator:** Employee Development Division.  
 Basic PERT techniques, vocabulary and approach of planning, scheduling and control.

**Seminar on Methods of Improving Station-Bureau Relationships (30 hours)**

**Tues., 0930-1130, 22 Oct - 28 Jan**  
**Coordinator:** Russ Bjorklund, Head, Central Staff  
**Suggested for:** GS-12 and above  
 Identifies problems affecting relationships between NOTS and the Bureau and various Washington agencies. Various points of view are presented by management representatives and visiting Washington officials. Concentrates on ideas of improving these relationships. Participants are expected to present a case study for discussion, and/or a set of recommendations to solve a specific problem.

**Seminar on Industrial Sociology (24 hours) 1430-1630 Tuesdays, 1 Oct - 12 Dec.**

**Coordinator:** Dean Hewitt, Personnel Department  
 Explores man's relationships to work organizations, through readings about, and discussion of, leadership patterns, adjusting organizational behavior, organizational conflict, etc.

**Creativity Research Seminar (40 hours) 13-17 January**

**Coordinator:** Dr. R. W. Stephenson, Personnel Department  
**Suggested for:** GS-11 or equivalent and above  
 After a brief review of the literature on creativity, participants will try to solve test problems in a creative way with the help of several procedural aids to creative thinking. In later sessions, the class will continue to try and solve the test problems creatively, but will work under the influence of a variety of obstacles to creative thought. Participants will be asked to take creativity tests and personality inventories, as a part of the course.

# JOURNEYMAN AND TECHNICIAN DEVELOPMENT CLASSES

**Nature of the Program—**These courses are designed to make a variety of development opportunities available to artisans and technicians in a range of skill areas. The NOTS courses listed contain a suggestion for suitable participants. These suggestions do not arbitrarily limit the kind of participant accepted. Each supervisor should determine, with his employees, the courses most needed for each individual's development. Burrough's Evening High School and Bakersfield College Evening Division offer many courses that should prove helpful to Journeymen and Technicians.

**Registration—**Registration for this semester starts immediately and continues through September 16. To register, send one completed NOTS COURSE ENROLLMENT AND/OR TUITION REFUND CERTIFICATION 11ND NOTS 12410/28 to Code 654. Approved nominees will be notified of class location and any pertinent information prior to the start of each course.

### Description of Courses and Schedules:

**Conduit Bending (16 hours) Wednesdays, 1400-1600, 2 October - 20 November**

**Coordinator:** J. D. Whitfield, Apprentice Electrician Instructor

**Suggested for:** Journeymen and Helper Electricians  
 Acquaints the participants with the fundamentals of precision conduit bending using hydraulic and screw jack machines. The mathematical basis for bending will be discussed. Safe machine operation will be accentuated. Every student will have the personal experience of bending various types of conduit during the instruction.

**Electrical Schematics (14 hours) Tuesdays, 1400-1600, 5 November - 17 December**

**Coordinator:** J. D. Whitfield, Apprentice Electrician Instructor  
**Suggested for:** Journeymen and Helper Electricians and Draftsmen  
 Covers the reading and drawing of electrical schematics. The symbols and wiring diagrams used for power and control circuits will be explained and used. Their application to magnetics and relays for interlocking automatically controlled machines and processes will be explained.

**Advanced Plastic Industrial Technology (36 hours) Tuesdays, 1400-1600, 8 October - 10 December**

**Coordinator:** Carl Flagg, Apprentice Sheetmetal Instructor  
**Suggested for:** Journeymen and Technicians in different trade areas who use plastics  
 A continuation of the basic plastics course taught this spring, in which the chemistry of plastics and their manufacture, combination, and use were discussed. There will be applications demonstrated and practiced, of the forming, fastening, and cutting of plastics used on the Station.

**Basic Industrial Metallurgy and Heat Treating (Aluminums) (20 hours)**

**Thursday, 1430-1600, 30 Oct. - 12 Dec. (No class 28 November)**

**Coordinator:** R. Frederick Ladda, Apprentice Machinist Instructor

**Suggested for:** Journeymen and Technicians in the Machinist, Sheetmetal, and Welding areas  
 The basic structure and chemical - physical properties of aluminums currently in use on the Station will be discussed, as will the effect of stresses and strains on machined and welded components.

**Transistor Theory and Application (30 hours)**

**Tuesdays, 1400-1600, 1 Oct. - 14 Jan. (No class 24 December)**  
**Coordinator:** C. Neal, Head, Electronic Design Branch (4651)  
**Suggested for:** Electronic Mechanics and Technicians who have completed a basic transistor course  
 The second portion of a two-part course in transistor theory and application accenting the knowledge necessary to understand and use transistors in the shop situation.

**Slide Rule (8-20 hours approx.) Individually arranged**

**Programmed Text (take home study course)**  
**Coordinator:** Employee Development Division  
 The emphasis of this course is on understanding the slide rule rather than merely performing operations with certain scales. Principles behind the most commonly used scales are thoroughly developed. Elementary knowledge of simple arithmetic, algebra, and plane geometry is necessary.

**Introduction to Electronics (10-20 hours approx.) Individually arranged. Programmed Text (take home study course)**

**Coordinator:** Employee Development Division  
 This program is designed to provide the student with a useful understanding of basic fundamentals of electronics. This course is recommended as a prelude to advanced study.

# U.S.C. SCHEDULE OF CLASSES

**REGISTRATION.** Registration and payment of tuition for the fall semester will take place at 1430, Tuesday, 17 September in the Mich Lab Conference Room A. Tuition may be paid in full or arrangements for deferred payments (\$5 service charge) can be made at this meeting. Persons who are not able to register at this meeting should contact the Registrar in the Education Office, Room 1004, Mich Lab.

**TUITION REFUND.** To be eligible for a full tuition refund (excluding the \$5 deferred payment charge), an employee must submit one copy of NOTS Course Enrollment Form and/or Tuition Refund Certification 11ND-NOTS-12410/28 signed by his supervisor (indicating that the training is relevant to present or projected work assignments) prior to the first meeting of class and receive a grade of "C" or higher upon

completion of the course. Partial tuition refunds will be made by the University to eligible employees who wish to withdraw prior to the sixth week of classes with a valid reason.

**TEXTBOOKS.** Textbooks will be available at the registration meeting on 17 September. The Education Office will try to secure additional copies for persons who register late.

**ACCESS TO MICHELSON LABORATORY.** Enrollees who do not have access to the Laboratory must notify the registrar on or before 17 September so that arrangements can be made with Security. NO UNCLEARED STUDENTS WILL BE ADMITTED TO THE LABORATORY without prior arrangement.